
Log Splitter



wee.no

Table of contents

Overview.....	2
Features.....	2
Warning.....	3
Identification.....	6
Assembly.....	7
Operating environment.....	7
Operation	7
How to split a log with slant surface.....	10
Maintain and storage.....	10
Troubleshooting	11
Specifications	12

Overview

This Log Splitter is used for cut firewood easier, replaced the traditional way of splitting wood by labor power. This log splitter powered by a quality Ducar engine with idle control. Features a gear pump, which decreases cycle time by delivering high flow/low pressure when there is no resistance and low flow / high pressure when cutting through a log. Patented log stripper clears log from retracting wedge. Log cradle prevents helps keep split wood from falling onto the ground.

Warning: This log splitter for outdoor use only. Do not operate indoors even if ventilated. The poisonous fumes from engine can kill you.

Features

- Operate at vertical and horizontal position
 - Auto idle/throttle control for extended engine life, improved fuel economy and reduced engine noise
 - 2-stage pump allows the log splitter to achieve the same pressures as a single stage pump, while using less horsepower.
 - Horizontal-shaft engines can expect a lifetime that is up to five times longer than the lifetime of a vertical shaft engine.
 - Moving handle for easy towing
 - Two handles valve
-

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 30 motor oil.
See engine manual for engine oil capacity.
Hydraulic reservoir is shipped without oil.
When add oil, the red oil level indicator on side of tank should be full.
There should be added around 8 gallons.
Closely inspect all log splitter components.
If you have damaged components then: Contact the freight company that delivered the unit and file a claim.



DANGER(red) indicates an imminently hazardous situation which, if not voided, will result in death or serious injury



WARNING(orange) indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION(yellow) indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury



CAUTION (yellow) used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage



You must be 16 or older to operate this machine.
Keep untrained people away.



Keep untrained people away.



Never leave the log splitter unattended, while the engine is running.



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.



Never wear loose clothing, which can get caught in the moving parts of the log splitter.



Only operate the log splitter in daylight.



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



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”.



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.



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.

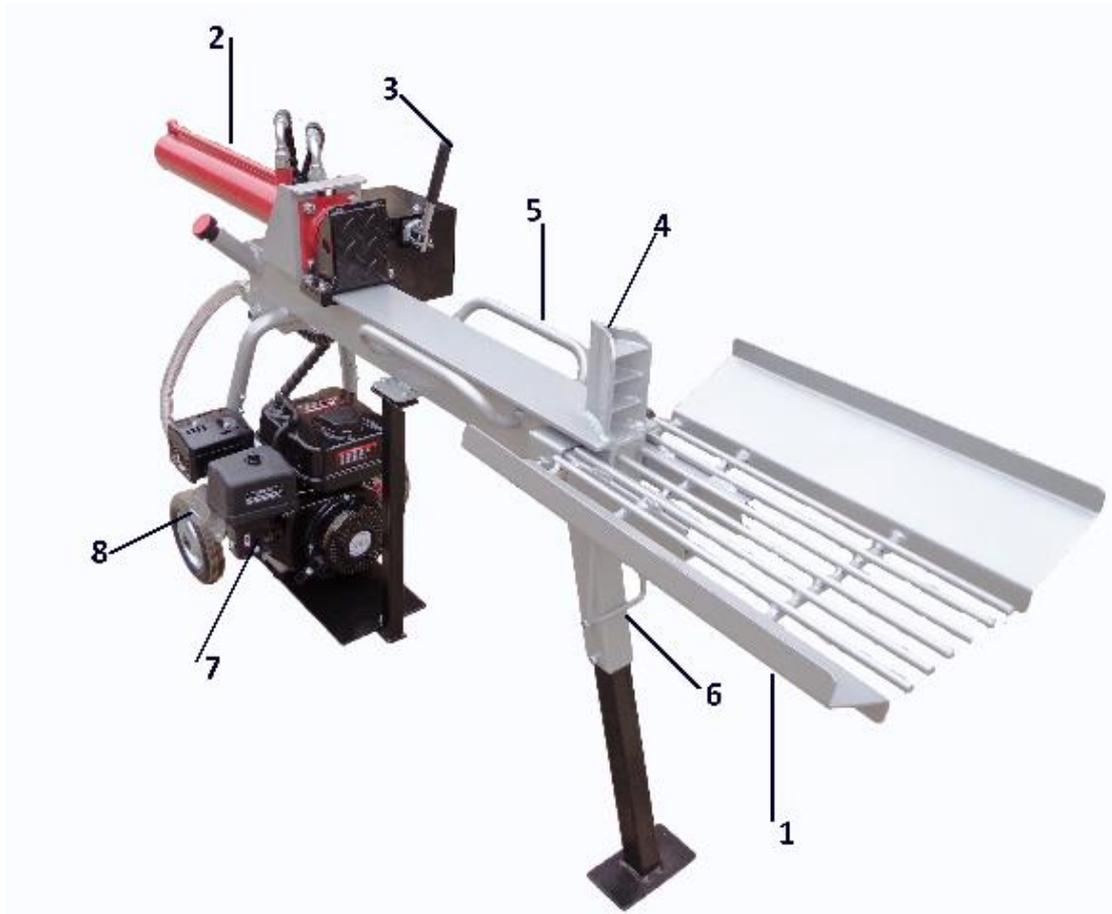


Poisonous fumes from engine can kill you. Do not operate indoors even if Ventilated. For outdoor use only.



You can be burned by muffler.
Do not touch.

Identification



- 1.) **Front table:** Put finished wood on it.
- 2.) **Hydraulic Cylinder:** The hydraulic cylinder is rated to 3500 psi.
- 3.) **Control Valve Handle:** Use the control valve handle to move the pushing plate 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.) **Moving handle:** move the log splitter easily.
- 7.) **Engine:** The air cooled engine powers the hydraulic pump.
- 8.) **Tires:** 8inch solid wheel

Assembly

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 gasoline engine, oil tank, wheels, support legs, and hardware.
4. Leave the hydraulic cylinder/log cradle in the shipping crate until valve assembled.
5. Locate all hardware before beginning assembly
6. Attached hydraulic hose at last.

Operating environment

- **Safety equipment / controls.** Always operate the log splitter with all safety equipment in place and in good working order, and all controls properly adjusted for safe operation.
- **Daylight only.** Only use the log splitter in daylight so you can see what you are doing.
- **Smoking / sparks.** Never smoke while operating the log splitter, and never operate near sources of sparks or flames.
- **Under the influence.** Never operate, or let anyone else operate, the log splitter while under the influence of alcohol, drugs, or medication.
- **Unattended.** Never leave the machine unattended while the engine is running.

Operation

Splitting Operation

1. Put on protective clothing / gear

Wear the following protective clothing and safety gear:

- 1.) **Eye protection.** Always wear safety glasses or goggles when operating the machine. Pieces of log may fly out and serious eye injury can occur.
- 2.) **Boots.** Falling logs can crush feet. Always wear safety shoes or heavy boots when operating or helping to load logs.
- 3.) **Gloves.** Wear snug fitting gloves without drawstrings or loose cuffs.
- 4.) **Hearing protection.** The use of earplugs or other hearing protection device is recommended.

- 5.) **No loose / dangling.** Loose or dangling apparel can become entangled in moving parts. Never wear jewelry or loose-fitting clothing.

2. Lock & Block

Block the wheels to prevent unintended movement of the log splitter. Check that:

- 1.) The outrigger legs are both locked in the down position.
- 2.) The wheels are blocked

3. Load log

Load log onto beam with a cut end against the endplate-positioned for a lengthwise cut.

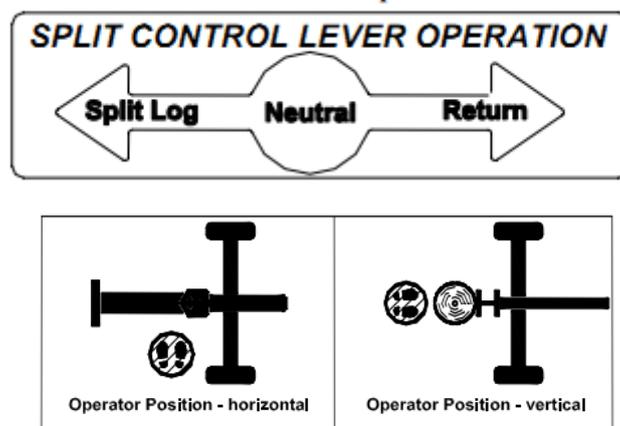
Notes:

- 1.) The log splitter is designed only for cutting lengthwise with the grain, not for cutting across the grain.
- 2.) This log splitter is designed for cutting logs only up to a maximum of 24inch long. Longer logs will not fit on the beam.

Warning: Always keep hands and feet away from the endplate, wedge, and partially split logs while loading, operating and unloading the log splitter.

4. Extend pushing plate

Move split control lever toward endplate to extend pushing plate and split log.



Important safety instructions:

- 1.) **Operator position.** Always operated the log splitter from the manufacturer's indicated OPERATOR POSITION. (See diagram above.) Other positions are unsafe because they can increase the risk of injury from crushing, cutting, flying objects, or burns.
- 2.) **Remove hands.** Remove both hands from log before activating Split Control Lever.
- 3.) **Hand activate.** Use only your hand to operate the Split Control Lever. Never use any other body part, or a rope, cable, or other remote device to actuate the control.
- 4.) **Second person.** Many accidents occur when there is more than one person involved in loading and operating the log splitter. Only one person should operate the controls. If a second person is assisting in loading logs, the operator must

never actuate the split control lever until the assistant and all bystanders are at least 10 feet away. Never allow an assistant to hold the log in place while the operator actuates the split control lever.

5. Stop wedge

Release split control lever to stop wedge movement when log is split.

Warning: Cracks in logs can close quickly and pinch fingers. Keep fingers away from any cracks that open in partially split logs.

6. Important stuck log procedure

If a log does not split completely and becomes stuck on the wedge, follow the instructions below to remove the log.

A log can become stuck to the wedge if the wedge becomes embedded in the log and the log doesn't split and separate. This can happen if the log is too stringy or tough to split completely. A stuck log will move back with the wedge on the initial attempt to retract the wedge. If this happens, retract the wedge completely to allow the splitter to strip the log from the wedge. Keep hands clear of log and wedge while wedge is retracting.

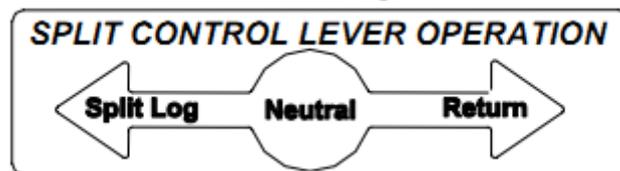
Warning: Never attempt to remove a stuck log by modifying the splitter and adding attachments to the splitter.

Personal injury could result from log or metal pieces flying out at high speed toward the operator or bystanders, or the splitter could become damaged.

7. Return pushing plate

Move split control lever away from end plate to return pushing plate

Once the control valve is actuated in the return direction, the pushing plate is designed to keep returning by itself completely and then stop automatically.



8. Remove split wood

Remove split wood from area.

Move each log away from log splitter after it is split. Split logs left near the log splitter are a trip hazard.

9. After use

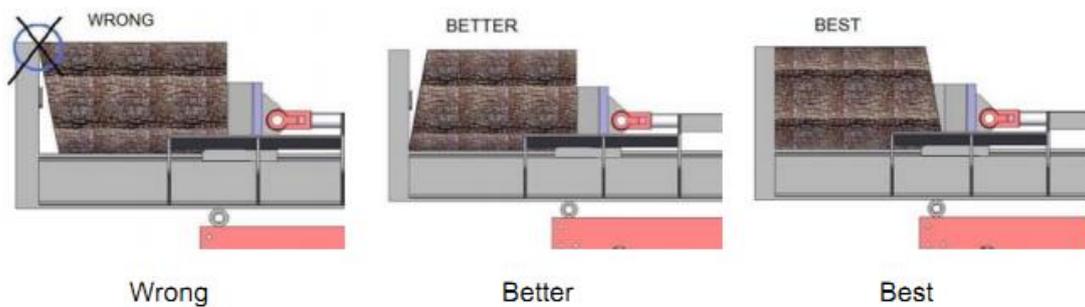
- 1.) Turn off engine
- 2.) Remove engine debris

Debris on a hot engine can be a fire hazard. After the engine is off, clean debris and chaff from engine cylinder head, cylinder head fins, blower housing rotating screen, and muffler areas.

- 3.) Return to horizontal position.

If in the vertical position, return log splitter to the horizontal position for greater stability and to prepare for transportation. Avoid contact with hot muffler.

How to split a log with slant surface



Maintain 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

Troubleshooting

Problem	Solution
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

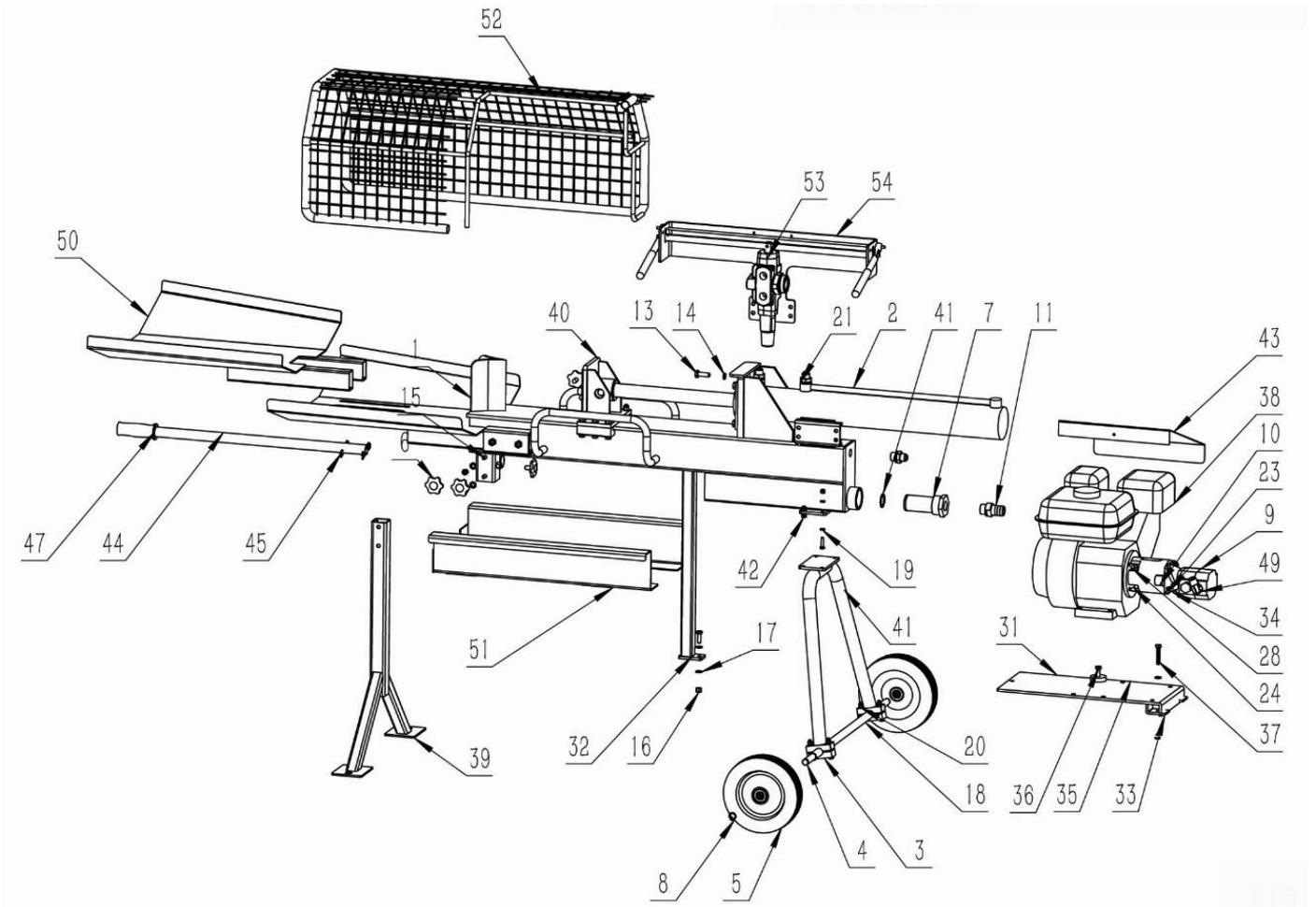
Cause	Solution
A -Insufficient oil to pump	Check oil level in reservoir
B -Air in oil	Check oil level in reservoir
C -Excessive pump inlet vacuum	Check pump inlet hose for blockage or kinks
D -Blocked hydraulic lines	Flush and clean the splitter hydraulic system
E -Blocked control valve	Flush and clean 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

Max. force:	12Ton
Engine:	6.5HP gasoline CE
Max. log length:	51cm
Max. log diameter:	30cm
Pump:	2-stage 6.3/2.1
Cycle time:	3second
Oil tank:	5.2L
Wheel:	8inch solid

Exploded View



Assembly Step

Step 1: Wheels and Axle



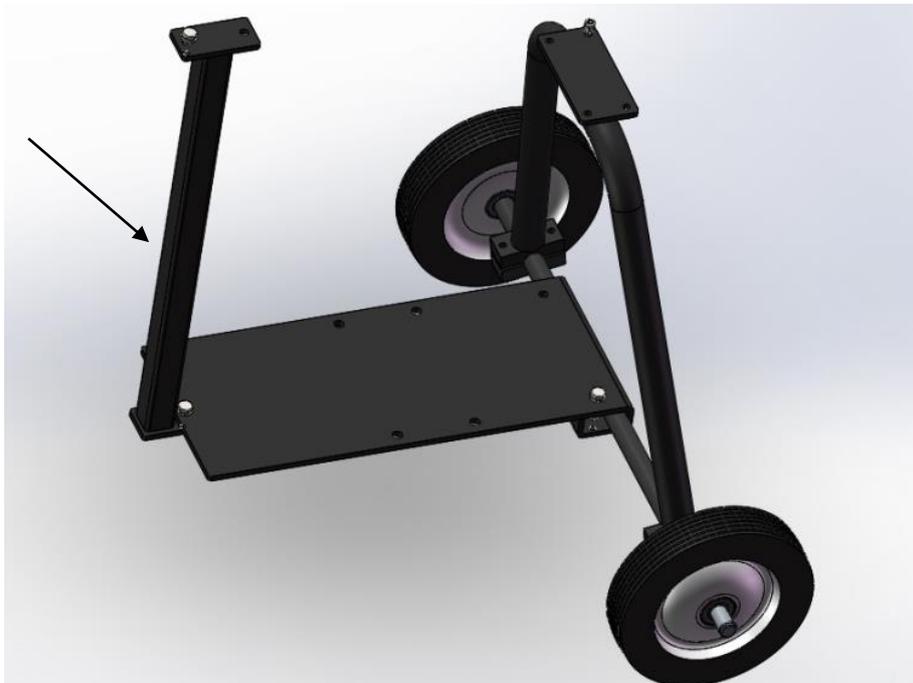
Step 2: Support frame



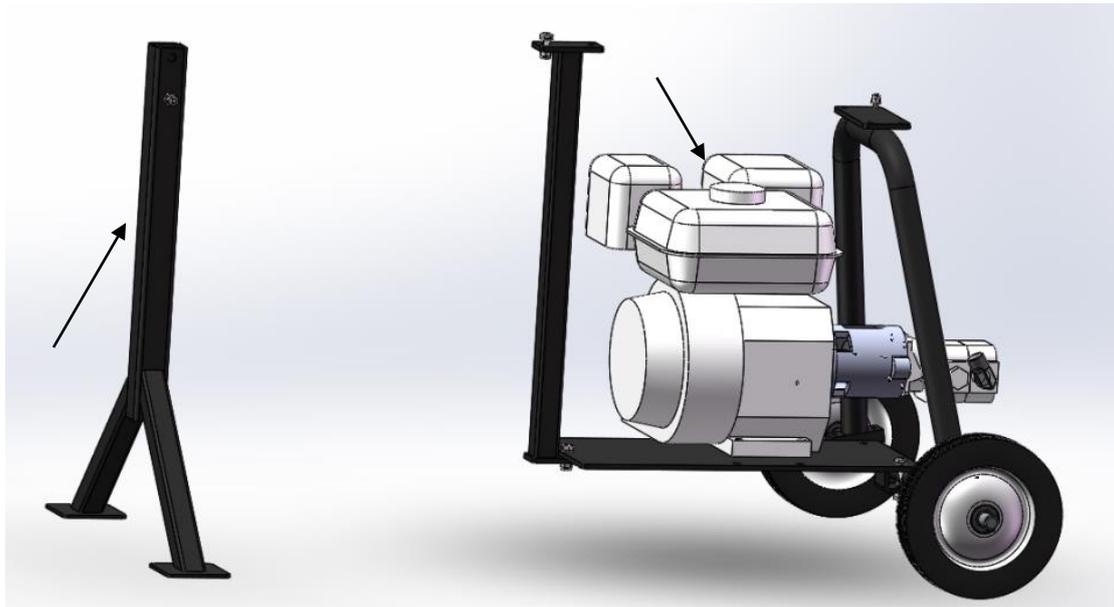
Step 3: Engine pedestal



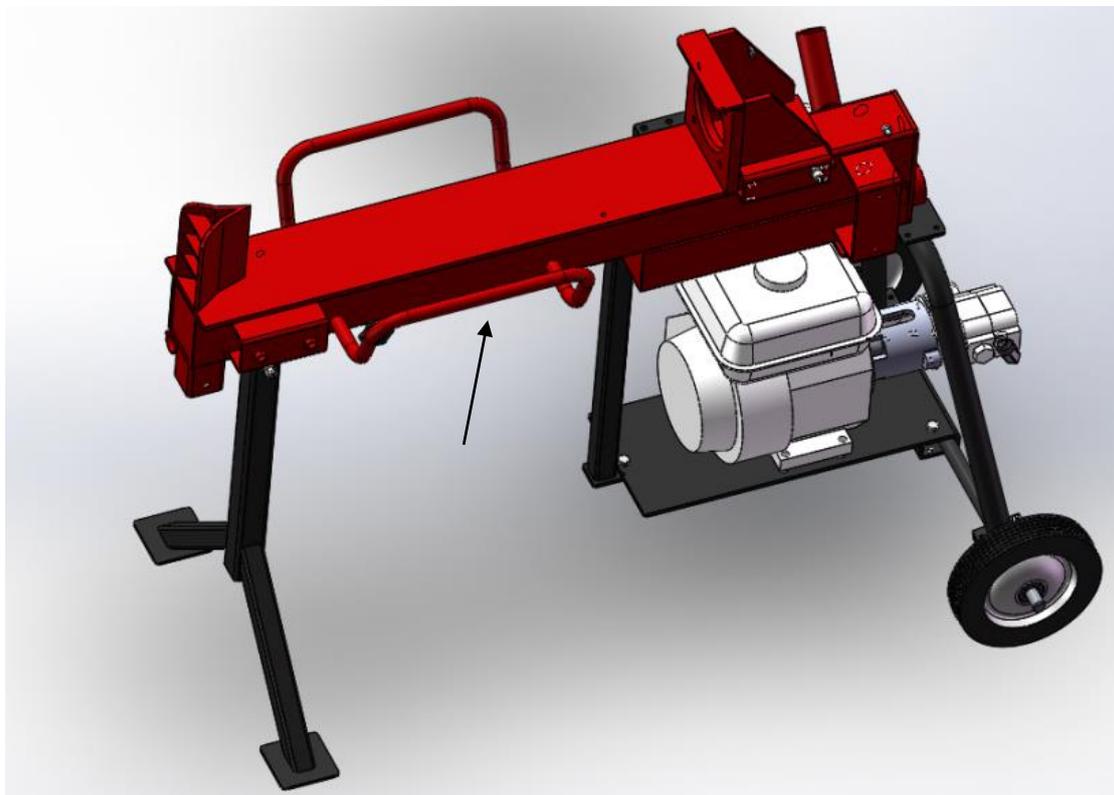
Step 4: Support bar



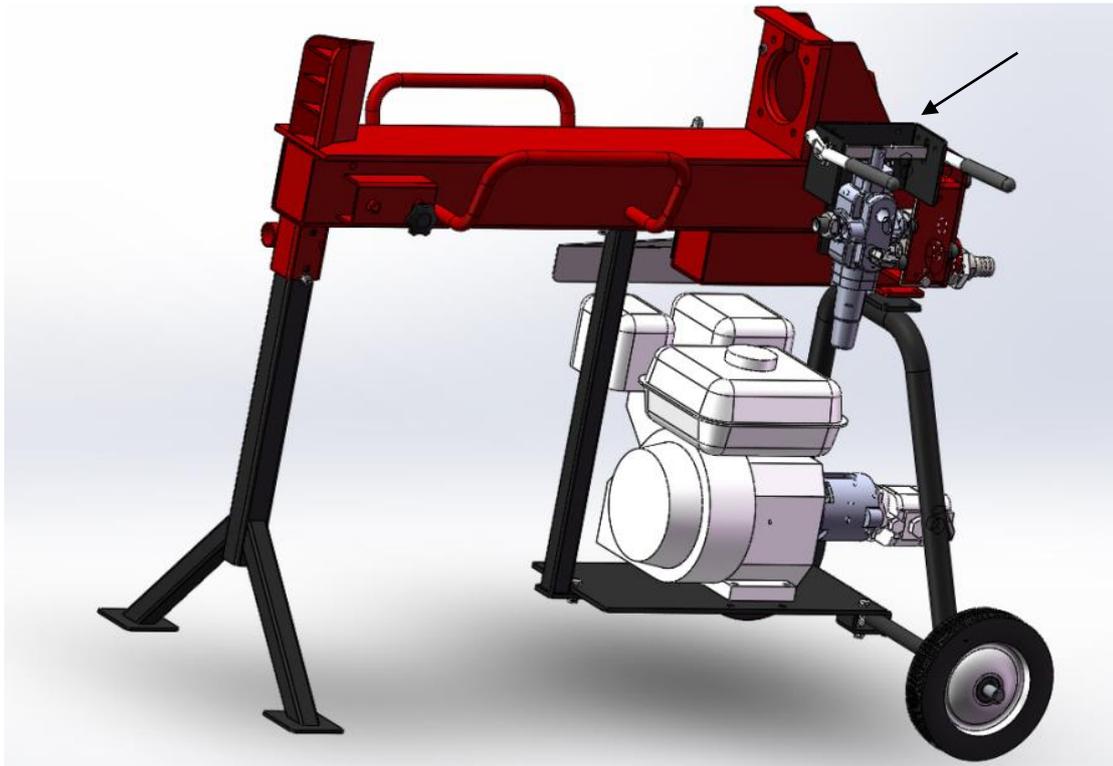
Step 5: Gasoline engine and front leg



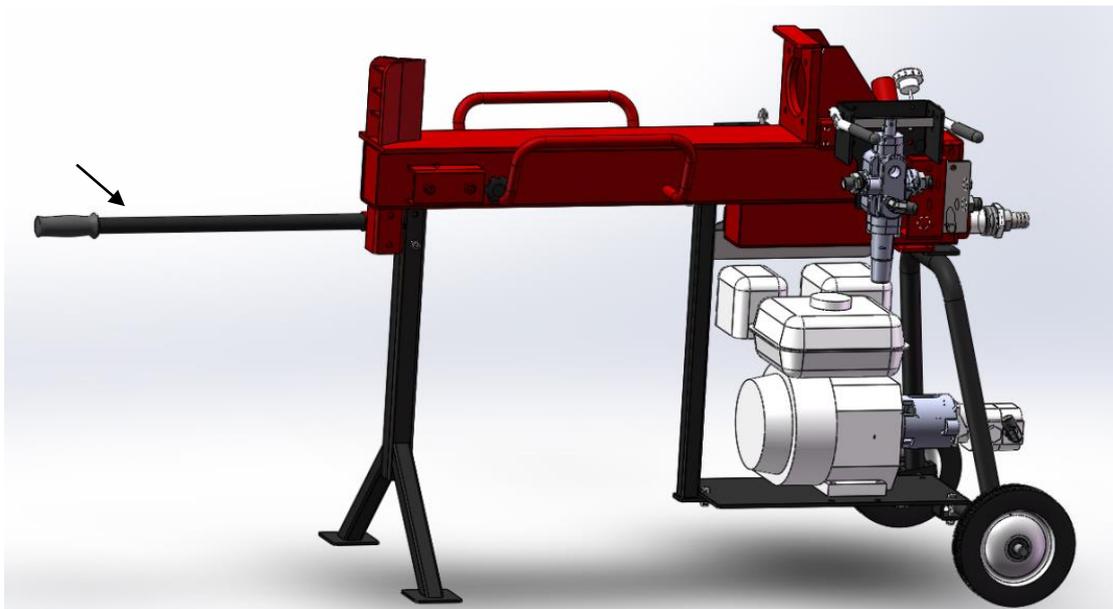
Step 6: Main beam



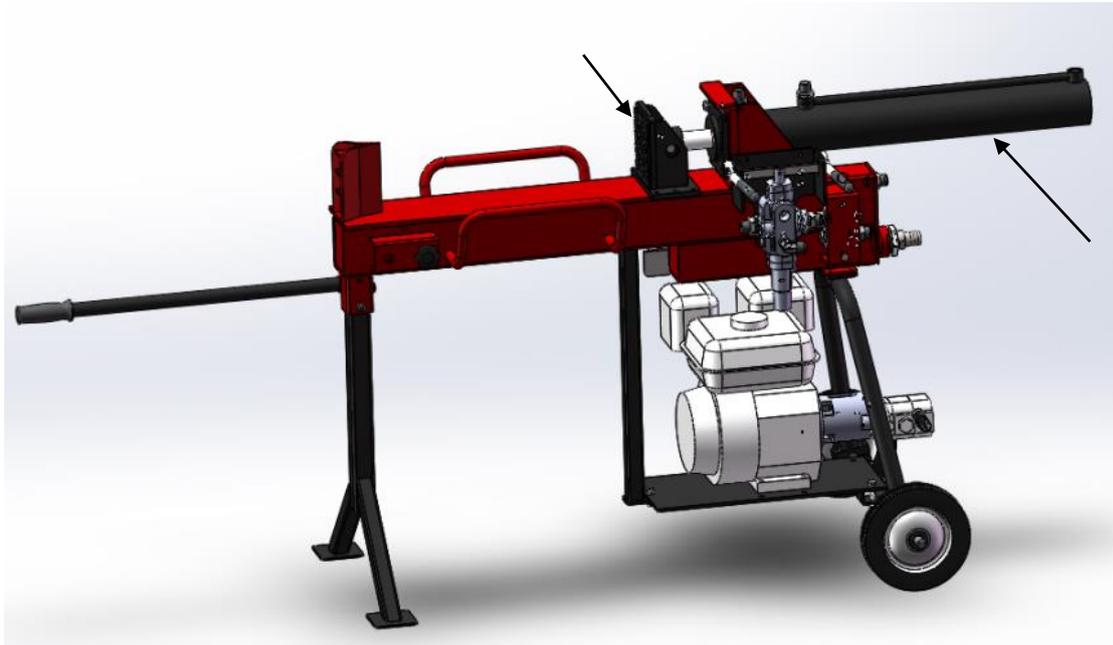
Step 7: Valve



Step 8: Towing bar



Step 9: Pushing plate and cylinder



Step 10: Front table

