

Gas Log Splitter

Operator's Manual



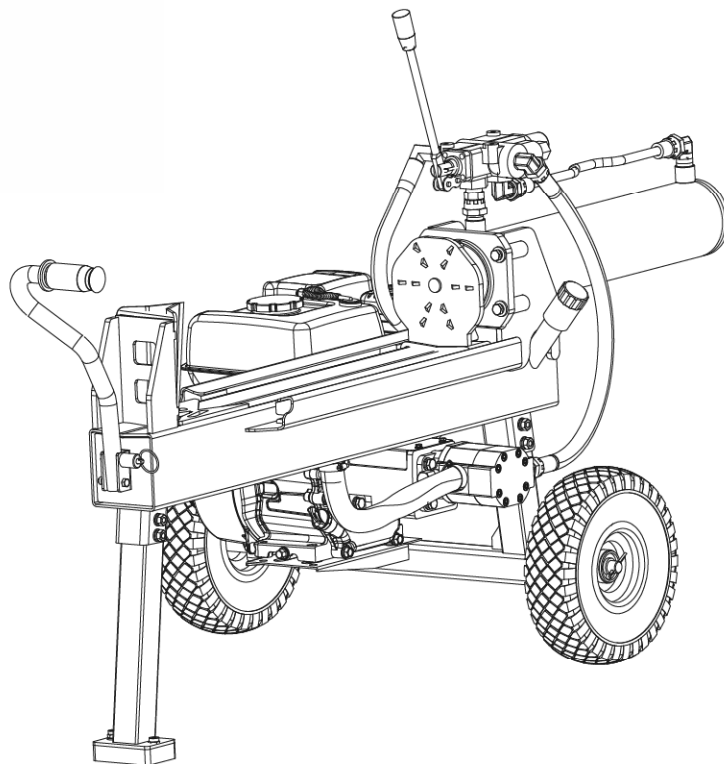
MODEL NUMBER

H5220FB

SERIAL NUMBER

PURCHASE DATE

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

GO FULL BOAR

Your new FULL BOAR® gas log splitter offers quality construction, and is easy and safe to operate. Expect professional performance and reliability. With proper use and care, it is designed to give you many years of dependable service.

Prepare to experience the durability to take on any job – with the ease, portability, and convenience of clean, gas splitting!

Discover the FULL BOAR Advantage

At FULL BOAR, we understand that land ownership definitely has its privileges, but it also comes with a great deal of responsibility. When duty calls and you need to respond, will you have what it takes to tame the great outdoors?

When looking for outdoor power equipment (OPE) to get the job done right, at the right price, FULL BOAR delivers the perfect combination of performance and practicality. FULL BOAR has a solution that’s right for you.

MAX Performance, MAX Value, MAX Support

- ✓ Backed by decades of proven manufacturing expertise
- ✓ Enhanced design features come standard
- ✓ Engineered for the best user experience
- ✓ Quality metal parts are used instead of plastic
- ✓ A robust warranty supports all products
- ✓ Budget-friendly prices make it practical



Up for the job? FULL BOAR is.

TABLE OF CONTENTS

Introduction	1
Specifications	4
Symbols	5
Safety	6
Contents Supplied	9
Assembly	11

Know Your Machine	15
Operation	17
Maintenance	20
Storage	21
Troubleshooting	22
Parts Diagram	23



WARNING 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.

EMISSION CONTROL SYSTEM

This equipment or its engine may include exhaust and evaporative emission control system components required to meet U.S. Environmental Protection Agency (EPA) and/or California Air Resources Board (CARB) regulations. Tampering with emission controls and components by unauthorized personnel may result in severe fines or penalties. Emission controls and components can only be adjusted by an authorized engine manufacturer's service center.

CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust, some of its constituents and certain product components contain or emit chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

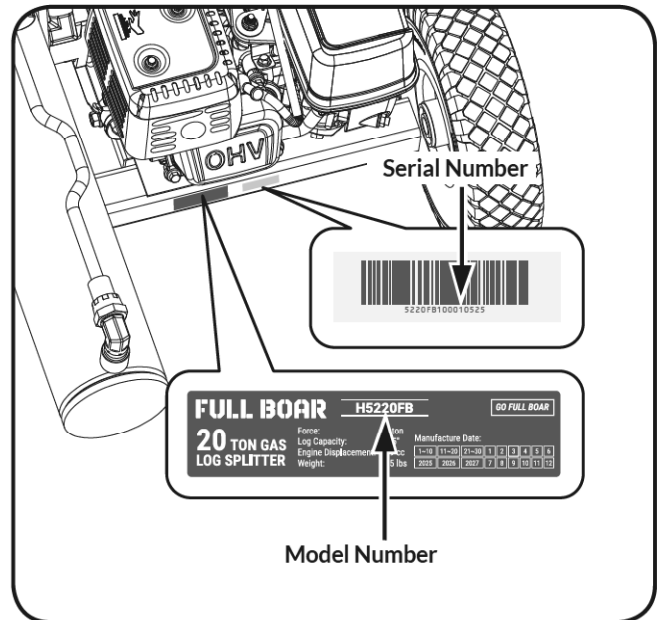
ENVIRONMENTAL



Recycle unwanted materials instead of disposing of them as waste. All tools, hoses, and packaging should be resorted, taken to the local recycling center and disposed of in an environmentally safe way.

MODEL AND SERIAL NUMBERS

Record the model and serial number as well as date and place of purchase for future reference. Have this information available when ordering parts or optional accessories and when making technical or warranty inquiries.



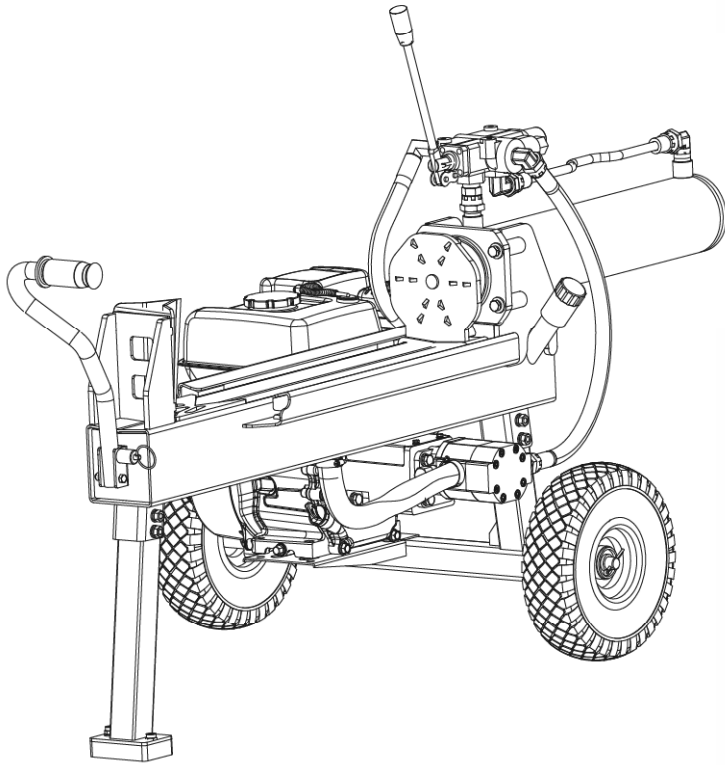
DISCLAIMER

Manufacturer reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your unit.

SUPPORT

Have questions about your FULLBOAR equipment?

Call us at (888) 533-2999, email us at Support@gofullboar.com, or contact us via your favorite social media site.



SPECIFICATIONS

Model #	H5220FB
Splitting Force*	20 ton
Engine	Full Boar
Displacement	209 cc
Gross Torque	9.15 lbf-ft / 2500 rpm
Starting System	Recoil
Fuel Capacity	0.68 Gallon
Engine Oil Capacity	16.9 oz
Log Capacity	20"
Log Diameter	16"
Forward Time	4.75 s
Reverse Time	3.92 s
Pump Size	10.5 GPM
Control Valve	Auto Return
Hydraulic Cylinder Bore	3.5"
Hydraulic Cylinder Stroke	19.5"
Hydraulic Rod Diameter	1.8"
Cylinder Cycle Time	8.67 s
Hydraulic Capacity	1.85 Gallon
Hydraulic Oil Required to Fill	1.45 Gallon
Hvdraulic Oil Included	Not included
Towable	No
Open Operating Zone	Standard
Log Lift Table Attachment	No
Dimensions(LxWxH) Inches	56.3" x 26.4" x 35.4"
Rear Wheels	10"
Weight (lbs)	134 lbs

* 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.

- 

Indicates a potential personal injury hazard.
- 

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.
- 

Do not place your hands between the splitting wedge and the log pusher when loading or removing logs.
- 

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.
- 

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.
- 

Gasoline and its vapors are extremely flammable and explosive.
- 

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 and fingers away from all pinch points.
- 

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

Keep hands away from pusher and cylinder, also away from the space in between
- 

Keep your hands away from the wedge and the cylinder, and away from any space in between.
- 

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.
- 

The exhaust fumes are dangerous, containing carbon monoxide. Staying in the environment can lead to unconsciousness and death.
- 

Check and fill hydraulic oil.
- 

Follow the direction indicated to use the control lever.
- 

The log should be rotated down and the most flat end placed toward the log pusher.
- 

Make sure the log does not tilt when splitting to avoid wedge damage.

SAFETY

SIGNAL SAFETY WORDS DEFINITION

The definitions below give the level of severity for each signal word.



DANGER

This symbol is used to indicate a hazardous situation which, if not avoided, will result in serious injury or death.



CAUTION

This symbol indicates a hazard, which, if not avoided, may result in minor injury, moderate injury, or property damage.



WARNING

This symbol points out safety instructions. Read and follow all instructions before attempting to operate this product. Failure to comply with these instructions could result in serious injury or death.



NOTE

This information makes the product easier to use.

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.



DANGER

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.

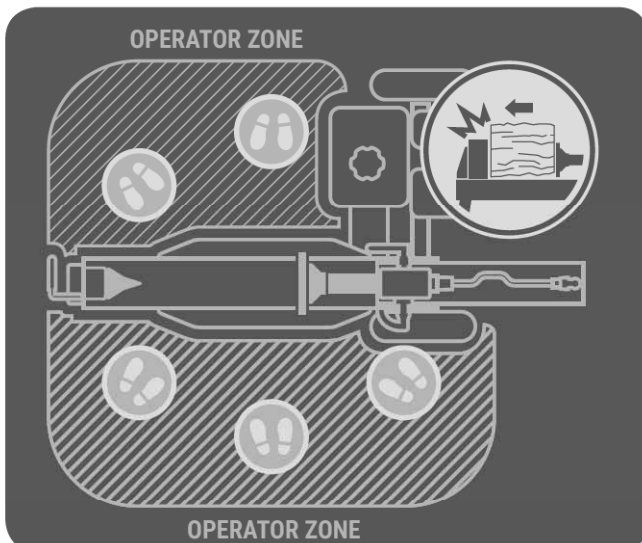
Always stop the unit and allow moving parts to stop before leaving operation zone. Do not leave a running unit unattended.



WARNING

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



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

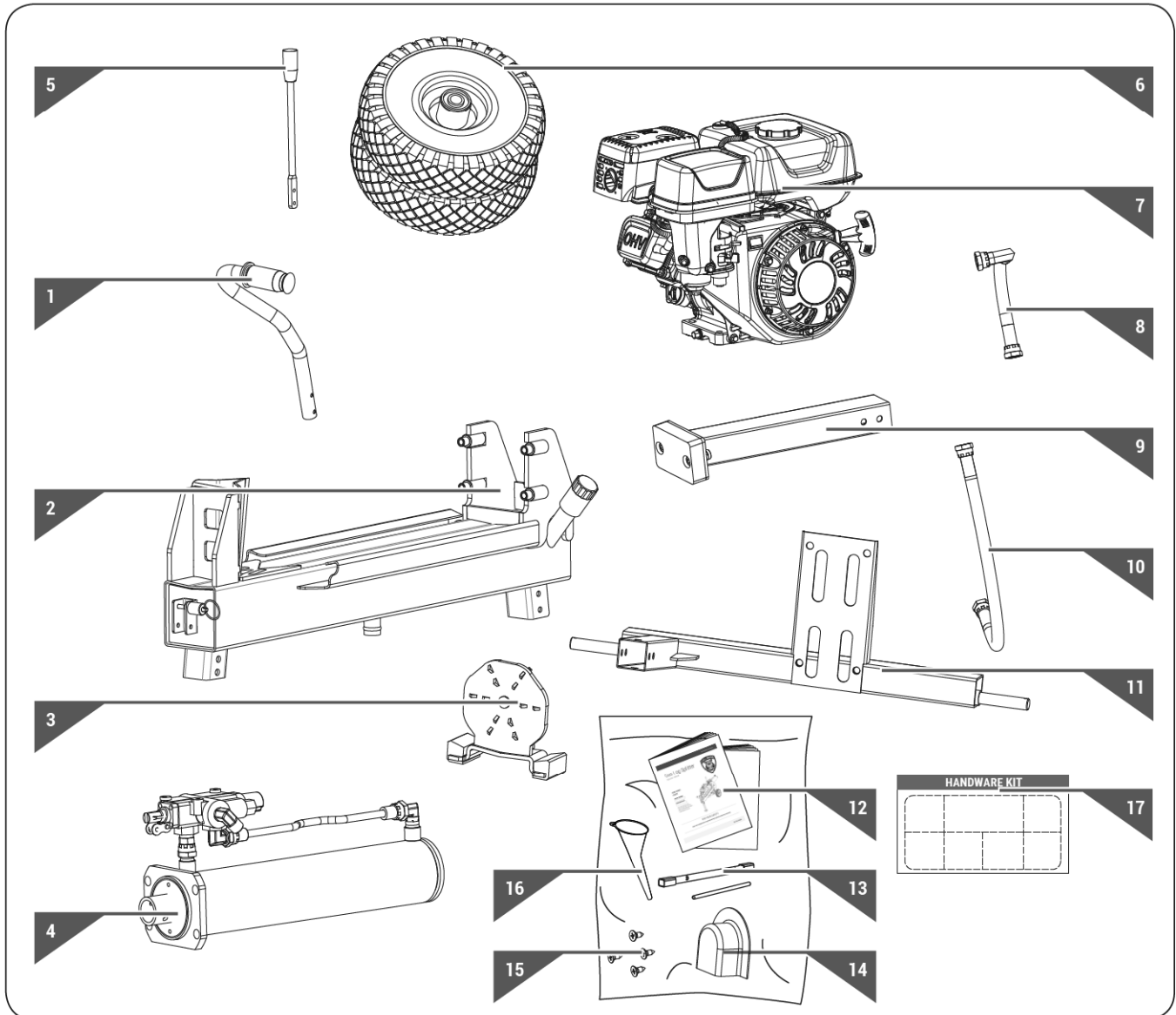
This product IS NOT intended to be towed behind a vehicle of any sort. The handle and wheels of the product are intended for the sole purpose of easily moving the log splitter on your work site. Any modification or changes to allow moving of this product by any other means other than by hand will render all warranties null and void.

CONTENTS SUPPLIED

Your FULLBOAR log splitter comes partially assembled and contains the following:

CAUTION





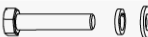
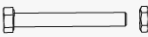





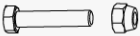
Heavy lifting required. Some of the components in these assembly instructions are heavy and can't be lifted by one person safely. Please plan to assemble this product when another person can be available to help.



1. Handle
2. Supporting Beam/Tank
3. Log Push Plate
4. Hydraulic Cylinder & Control Valve Assembly
5. Control Valve Lever
6. Wheels
7. Gasoline Engine & Pump Assembly
8. Hydraulic Oil Return Hose

9. Support Leg
10. Hydraulic Oil Inlet Hose
11. Underframe
12. Operator's Manual and Engine Manual
13. Tools for Spark plug Assembly
14. Exhaust Deflector Cover
15. Mounting Screw
16. Funnel

17. Hardware Kit, Including:

	M8 × 65	× 2	1
	M8 × 65	× 2	2
	∅16	× 2	3
	3 × 30	× 2	
	M10 × 35	× 4	4
	M8 × 65	× 1	
	6 × 25	× 1	5
	2 × 35	× 1	
		× 1	
	M8 × 45	× 4	6
		× 4	
	M6 × 40	× 1	7

ASSEMBLY

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

SUPPORT LEG

Secure the support leg onto the beam with the provided hardware as shown and tighten. (See **Figure 1**)

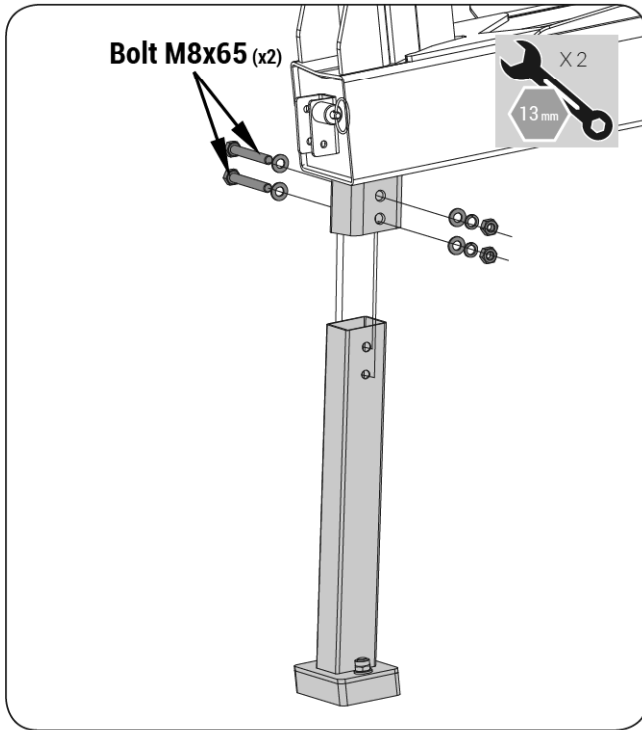
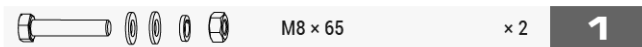


Figure 1



UNDERFRAME

Secure the underframe onto the beam with the provided hardware as shown and tighten. (See **Figure 2**)

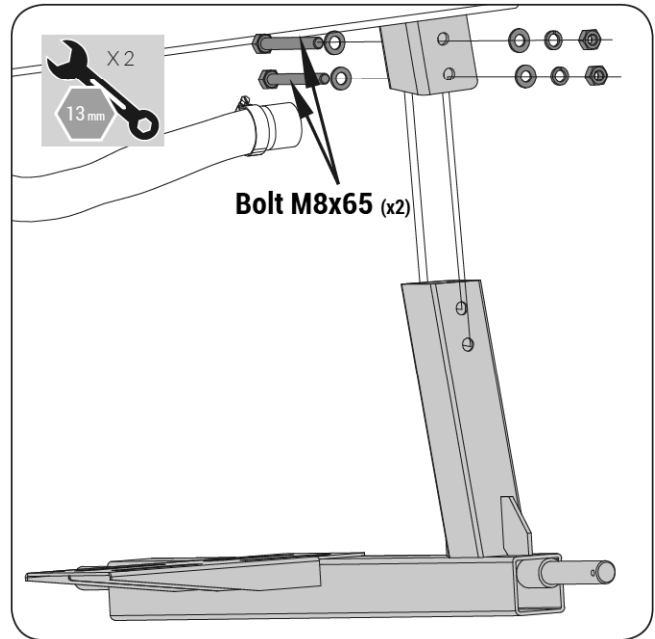
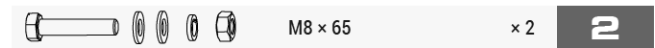


Figure 2



WHEELS

1. Slide the wheel onto the wheel axle, then install a flat washer. Insert cotter pin and bend the pin end left and right.
2. Repeat steps outlined above for the other wheel installation. (See **Figure 3**)

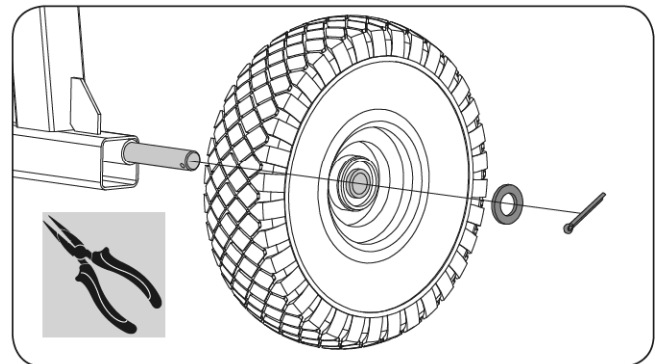
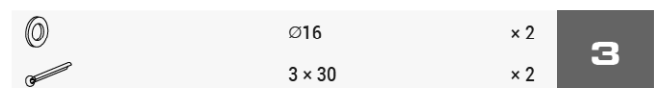


Figure 3



CYLINDER & CONTROL VALVE ASSEMBLY

1. Position the cylinder on the beam so that the mounting holes align with the holes in the beam bracket. Secure the cylinder with M10x35 bolts, spring washers, and flat washers in position, but do not tighten them. (See **Figure 4**)
2. Slide the log push plate into the guide rail and slide it onto the cylinder's connection shaft. (See **Figure 5**)
3. Tighten the M10x35 bolts. (See **Figure 6**)
4. Secure the log push plate using M8x65 bolt and nut. (See **Figure 7**)

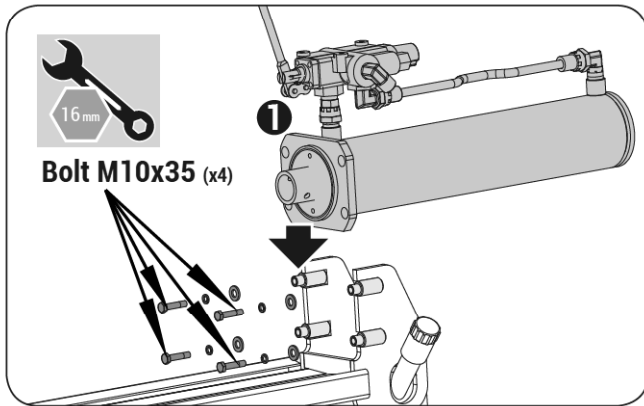


Figure 4

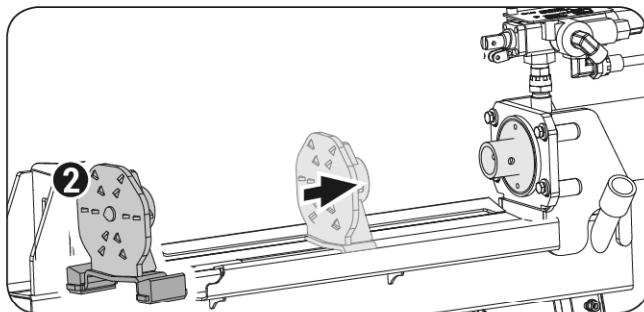


Figure 5

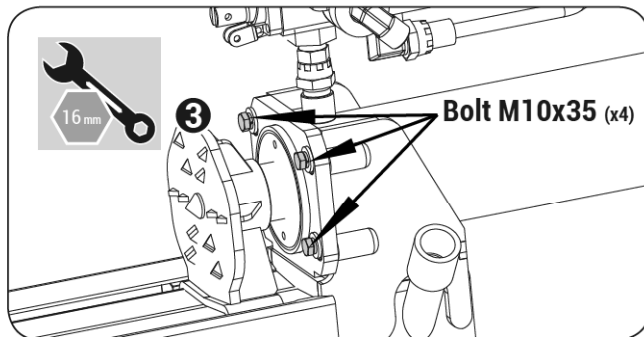


Figure 6

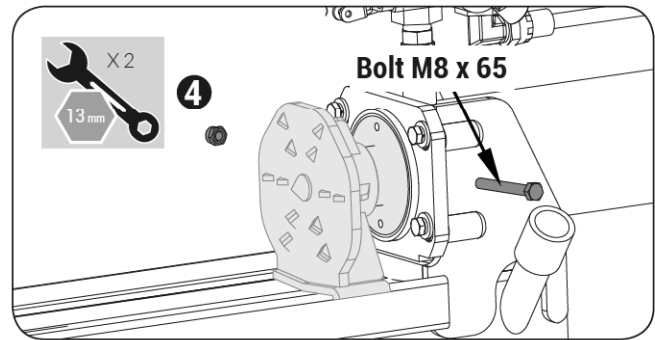




Figure 7

	M10 × 35	× 4	4
	M8 × 65	× 1	

CONTROL VALVE LEVER

Insert the pins of the connecting buckle through the holes - one pin through the hole at the bottom of the control lever handle, the other pin through the lower holes of the valve. Mount the chain link plate and the slotted fixing plate onto the pins from the other side.

Align the upper hole in the handle with the upper hole in the valve. Insert a 6x25 cylindrical pin through the holes from one side, then insert a cotter pin through the hole in the pin from the other side. Spread the ends of the cotter pin to secure the handle in place. (See **Figure 8**)

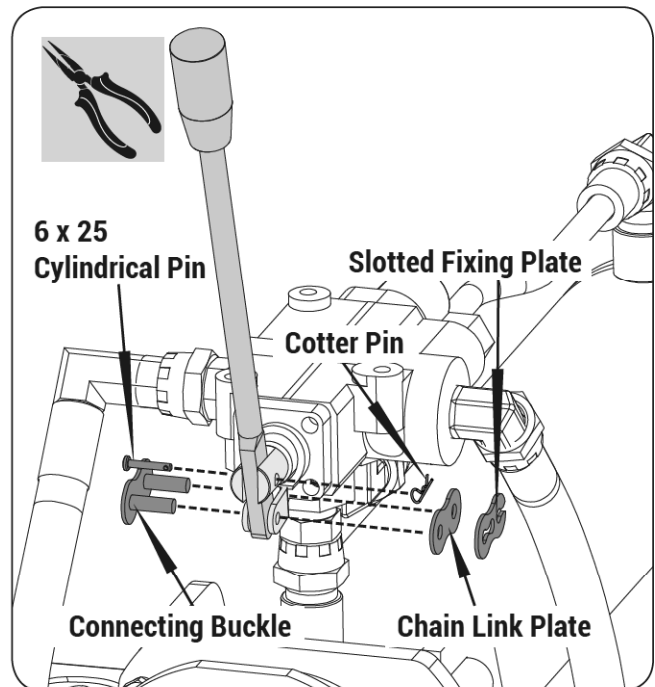





Figure 8

	6 × 25	× 1	5
	2 × 35	× 1	
		× 1	

RETURN HOSE ASSEMBLY

Locate the oil return hose, there is a right-angle connector at one end of the oil return hose.

Remove the plastic caps/plug from the hose and valve, then attach the end with right-angle connector to the valve, the other end to the filter on the tank as shown. Tighten. (See **Figure 9**)

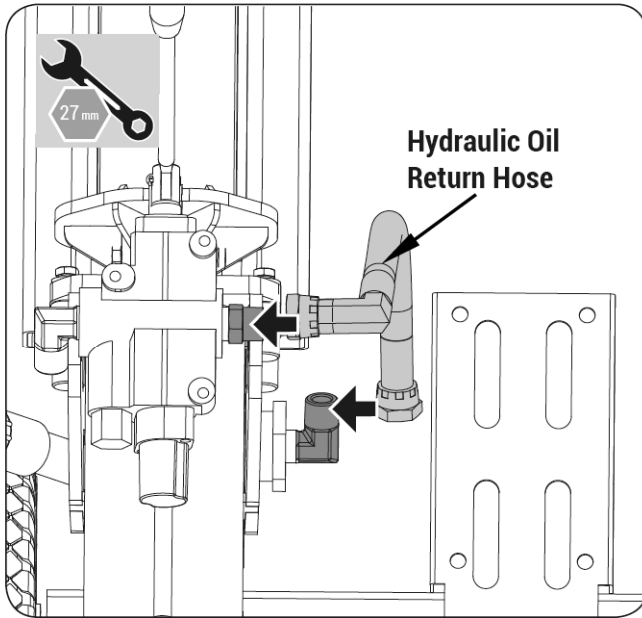


Figure 9

ENGINE ASSEMBLY

Place engine/pump assembly onto the engine support plate, with 4 support cushions under the engine, aligning the installation holes. Secure it in place using the provided hardware as shown. (See **Figure 10**)

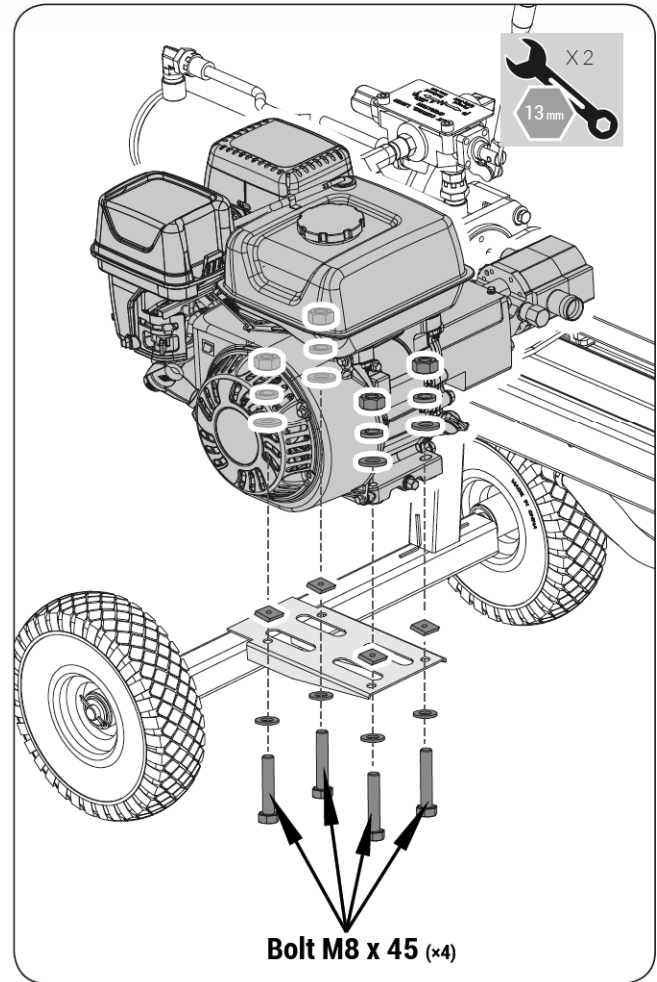
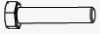



Figure 10

	M8 x 45	x 4	6
		x 4	

SUCTION HOSE & INLET HOSE ASSEMBLY

1. Remove the plug from the suction hose.
2. Slide suction hose onto the fitting on the pump and tighten clamp. (See **Figure 11**)

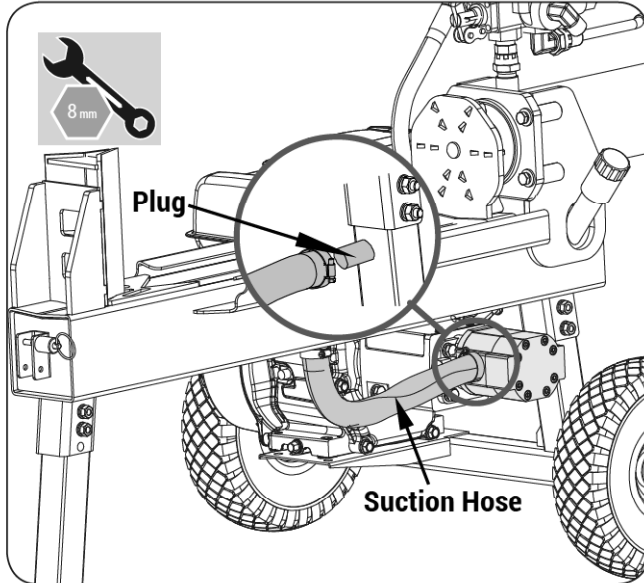


Figure 11

3. Locate the oil inlet hose. Both ends of this hose have the same fittings. Remove the plastic caps/plug from the hose and valve, then attach the hose to the pump and valve as shown. Tighten. (See **Figure 12**)

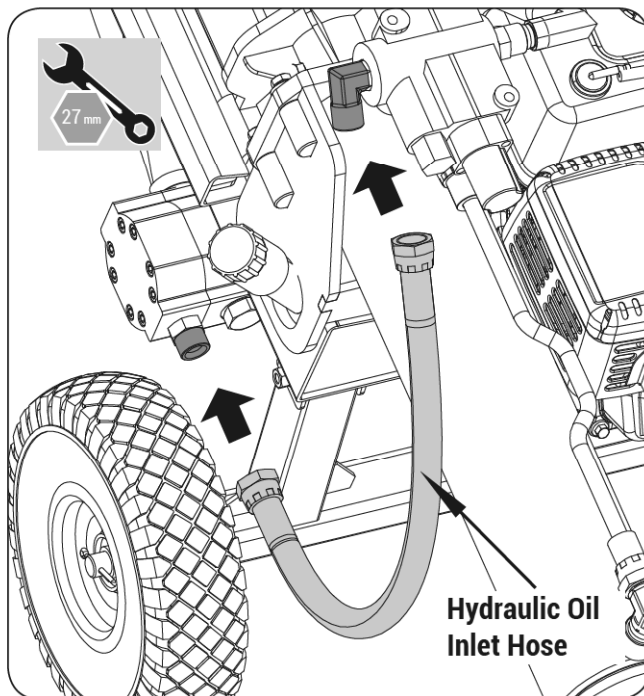


Figure 12

MOVING HANDLE

Using the M6x40 bolt and nut secure the handle into its installation place. (See **Figure 13**)

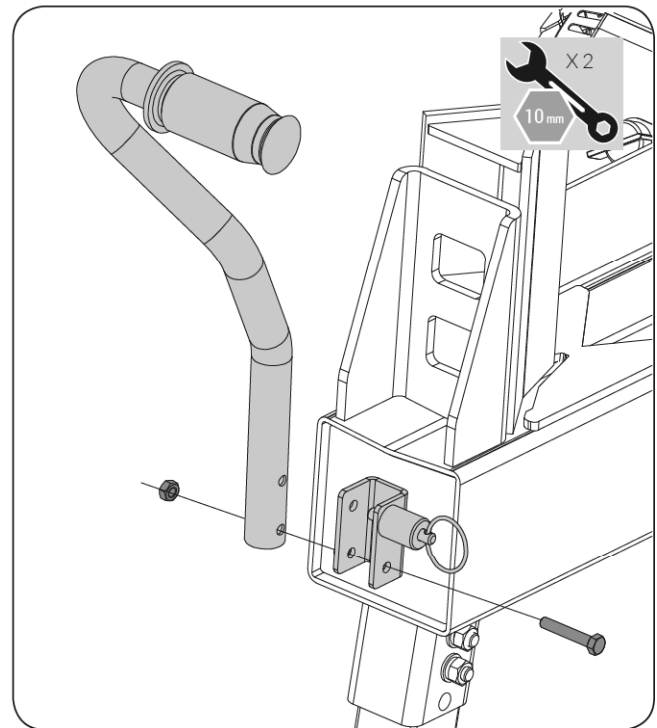
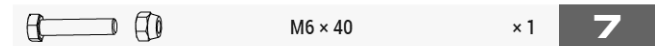


Figure 13



EXHAUST DEFLECTOR COVER

Install the Exhaust Deflector Cover onto the engine exhaust port using the mounting screw provided in the instruction manual bag. (See **Figure 14**)

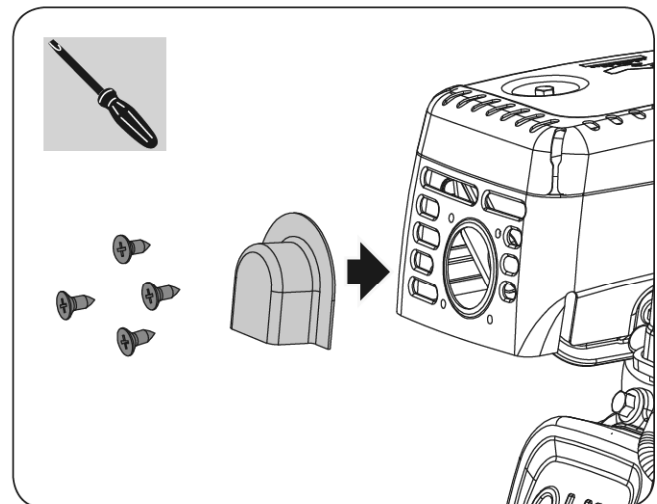
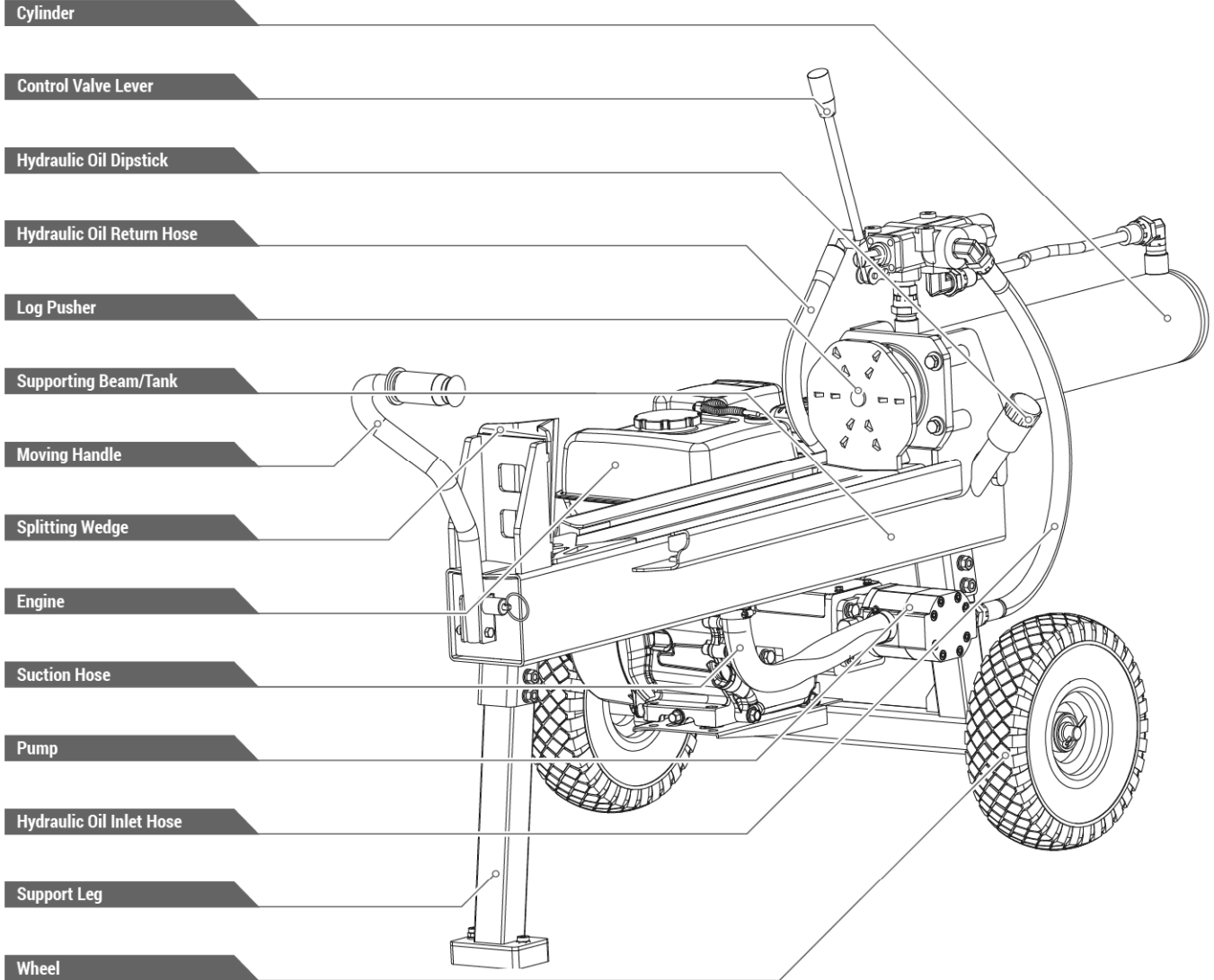
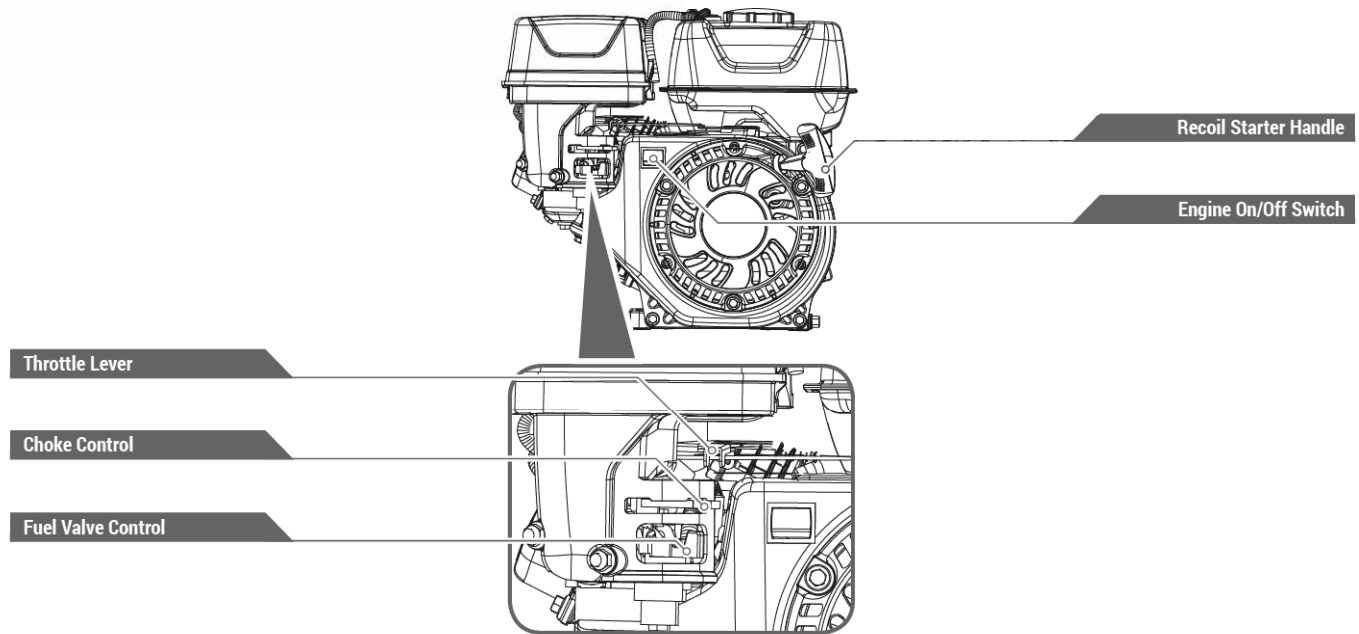


Figure 14

KNOW YOUR MACHINE

FEATURES AND CONTROLS





CONTROL VALVE LEVER

- » 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.

SUPPORT LEG

- » Supports log splitter while operating.

SUPPORTING BEAM/ TANK

- » The box-beam structural design is significantly stronger than typical I-beam design.

Moving Handle

- » Allows the unit to be towed safely and conveniently.

Log Pusher

- » Anti-slip teeth on the log pusher enhance gripping performance and reduce log movement.

ENGINE ON/OFF SWITCH

- » The engine switch has two positions. "0" - engine will not start or run. "—" - engine will start and run.

RECOIL STARTER HANDLE

- » The handle is used to start the engine.

FUEL VALVE LEVER

- » 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



DANGER

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.

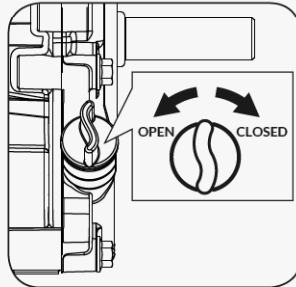


WARNING

The engine is shipped without oil. Do not start the engine before adding oil.

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.)



CAUTION

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

ADD GASOLINE TO ENGINE



DANGER

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



DANGER

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.)



WARNING

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.



WARNING

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.



WARNING

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:
 - AW22
 - 10W AW32
 - ASLE H-150
 - ISO 32

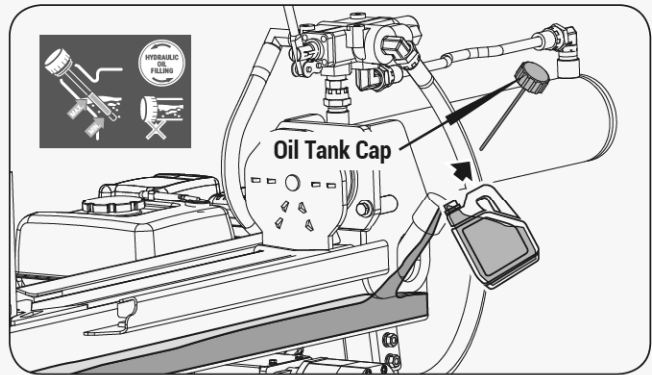


Figure 15

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



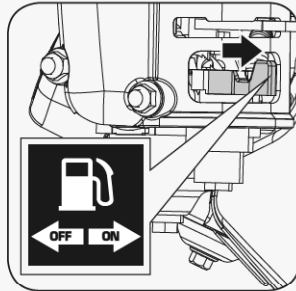
CAUTION

Completely install the dipstick when checking oil level.

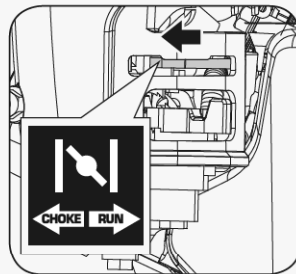
5. Start the engine and use the control valve handle to extend and retract the wedge five times to remove air from the high pressure lines.
6. With the wedge retracted and engine off, check the oil level again. Fill if necessary.
7. Cycle the cylinder again until it has a constant speed. This indicates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

STARTING ENGINE

1. Make sure the control lever is in the neutral position.

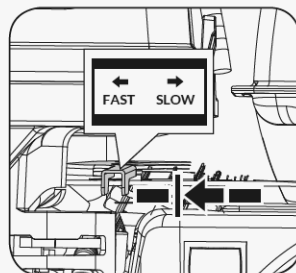


2. Move the fuel valve lever to the ON position.

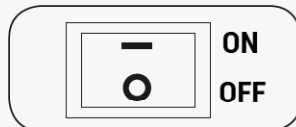


3. To start a cold engine, move the choke lever to the CHOKE position.

» To restart a warm engine, leave the choke lever in the RUN position.



4. Move the throttle lever away from the SLOW position, about 1/3 of the way toward the FAST position.



5. Move the engine switch to the ON position.

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.

! WARNING *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 (⏏).

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

Log Splitter Operation

! WARNING *Never place hands between the log and splitting wedge while placing the log onto the beam rails, always handle the log from the sides, not the ends.*

! CAUTION *Always split the log with the grain, not against the grain.*

! WARNING *Never split more than one log at a time.*

! CAUTION *Before engaging the control lever, please ensure that you are standing in the proper location.*

1. Block tires and ensure support leg is secure to prevent unintended movement of the log splitter during operation.
2. Pull the ring to unlock the moving handle, and push it downward to prevent the wood from striking it during splitting.
3. Loosen the hydraulic oil dipstick by two turns to let air go in and out of the oil tank smoothly. Air flow through the dipstick should be detectable while the log splitter is under operation.
4. Place the square cut log onto the beam rails and slide it against the wedge.
5. Push the control valve lever forward (towards the wedge) to split the log. Apply constant pressure to the lever until the wedge completely splits the wood and cylinder has fully traveled across the beam rails.
6. Pull back on the lever to retract the log pusher. Once the detent is engaged, the lever will lock in the retract position until it automatically returns to its starting position.
7. Make sure to tighten the dipstick before moving the machine after completing the work to avoid oil leakage from the fill neck.
8. Lock the moving handle back to upward position for movement of the machine. (See **Figure 16**)

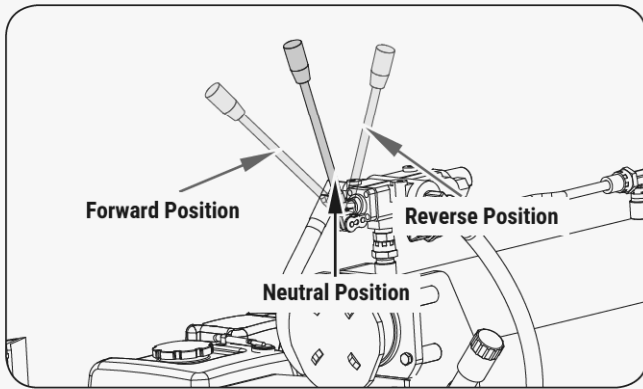


Figure 16

! WARNING DO NOT place the other hand on the log while the log pusher is traveling towards the wedge. NEVER touch the log while hydraulics are engaged.

! WARNING Never force the log splitter for more than 5 seconds by keeping pressure on it to split excessively hard wood.

After this time interval, the oil under pressure will be overheated and the machine could be damaged. Move the lever in reverse to retract the cylinder. For such extremely hard log, rotate it by 90° to see whether it can be split in a different direction. In any case, if you are not able to split the log, this means that its hardness exceeds the capacity of the machine and thus that log should be discarded to protect the log splitter.

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

Freeing a Jammed Log

Retract the log pusher by pulling back on the control valve lever. After the log pusher moves back and completely stops at its starting position, place a short square cut log against the jammed log.

Start the log splitter to let the short log push the jammed one through the wedge. (See **Figure 17**)

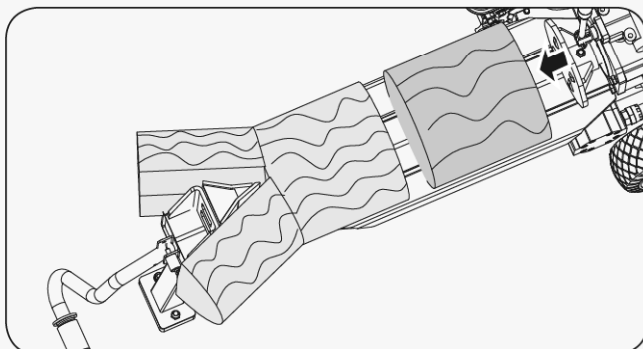


Figure 17

! WARNING Do not try to knock the jammed log off. Knocking about will damage the machine or may launch the log and cause an accident.

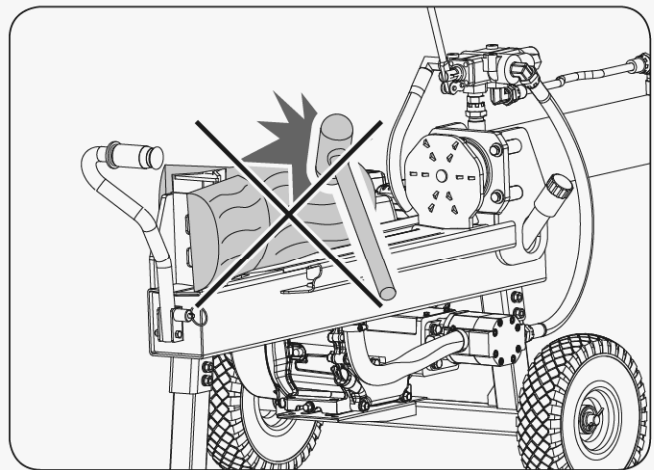


Figure 18

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.



WARNING

Avoid contact with hot muffler.



WARNING

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

Replacing Hydraulic Oil

Replace the Hydraulic oil in the log splitter every 400 hours of use.

1. Place a container under the tank. Make sure it is large enough to hold the contents of the tank. See specification section of this manual for hydraulic oil capacity.
2. Remove the dipstick, and disconnect the suction hose from bottom of the tank.
3. Drain oil from the tank.
4. After oil has been completely drained from the machine, reattach the suction hose to the tank.
5. Refill fresh hydraulic oil..
6. Clean the surface of the Dipstick, use it check and make sure the level of the refilled oil is just between the 2 grooves around the dipstick.
7. Start engine and purge air from hydraulic system. Extend and retract the cylinder to purge air from the hydraulic system. Cylinder motion should be smooth and continuous.
8. Tighten the dipstick.

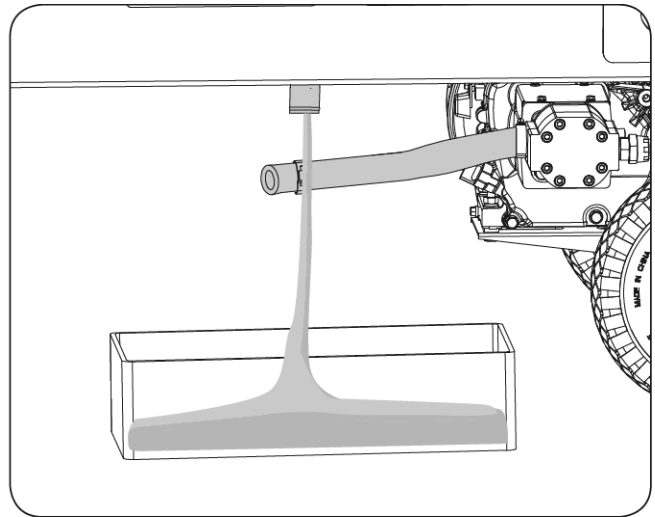


Figure 19


Engine Maintenance

Refer to the engine manual packed separately with your unit for detailed information and a maintenance schedule.


STORAGE

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

1. Retract the log pusher 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 log pusher. 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.

 **WARNING** 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.


 **DANGER** 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.

 **DANGER** 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.

 **DANGER** 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.

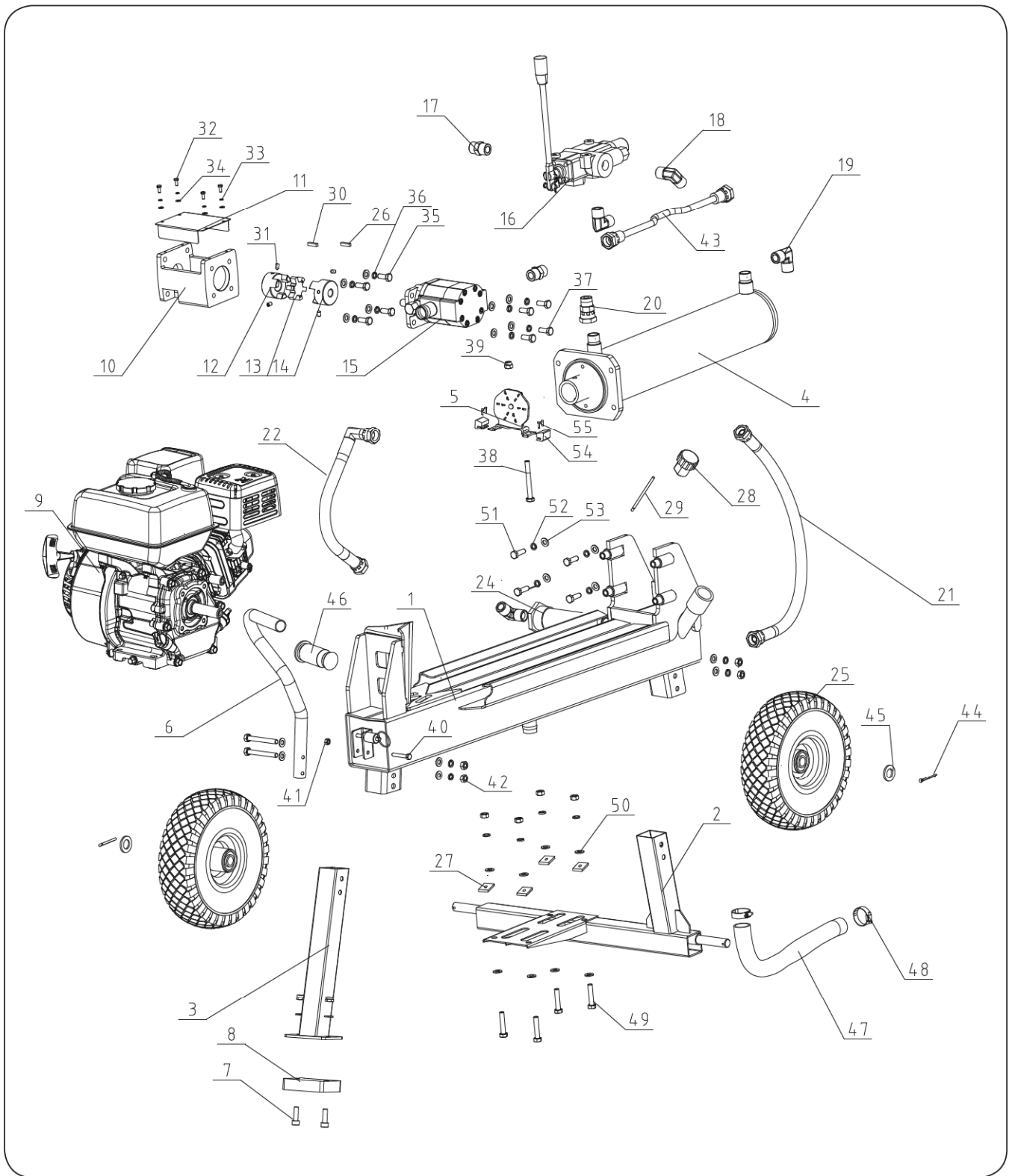
6. Store gasoline in a cool, dry place in a UL listed tightly sealed container.

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

TROUBLESHOOTING

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

PARTS DIAGRAM



PARTS LIST

No.	Description	Qty
1	Beam	1
2	Underframe	1
3	Support Leg	1
4	Cylinder Assembly	1
5	Log Push Plate	1
6	Moving Handle	1
7	Allen Bolt M8x20	2
8	Rubber Damping Pad	4
9	Engine	1
10	Pump Bracket	1
11	Pump Bracket Cover	1
12	Gear Pump Connector Right	1
13	Elastic Spider Block	1
14	Gear Pump Connector Left	1
15	Pump	1
16	Control Valve	1
17	Outlet Fitting	2
18	Right-Angle Fitting 1	2
19	Right-Angle Fitting 2	2
20	Straight Connector	1
21	High Pressure Oil Inlet Hose	1
22	Oil Return Hose	1
23	Discontinued	N/A
24	Return Oil Filter	1
25	Wheel	2
26	Key 3x25	1
27	Support Cushion	4
28	Tank/Dipstick Cap	1
29	Dipstick	1
30	Key 3/16x30	1
31	Allen Bolt M6x8	4
32	Screw M4x8	4
33	Lock Washer Ø4	4
34	Flat Washer Ø4	4

No.	Description	Qty
35	Bolt 5/16-24UNF	4
36	Lock Washer Ø8	16
37	Bolt M8x20	4
38	Bolt M6x65	5
39	Lock Nut M8	3
40	Bolt M6x40	1
41	Lock Nut M6	1
42	Nut M8	8
43	Hydraulic Hose Valve-Cylinder	1
44	Cotter Pin 3x30	2
45	Flat Washer Ø16	2
46	Handle Sleeve	1
47	Suction Hose	1
48	Clamp	2
49	Bolt M8x45	4
50	Flat Washer Ø8	28
51	Bolt M10x35	4
52	Lock Washer Ø10	4
53	Flat Washer Ø10	4
54	Guide Block	2
55	Bolt M5x20	4



GO FULL BOAR