

Log Splitter

Safety and Operating instructions



Model number 969121304

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Safety Information



Attention; this machine can be dangerous! All operators should fully read all instructions and use extreme care and awareness when operating the Unit. Failure to follow the instructions or modify the equipment can result in personal injury.

<u>Thank you</u> for purchasing the BlueBird Log splitter. It will allow you to split wood for use in wood burning applications. Do not use unit as a hydraulic press for other applications. Please become familiar with the unit before operating. Enter your model number and serial number for future reference.

Model number Serial number

If you have any problems or concerns about this unit please call your dealer or contact us at Customerservice@BlueBirdturf.com

Mandatory Operating preparation:

- Read this safety and operation manual to understand proper safety procedures and operation.
- This is a single person use machine, do not operate with two people.
- Do not allow anyone to operate this unit without proper training.
- Do not allow children to operate the log splitter.
- Do not use this machine for anything other than splitting wood.
- Do not run unit indoors or in poorly lit conditions.
- Make sure the ground is level and free of ice or water.
- Remove split logs and debris form the area after splitting to prevent tripping.
- Do not step over unit.
- Square the log on both ends to 26 inches maximum.
- Stay in operator zone when using unit (see manual pg. 16).
- Only use the control lever when the work area is clear of people.
- Do not put any part of your body in the log splitting area or near any moving part including clothing.
- Do not operate this equipment under the influence of any type of medication or alcohol which might impair reflexes or judgment.
- Never try to remove anything from the log splitter while it is running.
- Keep all observers including children and pets away from unit including the discharge area.
- Wear safety glasses, hard hat, ear protection, gloves, hard toe shoes and avoid loose fitting protective clothing.
- Check for all safety decals and instructions should be legible.
- Never attempt any clearing of the machine while it is operating.
- All maintenance work should be done with the engine off, cooled down and the spark plug disconnected and the wire moved away from the spark plug to prevent unwanted accidental start up.

Safety symbols used on equipment



Danger: this machine must be operated in a safe manner according to the directions in the manual. Failure to observe the instructions, modify or use the machine when repair is needed could result in serious injury or death. As with any power equipment caution should be observed!



PROP. 65 WARNING The State of California contains one or more chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



Read the safety and operating manual: read and understand this manual before operating this equipment.



Eye and hearing protection must be worn when operating this equipment.



Warning : Crush potential Do not insert body parts into the openings.

Safety symbols used on equipment continued:



Disconnect spark plug and read manual before servicing the equipment.



Observe safety decals and their instructions.



Wear protective eye and ear equipment.

Ensure Latch is engaged before operating or towing

Warning

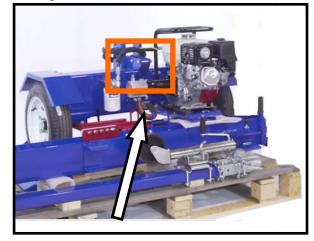
Safety before operating or towing.

Never check for hydraulic leaks with you hand, finger or any body part. Hydraulic systems are under very high pressure and can penetrate the skin and cause serious injury or death.

If you have an injury with high pressure oil penetrating the skin do not disregard this. Get medical attention immediately and convey to the doctor about how the injury occurred so they will treat it properly.

The crate is held down by four clips that need to be removed, two on each end. Lift off the shipping crate and remove straps holding down the unit to the pallet. A video of this assembly is available at www.Bluebirdturf.com

Scanning the QR code on the front of the manual will allow you access the link to the video.





Remove these two bolts , they will be used for attaching the tongue.



Install the tongue and reinstall the bolts and tighten.



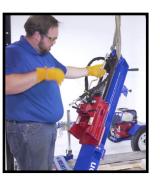
Rotate the jack to upright position and lower the wheel so the tongue will be level when installed.

Notice unit is level when taken off pallet.



Using a fork lift or engine hoist, attach a sling to the end of the boom, raise the beam up to the upright position. If no lift is available it can be raised by three people. Have two people lift while the other stabilizes the base on the ground to prevent slipping out. On a level hard surface, the beam will stand upright and the base can be wheeled up to the upright beam.







When the holes line up insert the pin and clip.

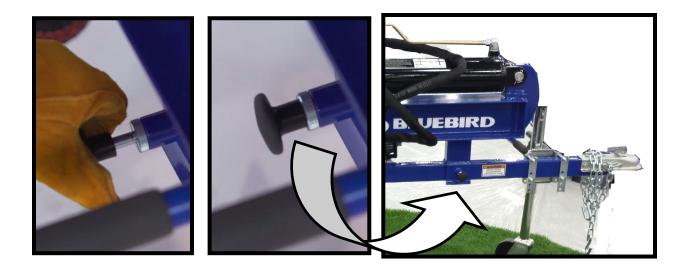






Use handle at top to lower the boom and secure the pin, see pictures below.



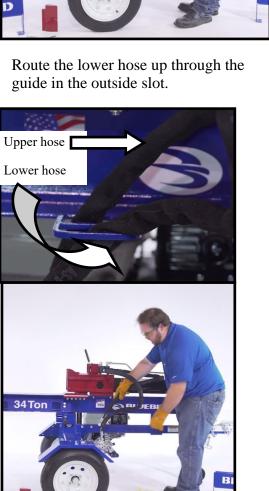


Released position

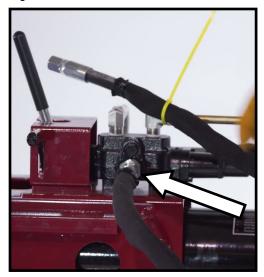
Secured position

Important! Ensure Latch is engaged before operating or towing!





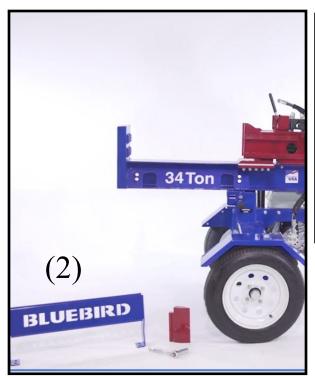
Now route the upper hose down through the inside slot.

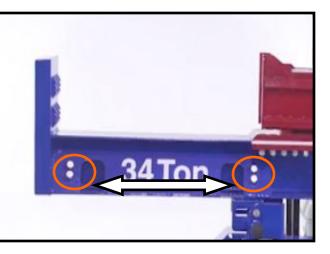


Install to the fitting on the control valve.



Connect the hose to the pump and tight-en all fittings.

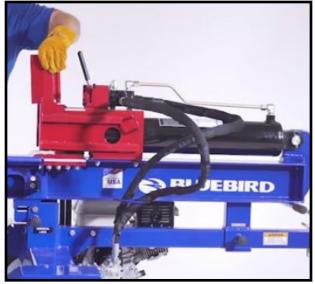




Remove the four bolts on each side and attach the side plates.

Adding the side plates





Insert splitting wedge and attach with bolt provided.

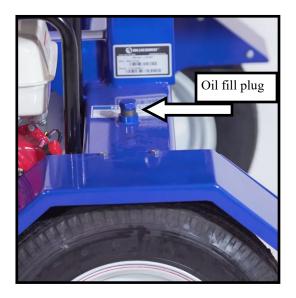
Read next page for oil filling procedure!

Hydraulic oil

Clean area around the fill port, do not allow debris to enter the hydraulic system.

Warning

Do not open any hydraulic lines or plugs when engine is running or hot.



- <u>You must add hydraulic oil to unit before operating the unit. Fill the unit</u> <u>to within 1 inch of the top of the filler hole.</u> It uses SAE 10w Hydraulic oil, or ATF Dextron III in cold weather below 32 degrees.
- It will require about 8-10 gallons of hydraulic oil.

Purging:

- Remove any wood from splitter path.
- Disconnect the spark plug.
- Hold the control valve in the forward position and pull the starter cord multiple times to move the cylinder forward.
- The unit is self purging during operation but do not attempt to split logs until it has had a chance to remove the air from the system. Recheck oil level after the unit has been operated and is purged of air.

Towing Safety

TOWING SAFETY:

- <u>ALWAYS confirm all local and state regulations regarding towing, licensing,</u> <u>and lights before towing your log splitter.</u>
- Check tire pressure and condition of tires before attempting to tow the unit.
- NEVER allow anyone to ride on your log splitter.
- NEVER move your log splitter over hilly or uneven terrain without a tow vehicle or adequate help.
- NEVER exceed weight capacity of ball or load limits of coupler.
- ALWAYS check before towing to make sure that the log splitter is correctly and securely attached to the towing vehicle and that the safety chains are secured to the hitch or bumper of the vehicle with enough slack to allow turning. Always use a Class I or above and a 2" ball for connection to log splitter. Place a customer supplied lock or lock pin into the latch assembly of the hitch coupler.
- ALWAYS attach safety chains when towing your log splitter.
- NEVER carry cargo or wood on your log splitter.
- NEVER leave the ram extended in storage or transport.
- AlWAYS check the unit is in the horizontal position and pin locked in place.
- NEVER exceed 45 mph when towing your log splitter. Towing the log splitter at speeds higher than 45 mph could result in loss of control, damage to the equipment, serious injury or death. Adjust towing speed for terrain and conditions. Be extra cautious when towing over rough terrain, and avoid sharp turns and steep angles when towing your log splitter.
- It is very difficult to back up with a short wheel base trailer, take care when backing up with your log splitter in tow (it is not recommended).
- ALWAYS allow for added length of your log splitter when turning, parking and crossing intersections and in all driving situations.
- ALWAYS disconnect your log splitter from the towing vehicle before operation.
- ALWAYS replace ball or coupler if damaged. Make sure the ball is tight.
- ALWAYS turn the fuel shut off valve on the engine to the "OFF" position before towing the log splitter.

Pre-operation

Danger!

- Never fuel the unit or run the unit in an enclosed space. Residual gas fumes could be ignited by a water heater or furnace in a garage. Gas fumes are very flammable and you should change clothes if some is spilled on you.
- Clean up any spills and do not dispose of gas soaked rags in the trash, they may spontaneously combust.
- Engine produces carbon monoxide and is fatal within minutes in an enclosed environment, never run engine indoors or confined area
- Never smoke while fueling the unit. Make sure the fuel cap is secure on both the machine and the gas can after fueling.
- Use fresh gasoline and keep lid on gas can when not refueling.
- Store fuel away form heat or flame.
- Use a fuel stabilizer to insure gas will remain volatile.
- Make sure the unit is on a stable level surface.
- Check all bolts and guards to make sure they are tight and in proper working order.
- Chock the wheels before operating the unit.
- Know how to stop unit and be familiar with the controls.
- There are many different state and federal laws concerning gasoline engines use . A spark arrestor (contact the engine manufacturer for further information) may be necessary if using in a wooded area or National forest. Consult authorities in the area you intend to use the equipment.

Operation Guidelines

- This machine is designed to split wood with the grain. Any other use is not intended.
- Never attempt to split two logs at the same time.
- Never try to free a stuck log while the unit is operating.
- Never reach over unit .
- Never try to add or remove a log when the wedge is moving.
- <u>Never allow any body part between the wedge and the log</u>, <u>severe damage</u> or <u>death could occur</u>.
- Use only your hands to operate the control, do not use a rope or any other means to operate the control. The machine is designed to require two hands on the controls to split the wood . Never try to defeat this feature, it is for your safety.
- Having a fire extinguisher is recommended since you are using a combustion engine near wood scraps and chips.
- Never attempt to alter engine governor to increase maximum speed.
- Never modify a guard and keep them in good working order.
- Always stand clear of splitter area when the unit is running.
- Never try to adjust a piece of wood while the unit is working.
- Keep the air intake on the engine clean of debris.
- Never remove the air cleaner while the engine is operating.
- Never leave the unit running unsupervised.
- The unit should only be used with ample lighting (daylight preferred).
- Do not touch the muffler unless the unit has completely cooled down.
- Check safety labels daily and replace when necessary.
- The tires should be inflated to 30 PSI.
- Check engine oil daily or during extended operation.

Operation guidelines



• The unit can be operated either horizontal or vertical. There is a pin which locks the unit in either position. To use vertically, release the horizontal pin and tilt unit upright and lock into place with the vertical pin. To return the unit horizontally, release the vertical pin and tilt the unit back to the horizontal position, then lock it's pin in place. The knob will close completely when it is secured.

The appropriate pin lock needs to be released to go to another position. Be sure pin is <u>fully seated</u> in place after locating the beam in either position.

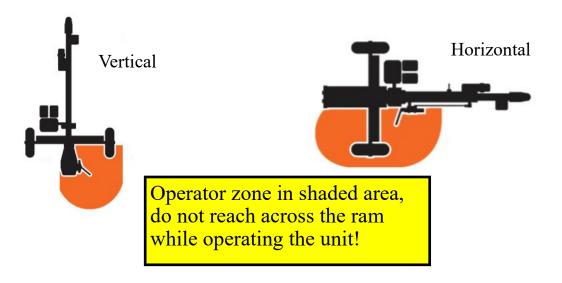


Operation

- Check to make sure the log splitter area is clear.
- Level the unit.
- Fill fuel tank before starting and also check the engine oil level.

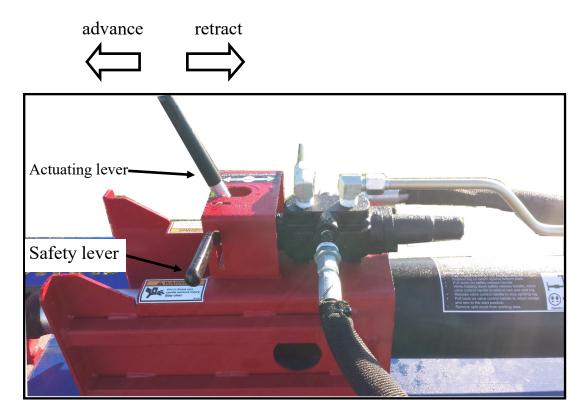
Purging: the Unit

- Grease the rail and remove any wood from splitter path.
- <u>Disconnect the spark plug</u>.
- Hold the control valve in the advance position and pull the starter cord multiple times to move the cylinder forward. Recheck oil level and add as necessary.
- Reconnect spark plug and start the unit according to the engine manual.
- Most engines needs the fuel selector turned on and choke on to start. Refer to engine manual for specific directions.
- Cycle the unit multiple times with no wood in unit . Recheck oil level.
- The unit is self purging during operation but do not attempt to split logs until it has had a chance to remove the air from the system. Recheck oil level after the unit has been operated and is purged of air.
- Do not touch muffler during operation.
- Not every situation can be covered in a manual, use good judgement and never push equipment beyond its capability.
- Stay alert, the equipment is easy to use but any piece of equipment has a danger component in it's nature, so avoid the temptation to work rapidly.
- Stay in the operator zone while operating the unit and never reach accrss the unit while in operation.



Operation

- Hold the log by the sides, do not place log in splitter holding the ends. Put the cut end against the foot of the beam. Make sure the log is securely against the foot plate up against the end beam. For vertical operation, place the log on the foot plate up against the beam.
- Press the safety lever down with one hand and pull the actuating lever with the other hand to the advance position until the log splits or extends fully. **Do not try to defeat this safety** <u>feature.</u> Always stop the operation if you feel the log is not splitting properly and never try to catch a log from falling off the splitter.
- You do not need to hold safety lever down to retract the cutting wedge, but still be careful even in the retracting position.





Maintenance



- When performing any maintenance on this unit, with engine off spark plug wire must be disconnected and placed away from spark plug to prevent accidental starting!
- When doing any repair, refer to qualified repair personnel if you are uncertain of the procedure.
- Never open filler plug or any fitting when unit is running or hot.
- Never check for hydraulic leaks with you hand, finger or any body part. Hydraulic systems are under very high pressure and can penetrate the skin and <u>cause serious</u> <u>injury or death.</u>
- Keep hydraulic fluid at the proper level. Check before operating unit that it is 1 inch below filler neck.. Low oil level will damage the pump.
- Make sure all fittings are tight and replace any damaged or worn parts with approved replacements.
- Do not attempt to increase the engine speed from factory setting.
- The wedge can be removed for sharpening.
- Change the oil filter after first 25 hours. Fill new filter with new oil before installing to reduce the problems of air getting in the system.
- After changing filter you may have to purge the system of air. To purge air from unit work the control valve to fully extended then retract with **no wood** in the splitter. Multiple times until the ram extends smoothly.

Storage

- Some pieces of power equipment are not used frequently. This can cause problems due to the fact fuel has a limited shelf life.
- It is very hard to remove all fuel from a carburetor so it is recommended to add fuel stabilizer to the fuel (at the time of purchasing the fuel) and fill up the fuel tank.
- Run the unit for two minutes to have the fuel get into all parts of the carburetor and shut off the engine. By having the fuel tank full it reduces air space which helps with prolonging the life of the fuel.
- Even when using stabilized fuel, if the unit is not run for over 12 months, the stabilized fuel should be discarded (please dispose of correctly according to local codes) and refilled with fresh fuel.
- Using old fuel can leave deposits in the engine, and create hard starting.
- Make sure unit is clean before storage.
- Change oil as prescribed in the engine manual that comes with the unit.
- Check hydraulic fluid level and add the proper oil to the fill line (one inch below neck).

Troubleshooting

Engine:

When ever you have a problem, try to think through the problem logically. Mechanical failure is the least likely of problems. With a unit like this that may have times of inactivity, realize old fuel will be the most frequent problem. If this is the case, drain the fuel, replace the spark plug and try new fuel. If old fuel is known to be in the unit, the carburetor should be disassembled by a trained repair technician. If using a fuel stabilizer at the time the fuel was purchased, the fuel can be stored for 12 months and still be used. Do not attempt to revitalize old fuel with fuel stabilizer.

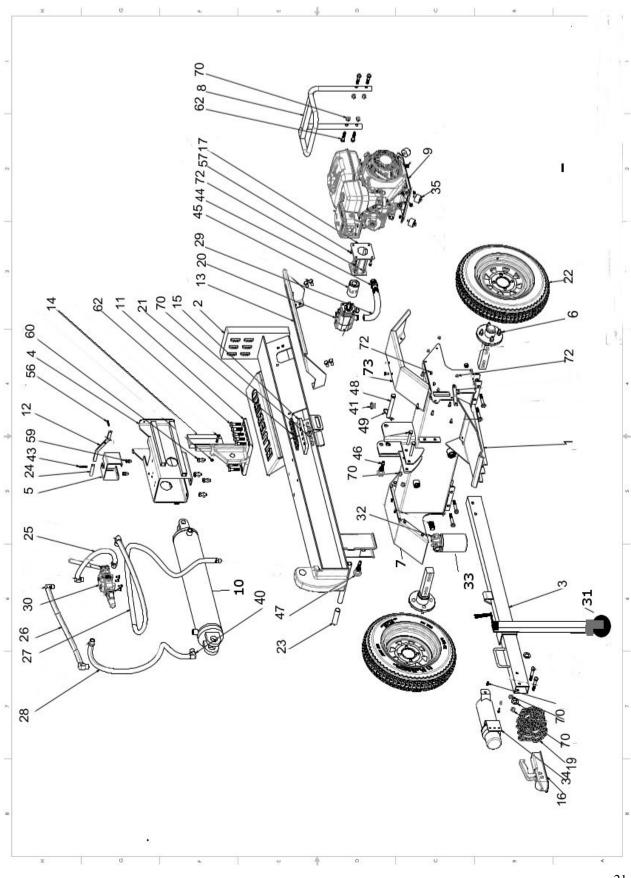
Hydraulic:

If the engine runs, but the ram doesn't work it is probably low hydraulic oil or air in the system. If you have to add hydraulic oil to the unit (assuming it was filled correctly), there is a leak somewhere which could also be drawing in air affecting the ability of the unit to operate properly. **Never check for leaks with your hand or body part, when the unit is** <u>running</u>.

High pressure leaks can penetrate the skin and cause injury or

<u>death.</u> With the engine off you can feel around the fittings for evidence of oil to find loose fittings or hoses leaking. Beyond tightening a loose fitting, all repairs should be performed by someone trained in hydraulic repairs. All parts need to be hydraulic rated and should be replaced with the original parts. To purge air from unit work the control valve to fully extended then retract with no wood in the splitter. Multiple times until the ram extends smoothly.

Problem		Solution	
Engine will not start		F, H, E,D,G	
Engine will not stay running or smokes		Open choke , low engine oil E, D, J	
Unit operates slowly or not at all		A, B, C, G	
А	Low hydraulic oil	Add oil to system	
В	Air in system	Purge unit with out load	
С	Kinked hydraulic line	Unkink lines	
D	Old fuel	Replace fuel /clean carburetor	
Е	Fuel shut off	Turn on	
F	Engine shutoff	Turn on	
G	Low Ambient temperature	Wait until warm ambient or change fluid	
Н	Choke control open/ closed	Close /open choke	
J	Gas in oil	Replace engine oil	



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1	HYDRAULIC TANK	577121580
2	I BEAM WELDMENT	577121587
3	TONGUE	577121588
4	DISLODGER	577121556
5	UPPER HOUSING	577121557
6	WHEEL HUB	577121572
7	RH FENDER	577121806
8	ENGINE GUARD	577121568
9	ENGINE PLATE	N/A
10	CYLINDER	577121559
11	WEDGE BASE	577121579
12	SAFETY HANDLE	577121558
13	LOG CRADLE	577121571
14	SPLITTING WEDGE	577121589
15	SLIDING PLATE	577121592
16	HITCH COUPLER	577121567
17	PUMP CONNECTOR	577121585
18		NA
19	SAFETY CHAIN	577121615
20	PUMP	577121560
21	SIDE PLATE	577121555
22	WHEEL AND TIRE	577121571
23	HANDLE GRIP	577121581
24	VINYL GRIP	577121582
25	HYDRAULIC HOSE LONG	577121574
26	HYDRAULIC HOSE SHORT	577121575
27	HYDRAULIC HOSE P toV	577121576
28	HYDRAULIC HOSE V to Filter	577121577
29	HYDRAULIC HOSE T to Pump	577121578
30	CONTROL VALVE	577121626
31	TRAILER JACK	577121612
32	FILTER ASSEMBLY w Filter	577121562
33	FILTER	577121563
34	MANUAL HOLDER	577121613
35	VIBRATION ISOLATOR	577121586 22

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41	3/4 INCH NPT PLUG	577121583
42	3/4 INCH NPT HEX DRIVE PLUG	577121584
43	SAFETY HANDLE SPRING	577121591
45	COUPLING ENGINE TO PUMP	577121554
46	POP PIN	577121566
47	POP PIN	577121565
48	CLEVIS PIN	577121586
49	9/64 HAIR PIN/COTTER	
57	PUMP ENBINE BOLTS	577121620
58	5/16-18	577121621
60	1/2-13 X 1.25	577121622
62	WEDGE BOLTS	577121623
70	1/2X13 NUT	577121624
72	5/16-18 NUT	577121625
73	LH FENDER	577121569
	LICENSE PLATE AND WIRING KIT	577121810
	FENDER LINK	577121570
	LIGHT HOUSING	577121807
	LICENSE MOUNT BRACKET	577121808
	LICENSE PLATE BRACKET	577121809
	DECALS	
	45 MPH MAXIMUM SPEED	577121593
	PINCH POINT	577121595
	HYDRAULIC OIL ONLY	577121596
	CONTROL LEVER OPERATION	577121597
	VERTICAL LOCK	577121598
	OPERATING INSTUCTIONS	577121599
	HYDRAULIC FILL PLUG	577121601
	HYDRAULIC DRAIN PLUG	577121602
	MODEL NUMBER	577121603
	STRIP REFLECTOR	577121604
	BLUEBIRD DECAL	577121605

Notes

Manual 577121614RP 1/26/2018

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