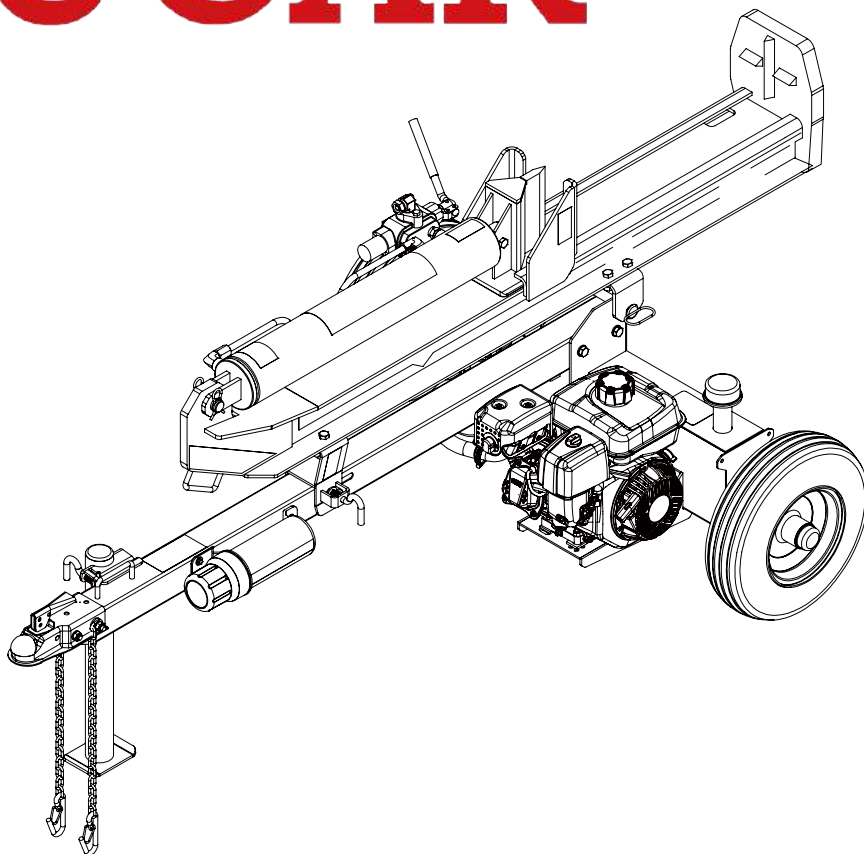


# DUCAR



## Gas Log Splitters

### Operator's Manual

**MODEL NUMBER :**    ☐ **DUELS25T**    ☐ **DUELS30T**    ☐ **DUELS35T**

**SERIAL NUMBER :**

Both model number and serial number may be found on the main label.  
You should record both of them in a safe place for future use.

## FOR YOUR SAFETY

**READ AND UNDERSTAND THE ENTIRE MANUAL BEFORE  
OPERATING MACHINE**

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# INTRODUCTION

Your new Gas Log Splitter will more than satisfy your expectations. It has been manufactured under stringent quality standards to meet superior performance criteria. You will find it easy and safe to operate, and with proper care, it will give you many years of dependable service.



**Carefully read through this entire operator's manual before using your new unit. Pay attention to all cautions and warnings.**

This unit is a gasoline engine driven hydraulic log splitter. It is designed to split wood logs for use as firewood for a stove or fireplace. This log splitter will only split logs lengthwise with the grain.

## Engine Manual

The Engine Manufacturer is responsible for all engine-related issues with regards to performance, power rating, specifications, warranty and service. Please refer to the Engine Manufacturer's owner/operator's manual, packed separately with your unit, for more information.

## Specifications

Model #	DUELS25T	DUELS30T	DUELS35T
Splitting Force*	25 ton	30 ton	35 ton
Log Capacity	650mm / 25.5"		
Engine	Ducar		
Displacement	212 cc	212 cc	270 cc
Starting System	Recoil		
Control Valve	Auto Return with Adjustable Detent		

Pump Size	2-stage 14 GPM	2-stage 14 GPM	2-stage 17 GPM
Hydraulic Cylinder Bore	100mm / 4"	115 mm / 4.5"	125 mm / 5"
Hydraulic Cylinder Stroke	610mm / 24"		
Hydraulic Rod Diameter	45mm / 1.75"		50 mm / 2"
Cylinder Cycle Time*	11.2 seconds	12.9 seconds	12.7 seconds
Hydraulic Oil Required to Fill	17 L / 4.49 Gallon	18 L / 4.75 Gallon	24 L / 6.34 Gallon
Hydraulic Oil Included	Not Included		
Replacement Filters	Built-in Filter		
Beam	Heavy duty H-shape formed construction		
Wedge Size	175mm / 7"		200mm / 8"
Wedge Style	2-way		
Rear Wheels	4.80-8, DOT Approved 16" O.D. Road Tires		
Hitch Coupler	2" Ball with Safety Chains		
Safety Chains	Standard		
Max Towing Speed	72km/h / 45 mph		
Hitch Handle	Standard		
Horizontal/Vertical Splitting	Standard		
Open Operating Zone	Standard		
Weight	230.5kg / 507.7 lbs	255.0kg / 561.7 lbs	285.0kg / 627.8 lbs
Dimensions (L x W x H)	2300mm x 1220mm x 940mm / 90.6" x 48.0" x 37.0"		

\* Splitting force and cycle times may vary depending on mechanical and environmental conditions.

## SYMBOLS

The rating plate on your machine may show symbols. These represent important information about the product or instructions on its use.



Read these instructions carefully.



Wear eye protection.

Wear hearing protection.



Wear protective gloves.



Wear safety footwear.



Do not remove or tamper with the protection and safety devices.



Don't stand or sit on the log splitter.



Operate the log splitter on level surfaces. Stay off slopes and slippery surfaces.



Do not touch parts that are hot from operation. Serious burns may result.



No smoking, sparks, or flames.



Properly dispose of waste oil!



Keep children and bystanders off and away.



Be sure the engine's switch is off before transporting the machine or performing any maintenance.



Keep hands and fingers away from all pinch points.



Never remove partially split wood from the wedge with your hands. Fingers may become trapped between the split wood.



Keep hands away from moving parts. Moving parts can crush or cut.



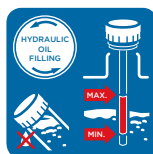
Keep feet away from moving parts. Moving parts can crush or cut.



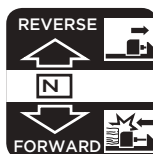
Always keep body and hands away from pin holes or nozzles that eject hydraulic fluid under pressure. Escaping hydraulic fluid can puncture skin and cause blood poisoning.



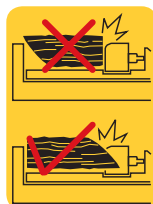
Thrown objects.



Check and fill hydraulic oil.



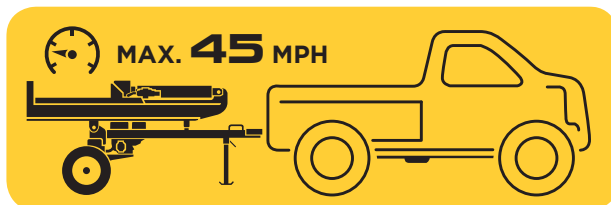
Follow the direction indicated to use the control lever.



For logs that are not cut square, the longest portion of the log should be rotated down and the most square end placed toward the end plate.



Do not transport with objects on the machine.



Maximum towing speed of 45 mph.

# SAFETY

## General Safety Rules

### Understand Your Machine

Read this manual and labels affixed to the machine to understand its limitations and potential hazards.

Be thoroughly familiar with the controls and their proper operation. Know how to stop the machine and disengage the controls quickly.

Make sure to read and understand all the instructions and safety precautions as outlined in the Engine Manufacturer's manual packed separately with your unit. Do not attempt to operate the machine until you fully understand how to properly operate and maintain the engine and how to avoid accidental injuries and/or property damage.

If the unit is to be used by someone other than original purchaser or loaned, rented, or sold, always provide this manual and any needed safety training before operation. The user can prevent and is responsible for accidents or injuries that may occur to themselves, other people, and property.

Do not force the machine. Use the correct machine for your application. The correct machine will do the job more efficiently and safer at the rate it was designed.

### Personal Safety

Do not permit children to operate this machine at any time.

Keep children, pets, and other people not using the unit away from the work area. Be alert and shut off unit if anyone enters work area. Keep children under the watchful care of a responsible adult.

Do not operate the machine while under the influence of drugs, alcohol, or any medication that could affect your ability to use it properly.

Dress properly. Wear heavy long pants, boots, and gloves. Do not wear loose clothing, short pants, or jewelry of any kind. Secure long hair so it is above shoulder level. Keep your hair, clothing, and gloves away from moving parts.

Loose clothes, jewelry, or long hair can be caught in moving parts.

Protect eyes, face, and head from objects that may be thrown from the unit. Always wear safety goggles or safety glasses with side shields when operating.

Wear appropriate hearing protection.

Always keep hands and feet away from all moving parts during operation. Moving parts can cut or crush body parts.

Always keep hands and feet away from all pinch points.

Do not touch parts that might be hot from operation. Allow parts to cool before attempting to maintain, adjust, or service.

Stay alert, watch what you are doing, and use common sense when operating the machine.

Do not overreach. Do not operate the machine while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces. Keep proper footing and balance at all times. This enables better control of the machine in unexpected situations.

### Inspect Your Machine

Check your machine before starting it. Keep guards in place and in working order. Make sure all nuts, bolts, etc., are securely tightened.

Never operate the machine when it is in need of repair or is in poor mechanical condition. Replace damaged, missing, or failed parts before using it. Check for fuel leaks. Keep the machine in safe working condition.

Do not use the machine if the engine's switch does not turn it on or off. Any gasoline powered machine that can't be controlled with the engine switch is dangerous and must be replaced.

Regularly check to see that keys and adjusting wrenches are removed from the machine area before starting it. A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.

Avoid accidental starting. Be sure the engine's switch is off before transporting the machine or performing any maintenance or service on the unit. Transporting or performing maintenance or service on a machine with its switch on invites accidents.

If the machine should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning sign of trouble.

### **Engine Safety**

This machine is equipped with an internal combustion engine. Do not use on or near any unimproved, forest covered, or brush covered land unless the exhaust system is equipped with a spark arrester meeting applicable local, state, or federal laws.

In the state of California, a spark arrester is required by law. Other states have similar laws. A spark arrester, if used, must be maintained in effective working order by the operator.

Never start or run the engine inside a closed area. The exhaust fumes are dangerous, containing carbon monoxide, an odorless and deadly gas. Operate this unit only in a well-ventilated outdoor area.

Do not tamper with the engine to run it at excessive speeds. The maximum engine speed is preset by the manufacturer and is within safety limits. See engine manual.

Keep a Class B fire extinguisher on hand when operating this log splitter in dry areas as a precautionary measure.

### **Fuel Safety**

Fuel is highly flammable, and its vapors can explode if ignited. Take precautions when using to reduce the chance of serious personal injury.

When refilling or draining the fuel tank, use an approved fuel storage container while in a clean, well-ventilated outdoor area. Do not smoke, or allow sparks, open flames, or other sources of ignition near the area while adding fuel or operating the unit. Never fill the fuel tank indoors.

Keep grounded conductive objects, such as tools, away from exposed, live electrical parts and connections to avoid sparking or arcing. These events could ignite fumes or vapors.

Always stop the engine and allow it to cool before filling the fuel tank. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot. Do not operate the machine with known leaks in the fuel system.

Loosen the fuel tank cap slowly to relieve any pressure in the tank.

Never overfill the fuel tank. Fill the tank to no more than 1/2" below the bottom of the filler neck to provide space for expansion as the heat of the engine can cause fuel to expand.

Replace all fuel tank and container caps securely and wipe up spilled fuel. Never operate the unit without the fuel cap securely in place.

Avoid creating a source of ignition for spilled fuel. If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.

When fuel is spilled on yourself or your clothes, wash your skin and change clothes immediately.

Store fuel in containers specifically designed and approved for this purpose.

Store fuel in a cool, well-ventilated area, safely away from sparks, open flames, or other sources of ignition.

Never store fuel or a machine with fuel in the tank inside a building where fumes may reach a spark, open flame, or any other source of ignition, such as a water heater, furnace, or clothes dryer. Allow the engine to cool before storing in any enclosure.

### **Hydraulic System Safety**

The hydraulic system of the machine requires careful inspection along with the mechanical parts. Be sure to replace frayed, kinked, cracked, or otherwise damaged hydraulic hoses or hydraulic components.

Hydraulic fluid can result in severe burns. Fluid in the hydraulic system can penetrate skin and result in serious injury or death. Be sure to stop the engine and relieve hydraulic pressure before doing any work on hydraulic parts.

Keep body and hands away from pin holes or nozzles that expel hydraulic fluid when under pressure. Use paper or cardboard, not hands, to search for leaks.

Ensure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.

Do not remove the cap from the hydraulic tank or reservoir while the machine is running. The tank could contain hot oil under pressure, which could result in serious injury.

Do not adjust the pressure setting on the hydraulic pump or valve.

If injured by escaping fluid, no matter how small the wound is, see a doctor at once. A typical injection injury may be a small wound that does not look serious. However, severe infection or reaction can result if proper medical treatment is not administered immediately by a doctor who is familiar with injection injuries.

## Specific Safety Rules

### Preparation Of The Log

Both ends of the log should be cut as square as possible to prevent the log from rotating out of the splitter during operation.

Never split logs greater than the specified log capacity.

Do not operate the log splitter on icy, wet, muddy, or slippery ground. Only operate your log splitter on level ground.



***Operating on a slope could cause the log splitter to roll over or logs to fall off the equipment, which could result in injury.***

Do not move the log splitter over hilly or uneven terrain without a tow vehicle or adequate help.

Keep the work area free of clutter. Remove split wood from around the log splitter immediately after each use to avoid potential tripping.

### Operator Zone

This unit is designed to be operated by one person located in the operator zone as shown in the following diagrams.

Operate the unit only when standing in the operator zone.

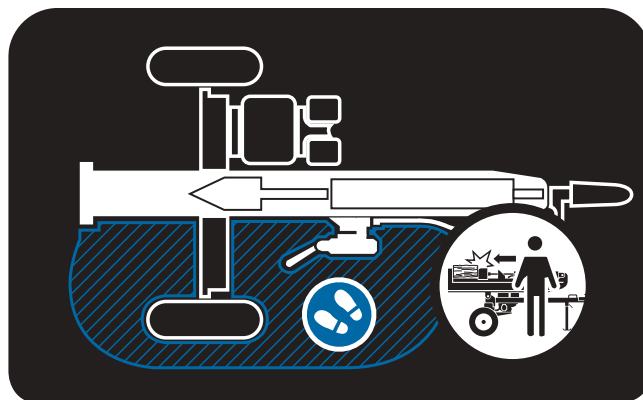
Always stop the unit and allow moving parts to stop before leaving operation zone. Do not leave a running unit unattended.



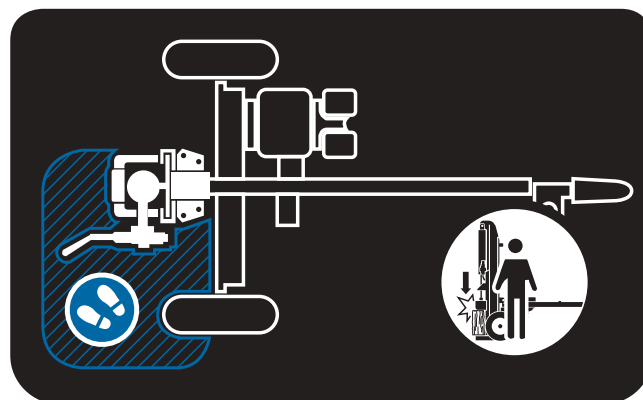
***Many accidents occur when more than one person operates the log splitter.***

***The adult who loads and stabilizes the log must be the person who operates the control handle.***

### Horizontal Operating Position



### Vertical Operating Position



## Machine Use And Care

Never operate the machine without good visibility or light.

Never attempt to split wood across the grain. The log splitter was not designed for cross-grain splitting.

Always block the front and back of both wheels to prevent unintended movement.

Hold the bark side of the logs when loading or positioning, never the ends. Never place your hands or any part of your body between a log and any part of the log splitter.

Do not straddle or step over the log splitter during operation.

Do not reach or bend over the log splitter to pick up a log.

When stabilizing a log with the left hand, remove your hand when the wedge contacts the log or serious injury may occur.

Never attempt to split more than one log at a time.

Do not attempt to load your log splitter when the ram or wedge is in motion.

Use your hand to operate the control lever on the valve. Do not use your foot, a rope, or any extension device.

Do not move the log splitter while the engine is running.

### Towing Safety

Check all local and state regulations regarding towing, licensing, and lights before towing your log splitter.

Before towing the log splitter, check tires for excessive wear, cuts, or damage. Check for proper tire inflation. Add air as required. Do not over inflate tires. Serious injury can result if tires explode.

Check before towing to make sure the log splitter is correctly and securely attached to the towing vehicle and the safety chains are secured to the hitch or bumper of the vehicle with enough slack to allow turning. Always use a class I, 2" ball with this log splitter.

Make sure the coupler is tight before towing and after towing 50 miles.

Never transport cargo on the log splitter.

Never allow anyone to ride or sit on the log splitter.

Always stop the engine, lock the beam in the horizontal position, and close the fuel shut-off valve when transporting the unit.

Use extra care when towing the log splitter. Do not exceed 45 mph. Towing the log splitter at a speed greater than 45 mph could result in loss of control, damage to the equipment, serious injury, or death.

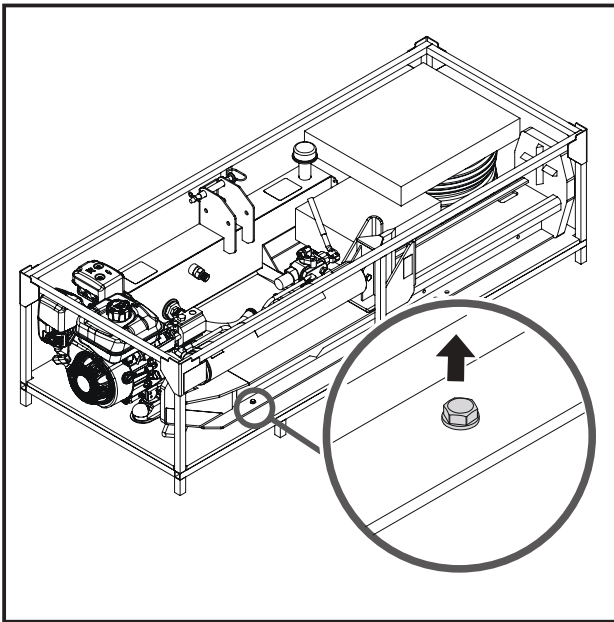
Avoid sharp turns and steep angles. Avoid large holes or ditches when towing the equipment. Always be careful when backing up with your log splitter when towing; it could jackknife. Use caution when backing up; a spotter outside the vehicle is highly recommended. Disconnect the log splitter from the towing vehicle before operating it.



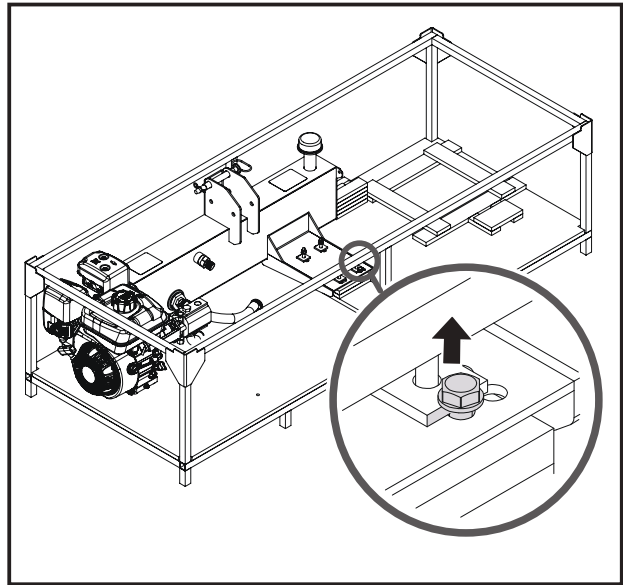
# UNPACKING THE CONTAINER

GB

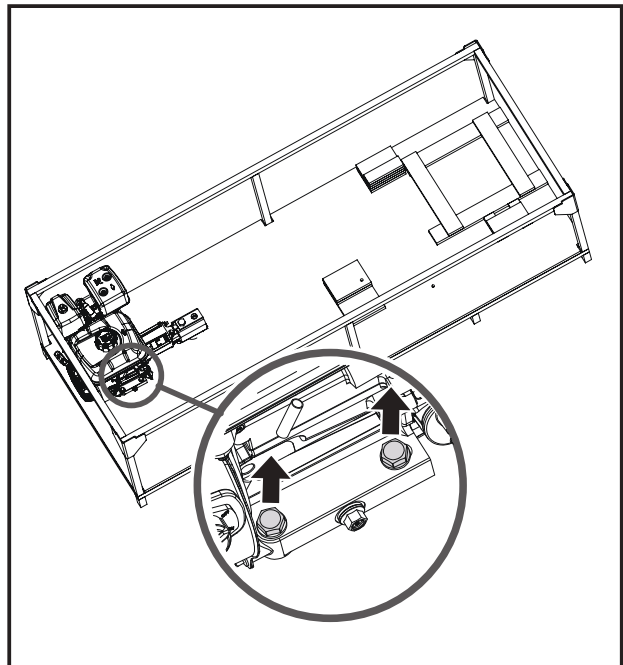
1. Remove plastic wrap on crate.
2. Remove restraining bolts (tee nut bolts) from the beam. Use a 13mm wrench or socket to remove the two hex bolts that are securing the beam to the crate bottom (as shown below). Please note that the two hex bolts are located diagonally opposed to each other.



3. Remove beam and cylinder assembly from metal crate with assistance of a helper. Lift beam and cylinder assembly to its vertical position standing upright on the beam's footplate.
4. Use a 13mm wrench or socket to remove the single hex bolt that is securing the tank assembly to the crate bottom (as shown below).



5. Use a 13mm wrench or socket to remove the two hex bolts that secure the engine to the crate bottom (as shown below).



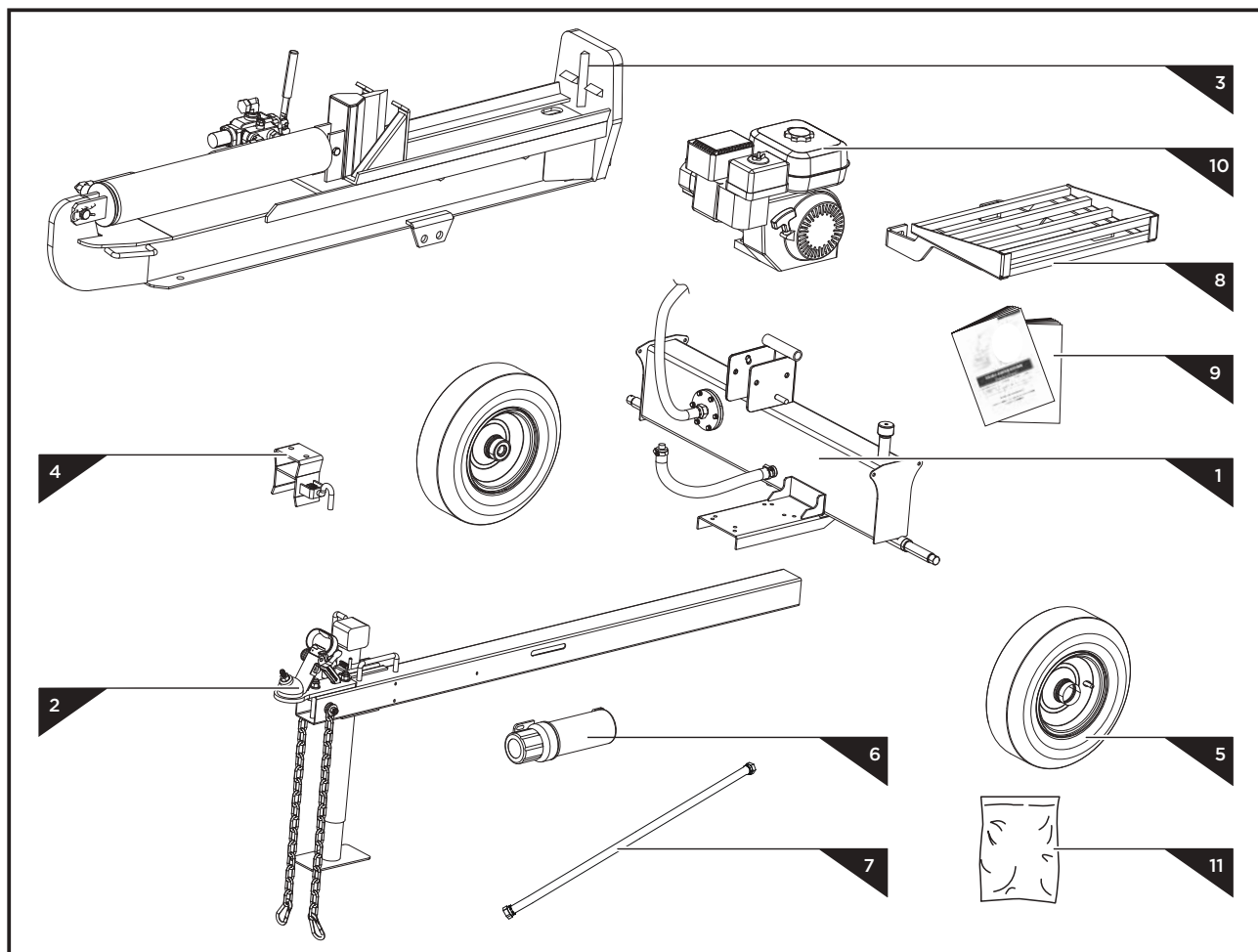
6. Remove Tank & Engine Assembly from crate, then remove the engine assembly.

# CONTENTS SUPPLIED

Your log splitter comes partially assembled and contains the following:

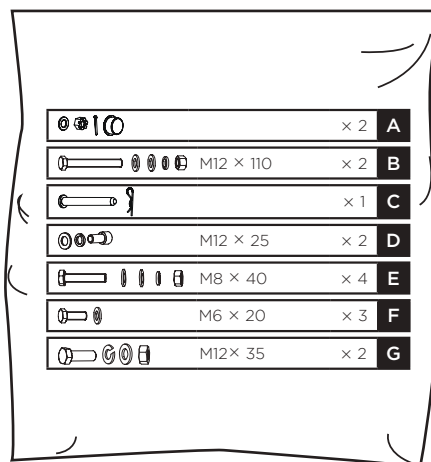


**Heavy lifting required. Some of the components in these assembly instructions are heavy and can't be lifted by one person safely. Please plan to assemble this product when another person can be available to help.**



- 1. Tank
- 2. Tongue
- 3. Beam & Cylinder
- 4. Beam Lock Bracket
- 5. Wheel/Tyre
- 6. Manual Canister
- 7. High-Pressure Oil Line Tube
- 8. Log Catcher
- 9. Operator's Manual and Engine Manual
- 10. Engine & Pump Assembly

11. Hardware Kit, Including:

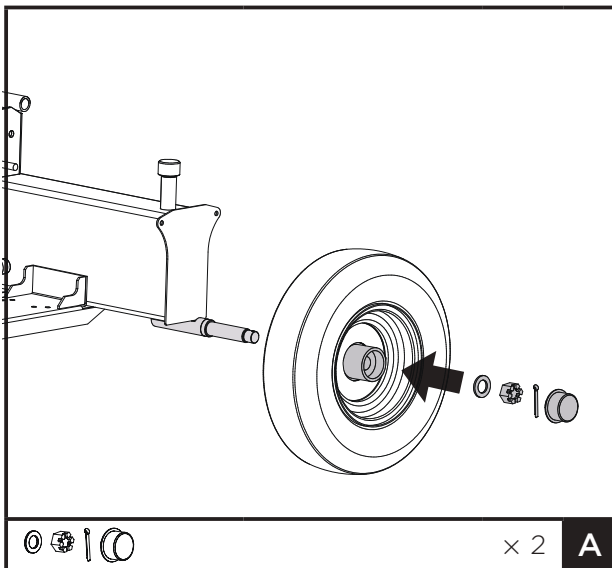


# ASSEMBLY

This log splitter was partially assembled at the factory. To assemble your machine follow the below instructions.

## Wheels

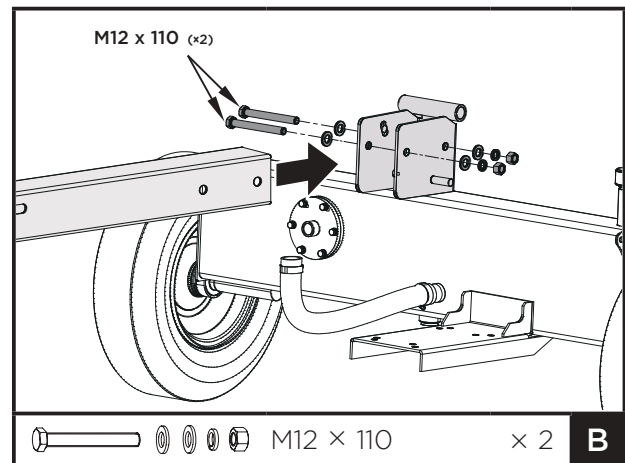
1. Remove disposable spindle covers and wheel bearing covers.
2. Slide Wheel/Tyre to the spindle with valve stem of tire facing outwards. Install the Flat Washer onto the spindle. Thread the slotted Castle Nut onto the spindle. The slotted nut should be attached with a 32mm socket tight enough to eliminate the free-play of the wheel assembly and not tighter. Make sure the wheels can freely rotate. The Castle Nut needs to be oriented to allow for the installation of the Cotter Pin. Install the Cotter Pin through the Castle Nut and spindle. Bend pin ends around spindle to secure its position. Install the hub cap using the hub cap tool. Gently tap the tool with a hammer to drive the hub cap into place. Repeat the steps outlined above to install the second wheel.



**Installation of the cotter pin is important and required. Failure to install the cotter pin can result in loss of wheel retention. Always assemble using a new cotter pin. Do not reuse.**

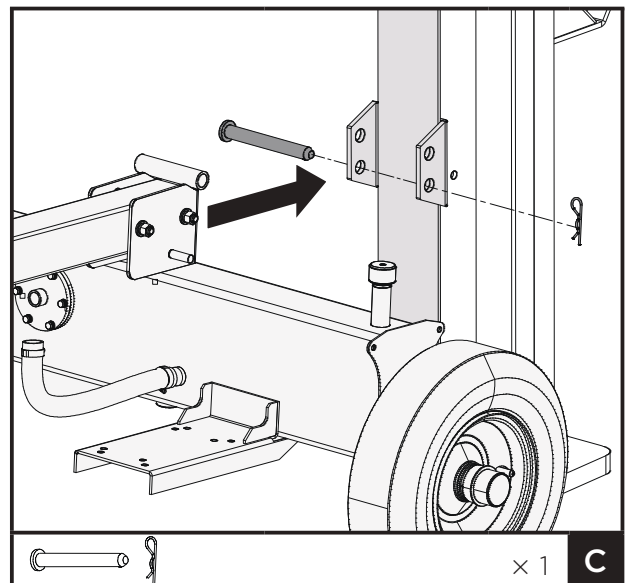
## Tank & Tongue

1. Rotate the Jack into the down position.
2. Position the tongue so that the mounting holes align with the holes in the tank's tongue mount.
3. Insert a M12x110 bolt with a flat washer into the each of the two holes, install a flat washer, lock washer, nut on each bolt and tighten.

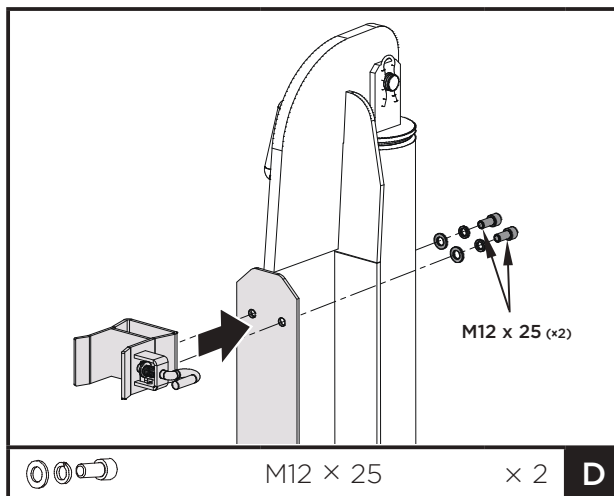


## Beam and Tank

1. Using two people or a suitable lifting device, stand the beam assembly vertically as shown, making sure the beam is on a stable and level surface.
2. Move the tank/tongue assembly into position, aligning the pivot tube located on the tank assembly with the holes located on the two tabs that are on the beam.
3. Slide the pivot pin through both of the holes and fasten with the R-clip.



4. Fasten the beam lock in place using the bolt M12x25 with the lock washer and flat washer in two places.



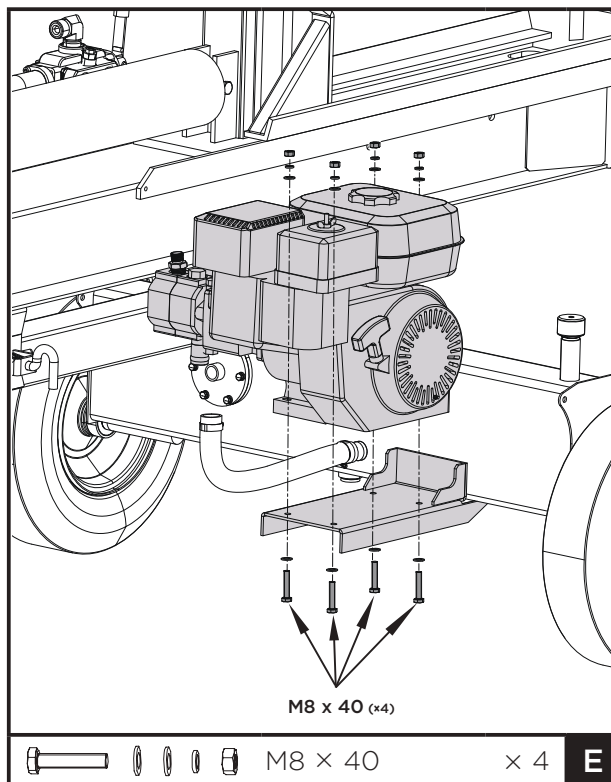
5. Lower the beam into horizontal position and verify the beam locks onto the tongue.



***Have a person stabilize the beam until it is secured to the tank/tongue assembly.***

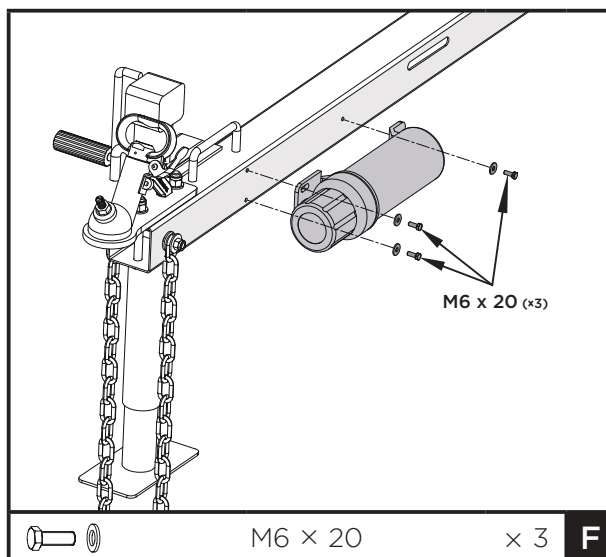
## Engine Assembly

1. Place engine/pump assembly onto the engine mount bracket, aligning the installation holes.
2. Secure the engine/pump assembly onto the bracket with the supplied hardware as shown.



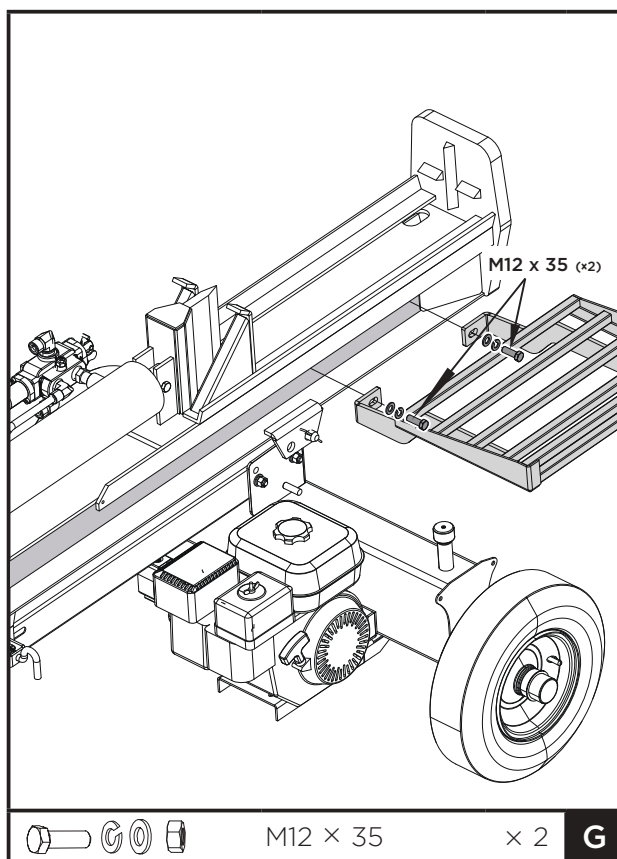
## Manual Canister

1. Remove the cap from the manual canister. Align the holes in the manual canister with the holes in the tongue. Insert and tighten bolts and washers. Put the cap back on the canister.



## Log Catcher

1. Align holes in log catcher with holes in the beam, secure the log catcher onto the beam with the provided hardware.



## Hydraulic Line Connection

1. Connect Suction Hose to Pump

Oil already filled in the tank, lift the end of the hose up as high as possible, then remove the plug from the suction hose.

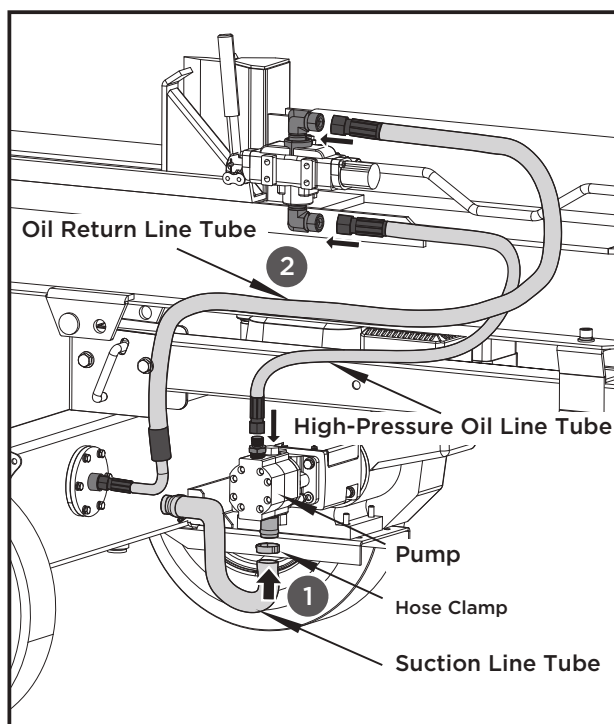
Slide suction hose onto the suction tube located on the bottom of the hydraulic pump. Secure the connection with hose clamp with a flat screwdriver.

2. Connect Oil Return Hose to Valve

Remove the plastic caps and plug, then attach the oil return hose to the fitting on top of the valve, tighten the connections.

3. Connect High Pressure Hose to Valve and Pump

Locate the high pressure hose. Remove the plastic caps, then attach one end of the hose to the fitting on top of the pump, the other end to the fitting on the bottom of the valve, tighten the connections.



# KNOW YOUR MACHINE

## Features and Controls

Foot Plate

Beam Assembly

Log Catcher (Optional)

Log Stripper

Split Control Handle

Cylinder

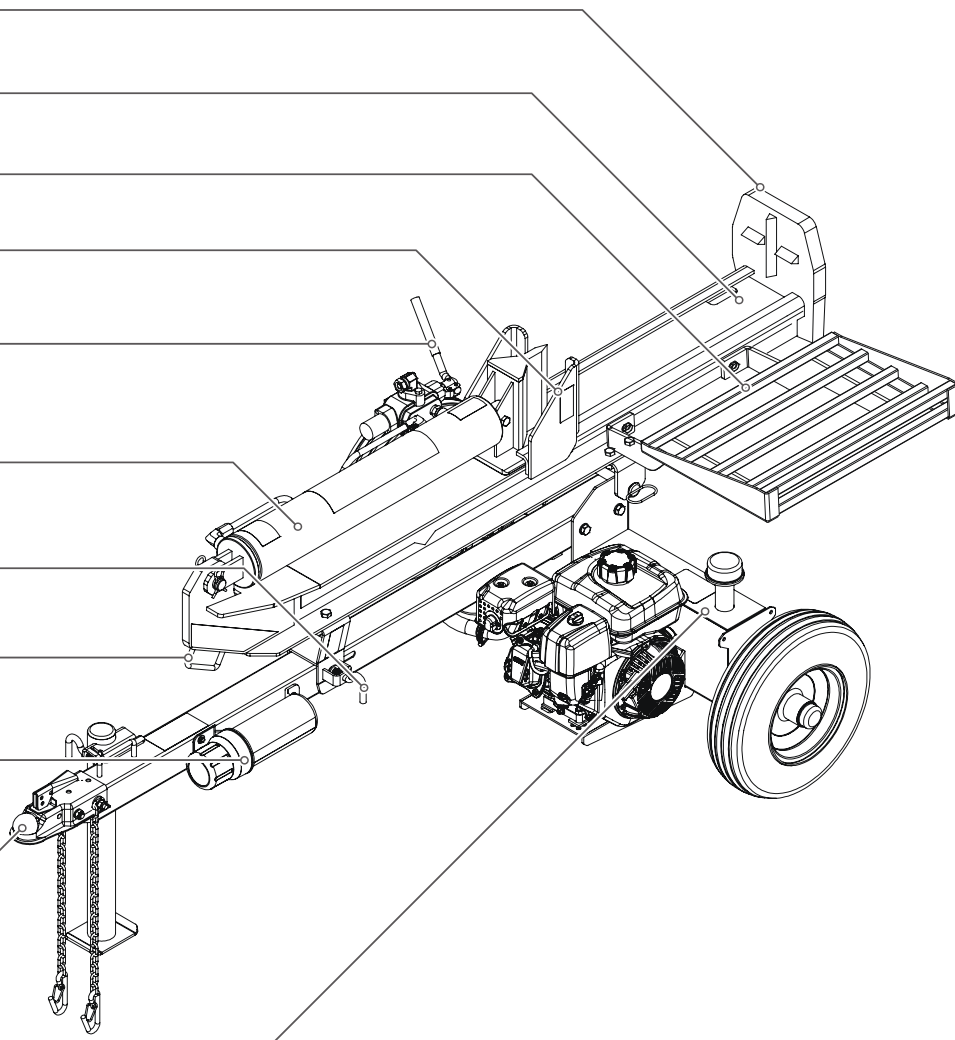
Beam Lock Bracket

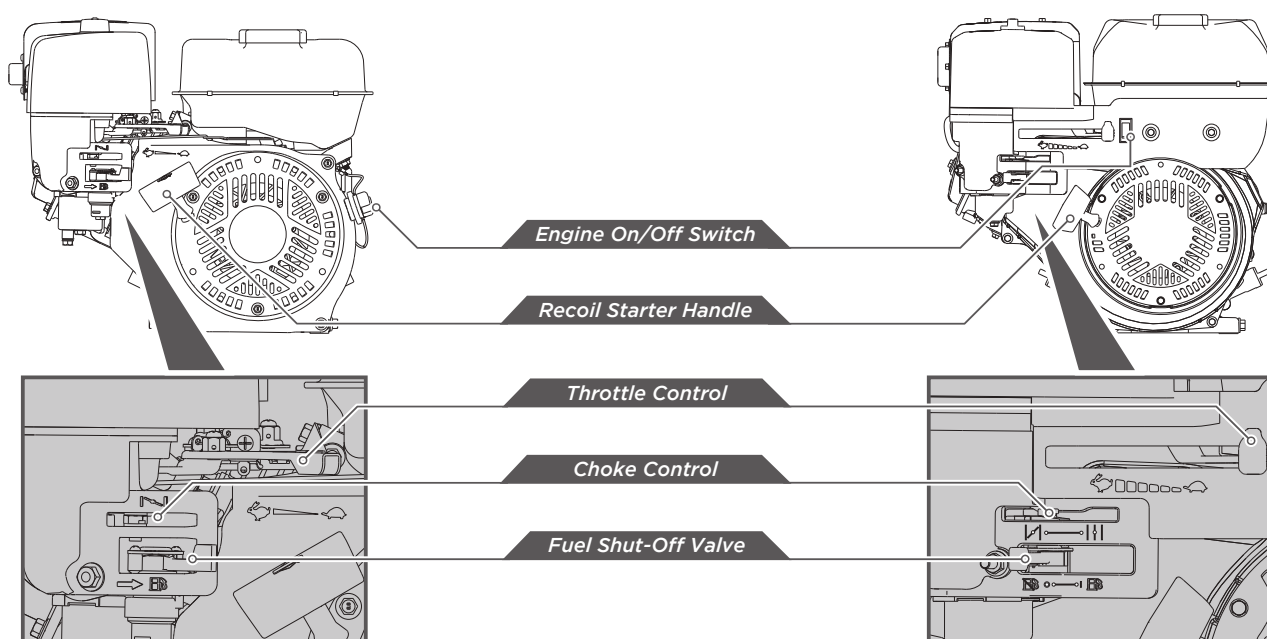
Lifting Handle

Manual Canister

2" Ball Hitch Coupler

Tank





### Split Control Handle

The control handle is used to move the wedge up and down to split logs. The control handle has three positions: Forward, Neutral, and Reverse. See the “operation” section for instruction.

### Manual Canister

Keep manuals safely in the canister.

### Lifting Handle

The lifting handle is included for easy transition from horizontal to vertical.

### 2” Ball Hitch Coupler

The coupler hitch is at the end of the tongue and attaches to a tow ball for transportation purposes.

### Log Stripper

The log stripper is designed to remove any partially split wood from the wedge. This may occur while splitting large diameter wood or freshly cut wood.

### Log Catcher

A log catcher can be mounted to the beam in minutes. It is used to hold a split log.

### Beam Lock Bracket

Pull outward the lock pin and lift up the lifting handle to transit the beam position from horizontal to vertical.


### Engine On/Off Switch

The engine switch has two positions. OFF - engine will not start or run. ON - engine will start and run.

### Recoil Starter Handle



The handle is used to start the engine.

### Fuel Shut-Off Valve



The fuel shut - off has two position. CLOSED (  ) - use this position to service, transport, or store the unit.

OPEN (  ) - use this position to run the unit.

### Choke Control

The choke control is used to choke the carburetor and assist in starting the engine. The choke control slides between the CHOKE CLOSED  and CHOKE OPEN  positions.

### Throttle Control

The throttle control regulates the speed of the engine and will shut off the engine when it is moved to the STOP position. The throttle control moves between FAST , SLOW , and STOP positions.



## Operation



*Many accidents occur when more than one person operates the log splitter.*

*If a helper is assisting in loading logs to be split, never operate the controls until the helper is clear of the area.*

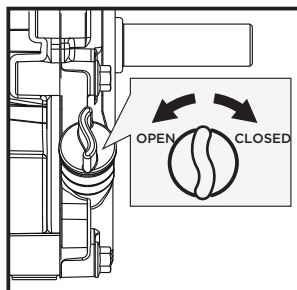


*Always check oil level before starting the engine and keep level full.*

### Add Oil To Engine

1. Make sure the log splitter is on a flat, level surface.

2. Remove the oil fill cap/dipstick to add oil.



3. Using a funnel, add oil up to the FULL mark on the dipstick. (See engine manual for oil capacity, oil recommendation, and location of fill cap.)



**DO NOT OVERFILL.** Check engine oil level daily and add as needed.

### Add Gasoline To Engine



*Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel. Use extreme care when handling gasoline.*



*Fill the fuel tank outdoors, never indoors. Gasoline vapors can ignite if they collect inside an enclosure. Explosion can result.*

1. The engine must be off and allowed to cool at least two minutes before adding fuel.
2. Remove the fuel filler cap and fill the tank. (See engine manual for fuel capacity, fuel recommendation, and location of fuel cap.)

### IMPORTANT: DO NOT OVERFILL!



*This equipment and/or its engine may include evaporative emissions control system components, required to meet EPA and/or CARB regulations, that will only function properly when the fuel tank has been filled to the recommended level. Overfilling may cause permanent damage to evaporative emissions control system components. Filling to the recommended level ensures a vapor gap required to allow for fuel expansion. Pay close attention while filling the fuel tank to ensure that the recommended fuel level inside the tank is not exceeded. Use a portable gasoline container with an appropriately sized dispensing spout when filling the tank. Do not use a funnel or other device that obstructs the view of the tank filling process.*

3. Reinstall the fuel cap and tighten. Always clean up spilled fuel.



*The hydraulic reservoir should be filled with hydraulic fluid before starting or operation*

### Add Hydraulic Oil To Oil Tank

1. Make sure the log splitter is on a flat, level surface.
2. Remove the oil dipstick from the oil tank.

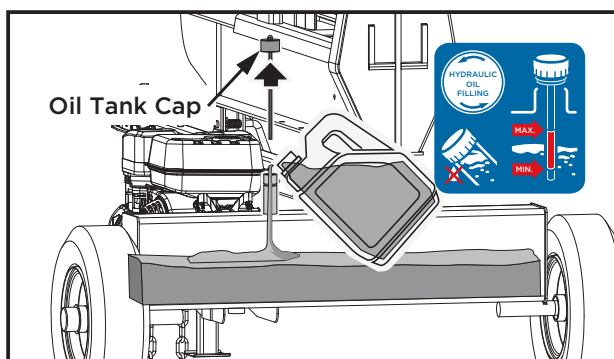


*Never remove the hydraulic oil dipstick when the engine is running or hot. Hot oil can escape causing severe burns. Allow the log splitter to cool completely before removing the hydraulic oil dipstick.*

3. The recommended hydraulic oil type:

10W AW32  
ASLE H-150  
ISO 32





4. Make sure the hydraulic oil level reaches the upper line of the dipstick.



**Completely install the dipstick when checking oil level.**

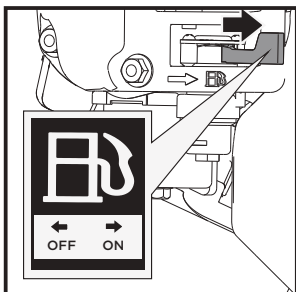
5. Start the engine and use the control valve handle to extend and retract the wedge five times to remove air from the high pressure lines.
6. With the wedge retracted and engine off, check the oil level again. Fill if necessary.
7. Cycle the cylinder again until it has a constant speed. This indicates that all air has been expelled.

### Starting Engine

1. Make sure the control lever is in the neutral position.
2. Move the engine switch to the ON position.

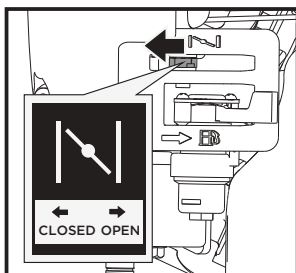


3. Open the fuel shut-off valve.

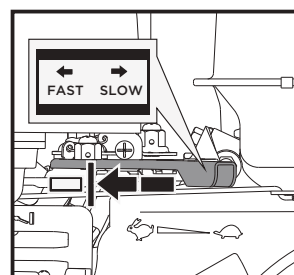


4. Move the choke lever to the CLOSED position.

*If the engine is hot, closing the choke is not necessary.*



5. Move the throttle lever slightly to the FAST speed.



6. Pull the recoil starter until engine compression has become difficult to pull. Let the recoil return to the home position, then pull quickly to start the engine. Repeat steps as needed. Fully open the choke and set the throttle to the FAST position, before operating the unit.



**Rapid retraction of the starter cord (kickback) will pull your hand and arm toward the engine faster than you can let go. Broken bones, fractures, bruises, or sprains could result.**

### Stop Engine

Return the cylinder to fully retracted position or home position. Move the Throttle lever to SLOW (☛). Move the engine switch to OFF. Close the fuel shut-off valve (☛).



**Sudden stopping at a high speed under a heavy load is not recommended. Engine damage may result.**

### Split Control Handle

Forward position - Move the lever in this direction to extend the cylinder toward the foot plate. Keep pressure on the lever until the log splits. The lever does not lock in this position. Release as soon as the log is split or the cylinder is fully extended.



**Never operate through the relief valve for more than 5 seconds.**

*The splitter wedge is designed to reach the full extension before contacting the foot plate.*

*To extend the life of the hydraulic cylinder, avoid "bottoming out" the wedge plate to the foot piece. To conform with industry safety recommendations, the wedge stops 1.5 inches from the end of the stroke.*



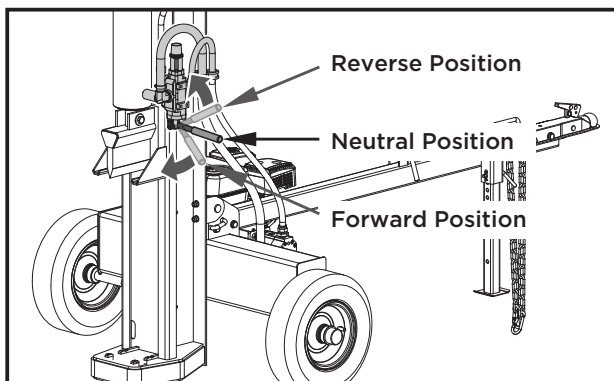
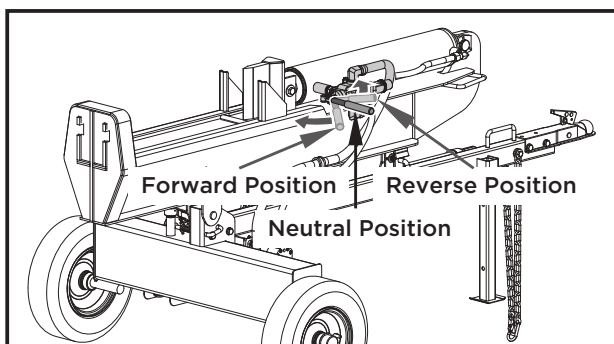
**Cracks in logs can close quickly and pinch fingers. Keep fingers away from any cracks that open in partially split logs.**

**Neutral position** – In this position the cylinder does not move even though the engine is running.

**Reverse position** – Move the lever in this position to retract the cylinder. Push the lever fully in this direction to lock it return mode. The lever will automatically return to the neutral position once the cylinder fully retracts.



**Keep hands and fingers away from the splitter wedge and log stripper during cylinder retraction.**



## Stuck Log Procedure

If a log does not split completely and becomes stuck on the wedge, never attempt to remove it by modifying the splitter or adding attachments to the splitter.

Move the control lever to the Reverse position and allow the cylinder to retract until the stuck log contacts the stripper plates. Continue to retract the cylinder until the log is dislodged from the wedge.



**Do not use the unit if the stripper plates are bent or damaged. Bent or damaged stripper plates must be repaired or replaced before use.**

# TRANSPORTING

## Moving By Hands



***The log splitter is heavy. It can crush and cause serious injury if it rolls out of control or tips over.***

Follow the instructions below for safely moving the log splitter.

1. Make sure the log splitter is locked in the horizontal position with latch rod before moving.



***Make sure the log splitter engine is off. Never move the log splitter with its engine running.***

2. Turn the fuel shut-off valve to the OFF position. This prevents carburetor flooding and reduces the chance of fuel leakage. Refer to the engine manual for fuel valve location.
3. Lock the support leg in the DOWN position before you move the log splitter.
4. Move the log splitter by hand to desired work site.



***Never operate through the relief valve for more than 5 seconds.***



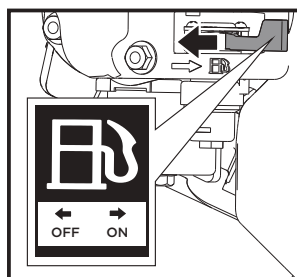
***Never allow anyone to sit or ride on the log splitter.***



***Never transport cargo or wood on the log splitter.***

## Towing by vehicle

1. Turn the fuel shut-off valve off. This prevents fuel from flooding the engine.



2. Check the tires to ensure they are fully inflated to 30 PSI for proper functionality.

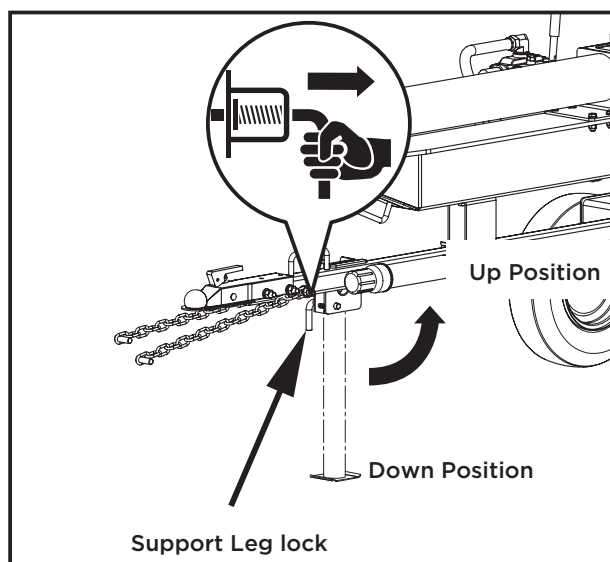


***Do not overinflate tires. Serious injury can occur if tire explodes.***



***When seating a bead after repair, do not exceed 30 PSI. Pressures higher than 30 PSI can cause the tire and wheel to rupture and explode.***

3. Make sure hitch is in good working order.
4. Check safety chains. Two safety chains must be used while towing. Cross safety chains under the coupler, allowing only enough slack for vehicle turns.
5. Pull out the lock lever and put the support leg in the UP position, then release the lever and make sure the leg is secured.



6. Tow the log splitter carefully to desired work site.



***Be aware of the added length of the splitter.***



***Never tow this log splitter over 45 mph. Faster speeds may result in loss of control.***



**Drive slowly and take extra caution when traveling over rough terrain.**



**If towing on a public road, make sure to comply with all local, state, and federal towing requirements. It is the sole responsibility of the purchaser to obtain licensing, trailer lights, safety chains, or signage as needed to comply.**



**Turn off the towing vehicle before leaving the splitter unattended.**

7. Lock the support leg in the DOWN position and disconnect from vehicle.



**Never operate the log splitter while it is attached to the vehicle.**

## MAINTENANCE

Inspect and maintain the log splitter before each use. If the log splitter has been used previously, it must be inspected and maintained before each subsequent use.

Always shut off the engine and relieve system pressure before inspecting, cleaning, adjusting, or repairing the splitter. Relieve system pressure by moving the split control lever back and forth several times.

Remove debris from the engine, muffler, and moving parts. Debris on a hot engine can be a fire hazard. Clean debris and chaff from the engine cylinder head, cylinder head fins, blower housing rotating screen, and muffler areas.



**Avoid contact with hot muffler.**

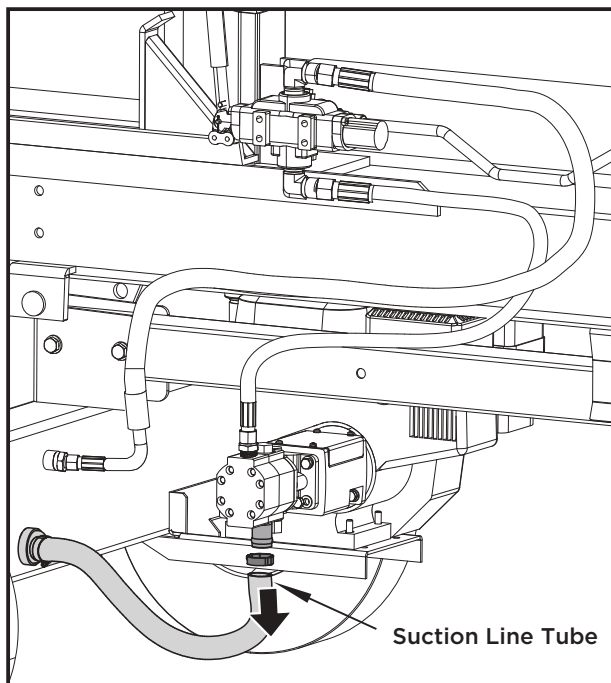


**Debris on moving parts can cause excess wear. Clear debris from the slide beam, wedge, and end plate.**

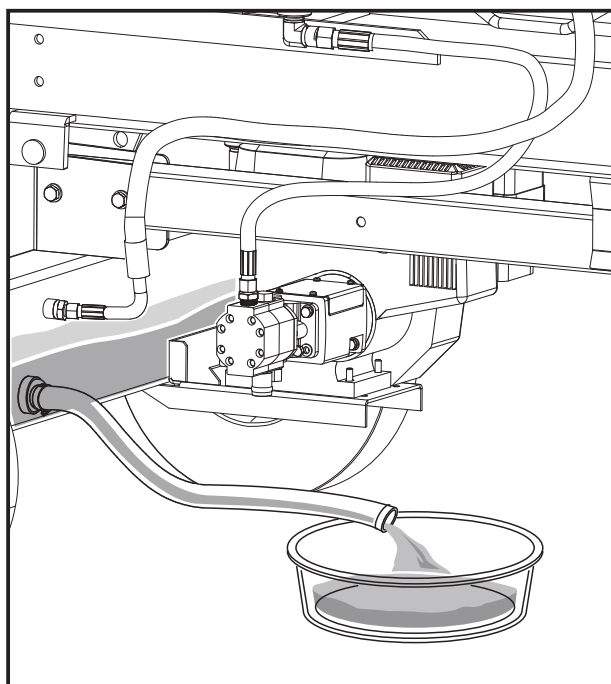
## Oil Draining

Use a drain pan to aid in the removal of all used oil and particles.

1. Disconnect the suction line tube from the pump by loosening the hose clamp.



2. Drain oil from the suction line tube.
3. After oil has been completely drained from the machine, reattach the suction line tube to the pump.



## STORAGE

Follow the instructions below for storing your log splitter between uses.

1. Retract the wedge completely to keep the rod protected from corrosion.
2. Allow the machine to cool 5 minutes before storing.
3. Clear the debris from the beam, wedge, and end plate. Use a damp cloth to clear exterior surfaces of the engine and log splitter. Use a soft bristle brush to remove excess dirt and oil. Use an air compressor (25 PSI) to clear dirt and small debris. Wipe the beam, wedge, and all metal parts with an oil rag to prevent corrosion.



***Never spray the engine or log splitter with a pressure washer. Water can contaminate the fuel system and can enter the engine and damage the engine.***

4. Refer to the engine manual for proper engine storage instructions.



***Gasoline can become stale when stored over 30 days. Stale fuel can cause acid and gum deposits that form in the fuel system or on carburetor parts. For engine fuel that is stored less than 30 days, add a fuel stabilizer to keep the fuel fresh. Turn the fuel valve lever to the off position. If fuel is stored over 30 days, then drain the fuel tank as stated in the engine manual.***



***Always drain fuel from the tank in an outdoor, well-ventilated area.***

***Stay away from sources of heat, flame, or sparks while handling fuel.***

***Clean up fuel spills immediately.***

5. Store the log splitter in a location away from corrosive materials, sources of heat, open flames, sparks, or pilot lights.



***Never store the log splitter inside where there is a source of heat or an open flame, spark, or pilot light, such as a water heater, space heater, furnace, clothes dryer, or other gas appliance. EVEN IF the log splitter's fuel tank is empty, residual gasoline vapors could ignite.***

***Never store the log splitter near fertilizer or any other corrosive material.***

6. Store gasoline in a cool, dry place in a UL listed tightly sealed container.



***Gasoline vapors can ignite if they collect inside an enclosure and explosion can result.***

## TROUBLE SHOOTING

Problem	Cause	Remedy
Wedge movement is slow or erratic	<ol style="list-style-type: none"> <li>1. Air in the hydraulic oil system</li> <li>2. Debris lodged in beam guides</li> <li>3. Low hydraulic oil</li> </ol>	<ol style="list-style-type: none"> <li>1. Purge air by extending and retracting the wedge several times until motion is smooth</li> <li>2. Clear debris from beam</li> <li>3. Check oil level and add as needed</li> </ol>
Oil leak from cylinder	<ol style="list-style-type: none"> <li>1. Faulty cylinder rod seal</li> <li>2. Scored or bent cylinder rod</li> <li>3. Loose hydraulic fitting</li> <li>4. Faulty combination washer seal on cylinder hydraulic fitting</li> </ol>	<ol style="list-style-type: none"> <li>1. Contact customer service</li> <li>2. Contact customer service</li> <li>3. Tighten hydraulic fitting</li> <li>4. Contact customer service</li> </ol>
Oil leak from hose connection	Loose hose clamp or hydraulic fitting	Tighten hose clamp or hydraulic fitting
Wedge will not extend or retract	<ol style="list-style-type: none"> <li>1. Faulty control valve</li> <li>2. Faulty hydraulic pump</li> <li>3. Low hydraulic oil</li> </ol>	<ol style="list-style-type: none"> <li>1. Contact customer service</li> <li>2. Contact customer service</li> <li>3. Check oil level and add as needed</li> </ol>
Wedge does not auto-return	<ol style="list-style-type: none"> <li>1. Low hydraulic oil</li> <li>2. Faulty control valve</li> </ol>	<ol style="list-style-type: none"> <li>1. Check oil level and add as needed</li> <li>2. Contact customer service</li> </ol>
Excessive bouncing while towing	Underinflated	Inflate tires to proper pressure
Control valve handle does not return to neutral when released from forward position	<ol style="list-style-type: none"> <li>1. Hydraulic oil too cold</li> <li>2. Hydraulic oil too thick</li> <li>3. Hydraulic oil contaminated</li> <li>4. Faulty control valve</li> </ol>	<ol style="list-style-type: none"> <li>1. Warm up engine</li> <li>2. Replace hydraulic fluid</li> <li>3. Replace hydraulic fluid</li> <li>4. Contact customer service</li> </ol>
Engine will not start	<ol style="list-style-type: none"> <li>1. Engine switch in OFF position</li> <li>2. Fuel shut-off valve in OFF position</li> <li>3. Fuel tank empty</li> <li>4. Spark plug disconnected</li> <li>5. Faulty spark plug</li> <li>6. Choke lever in wrong position</li> <li>7. Faulty engine</li> <li>8. No enough oil in engine</li> </ol>	<ol style="list-style-type: none"> <li>1. Move switch to ON position</li> <li>2. Move valve to ON position</li> <li>3. Fill fuel tank with fuel</li> <li>4. Connect spark plug</li> <li>5. Replace spark plug</li> <li>6. Adjust choke lever position</li> <li>7. Contact customer service</li> <li>8. Add the recommended oil amount 0.6L</li> </ol>

# PARTS SCHEDULE

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