

ASSEMBLY

If your log splitter is already assembled, skip the assembly instructions in this manual.

If unassembled, please read and follow these instructions.

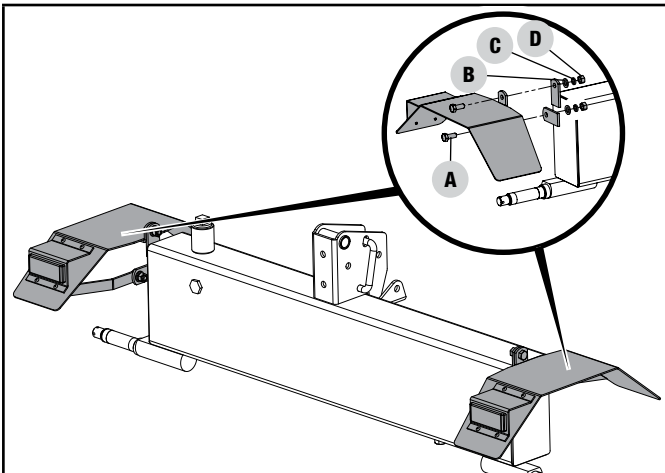
If you have any questions regarding the assembly of your log splitter, call our Technical Support Team at 1-877-338-0999. Please have your serial number and model number available.

Open Shipping Crate

1. Set the shipping crate on a solid, flat surface
2. Carefully cut the shipping bands and remove lid of shipping crate.
3. Locate all hardware before beginning assembly.

1) Install the Fenders

1. Attach the fender to the side of the hydraulic oil tank with an M10 × 25 bolt (A), Ø10 washer (B), Ø10 lock washer (C) and M10 nut (D). The safety reflector should be facing the back of the hydraulic oil tank.

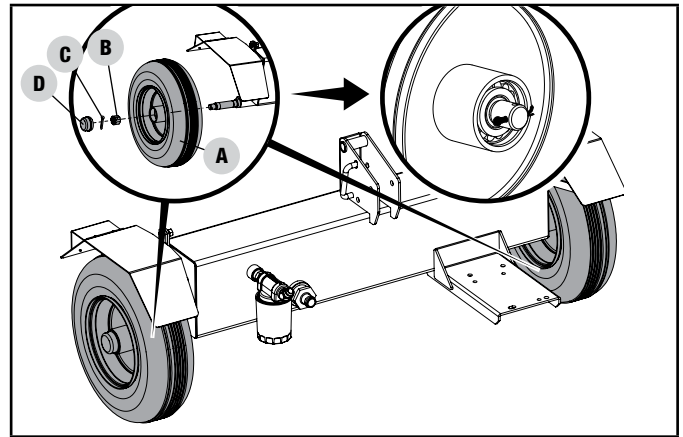


2. Repeat with second fender on opposite side

2) Install the Wheels

1. Remove the two plastic shipping caps from the wheel hubs.
2. Slide the wheel (A) onto the axle.
3. Be sure the tire valve stem is facing out.
4. Thread the castle nut (B) on the axle and tighten by hand. Use a wrench to tighten another ¼ turn.
5. Spin the wheel (A) to distribute the bearing grease.
6. Loosen the castle nut (B) and re-tighten by hand.
7. Install the cotter pin (C) through the axle and castle nut.
8. Wheel (A) should spin freely but when grasped on both sides, should not move from side to side.

9. Install the axle cap (D) using a soft-faced mallet or hammer and wood block.
10. Repeat for the other wheel.



NOTICE

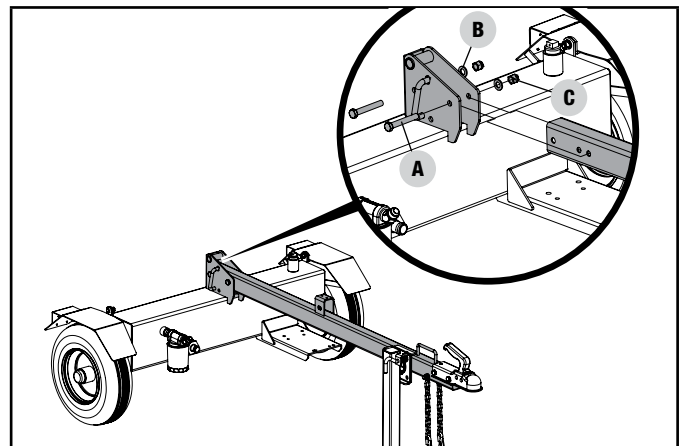
Keep dirt and debris away from the wheel bearings during assembly.

CAUTION

Over-tightening the castle nut will cause the bearings to run hot and fail prematurely.

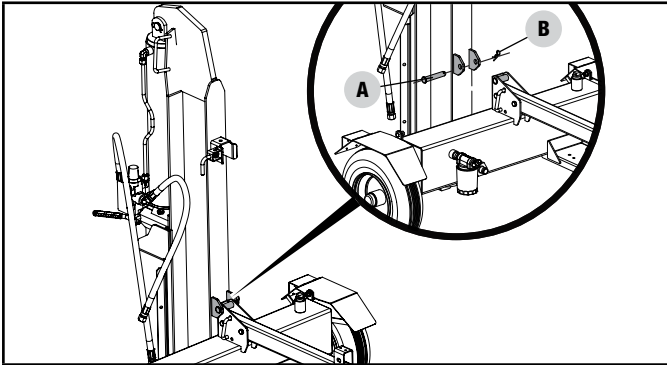
3) Install the Tow Bar

Attach the tow bar to the bracket on top of the hydraulic oil tank with two M12 × 80 bolts (A), Ø12 flat washers (B) and M12 lock nuts (C).



4) Install the Beam

1. Stand the beam vertical on the foot plate.
2. Roll the tank into position so the pivot holes of the tank and beam are aligned.
3. Insert the Pin (A) and secure it with the R-pin (B).

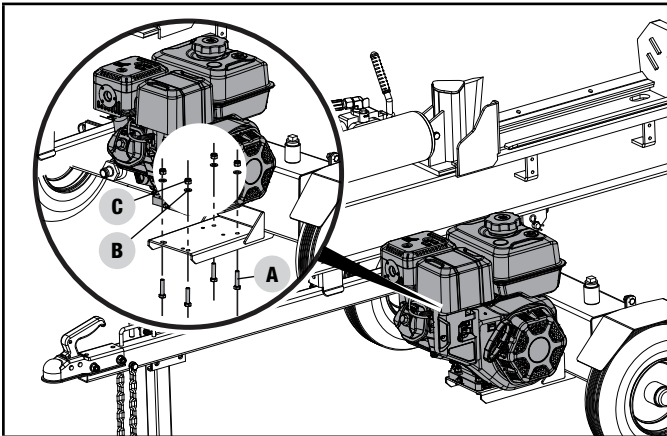


⚠ WARNING

The beam is extremely heavy and should always be handled with 2 or more people. DO NOT try and lift or handle the beam without assistance.

5) Install the Engine

1. Place the engine on the engine mounting platform with the recoil cover facing outward towards the wheel and align the 4 holes on the engine base with the holes in the engine platform.

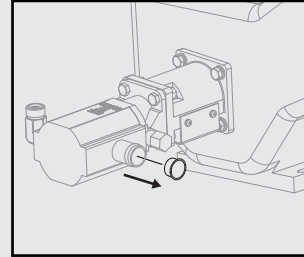


2. Install a M10 × 45 bolt (A) up through the hole on the engine platform and through the hole on the engine base.
3. Place a washer (B) on the M10 × 45 bolt (A) and thread a M10 nylon lock nut (C) onto the bolt and tighten securely. Tighten to 12 lbf-ft – 15 lbf-ft (16-20 Nm) or fully, then a 1/4 turn further.
4. Repeat steps 2 and 3 for the remaining bolts, washers and lock nuts.

6) Install the Hose and Hydraulic Filter

⚠ CAUTION

Red shipping plugs must be removed from hydraulic pump prior to installing hoses.



Hydraulic pump may contain residual oil from testing procedures during production. We recommend using an oil tray under the pump before removing the shipping plugs.

🗨 NOTICE

Oil Inlet (High Pressure) and Oil Return Hoses

Some hoses may be preassembled by the factory, check your hoses per below instructions to ensure proper assembly.

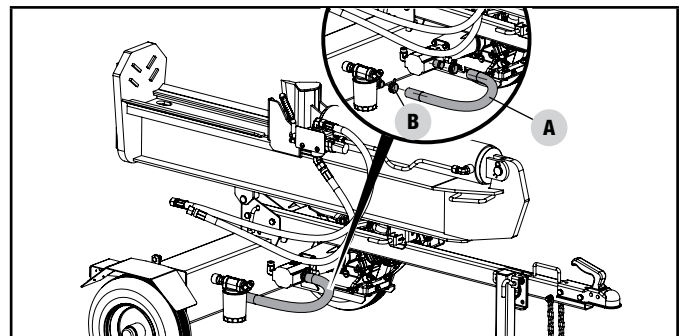
- These hoses are black and have swivel nuts on both ends.
- The Oil Inlet Hose sends hydraulic oil from the pump to the control valve/cylinder.
- The Oil Return Hose returns hydraulic oil from the control valve/cylinder to the tank.
- Hose connections do NOT require thread seal tape. The O-ring seals against the face of the fittings on the pump and hose.

Suction Hose

- This is the clear hose that connects the hydraulic tank to the pump inlet.
- Secure both ends of hose with hose clamps.

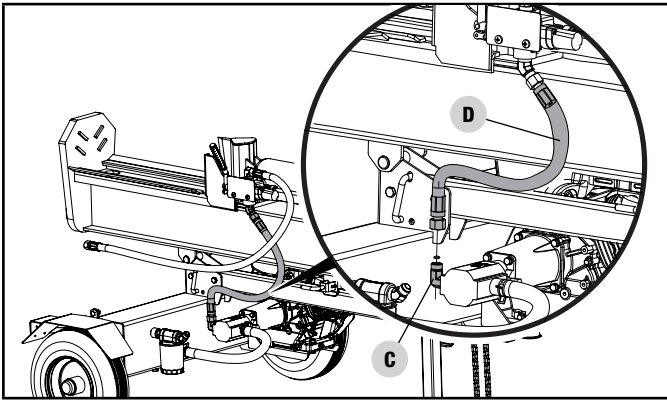
Suction Hose

1. Using the provided spring loaded hose clamps, connect one end of the clear oil hose (A) to the hydraulic oil tank (B) and the other end to the pump inlet on the pump (B). Using a pair of pliers, squeeze the tabs on the spring loaded hose clamps together to open them up and slide over the end of the clear suction hose and mounting fitting and release the pliers to lock the clamps into place.

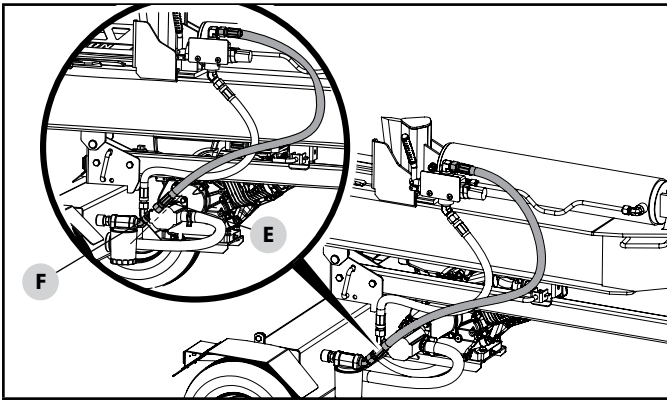


Oil Inlet (High Pressure) Hose

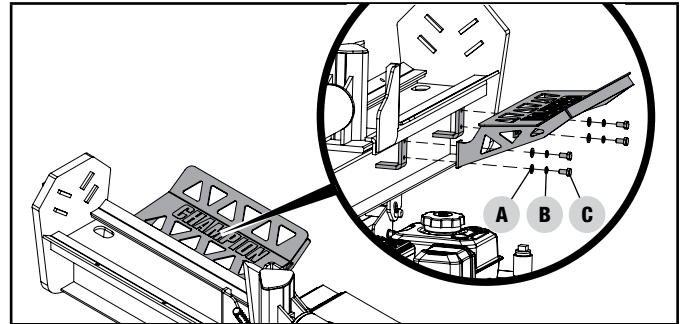
2. Place the provided o-ring into the pump outlet fitting (C) as shown. Make sure the o-ring is properly seated in the inner groove of the fitting.
3. Thread the loose end of the high pressure hydraulic hose (D) onto the pump outlet (C).
4. Securely tighten the hose fitting with a 27mm wrench. Tighten to 44 lbf-ft - 52 lbf-ft (59.7-70.5 Nm).

**Oil Return (Low Pressure) Hose**

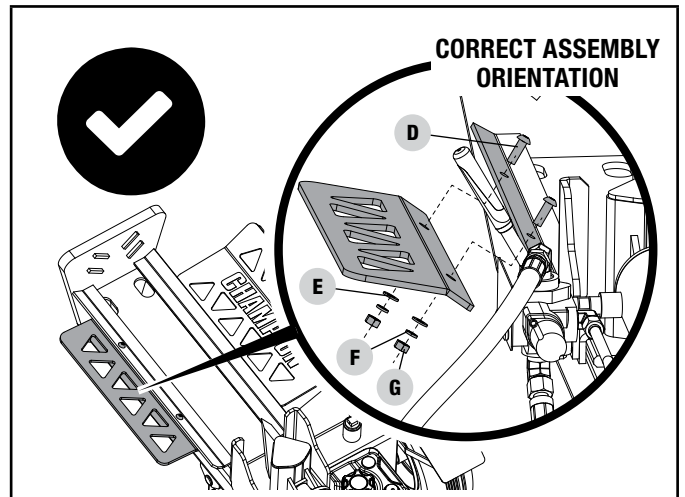
5. Thread the loose end of the low pressure hydraulic hose (E) onto the tapered hydraulic fitting on the hydraulic fluid tank (F). This hose fitting will only fit on this fitting to ensure correct connection.
6. Securely tighten the fitting with a 27mm wrench. Tighten to 52 lbf-ft - 66 lbf-ft (70.5-89.5 Nm). Make sure the fitting, when fully tightened is angled upward as shown.

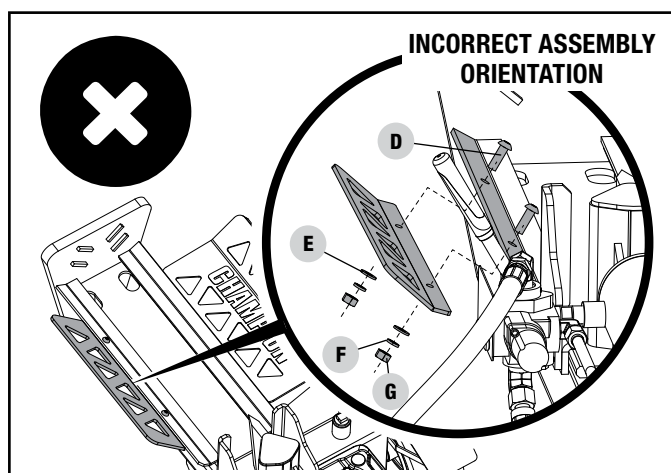
**7) Install the Log Catchers****Large Log Catcher (Engine Side)**

1. With the log catcher angled upward, align the four holes on the log catcher with the 4 threaded holes on the log splitter beam.
2. Place a Ø10 flat washers (A) and Ø10 lock washers (B) onto the four M10 × 20 bolts (C) and thread them through the holes on the log catcher and into the holes on the log splitter beam and tighten securely.

**Small Log Catcher (Hydraulic Hose Side)**

3. With the log catcher angled downward and under the lip of the log splitter beam, align the two holes on the log catcher with the two holes on the beam lip.
4. Place the two M10 × 30 bolts (D) through the holes on the beam and through the holes on the log catcher. Place a Ø10 flat washer (E) and a Ø10 lock washer (F) onto the bolt from the bottom side and thread the M10 nuts (G) onto the bolts and tighten securely.





Add Engine Oil

⚠ WARNING

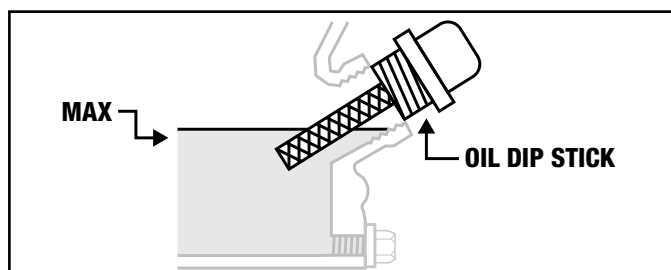
DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the log splitter as a result of failing to follow these instructions will void your warranty.

🗨 NOTICE

The recommended oil type is **10W-30 automotive oil**.

| Recommended Engine Oil Type | | | | | | | | | |
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| °F | -20 | 0 | 20 | 40 | 60 | 80 | 100 | 120 | |
| °C | -28.9 | -17.8 | -6.7 | 4.4 | 15.6 | 26.7 | 37.8 | 48.9 | |
| Ambient temperature | | | | | | | | | |

1. Place the log splitter on a flat, level surface.
2. Remove oil fill cap/dipstick to add oil.
3. Using a funnel, add up to 37.2 fl. oz (1100 ml) (include) of oil and replace oil fill cap/dipstick. DO NOT OVERFILL.
4. Check engine oil level daily and add as needed.



🗨 NOTICE

Once oil has been added, a visual check should show oil about 1-2 threads from running out of the fill hole.

If using the dipstick to check oil level, DO NOT screw in the dipstick while checking.

🗨 NOTICE

Check oil often during the break-in period. Refer to the *Maintenance* section for recommended service intervals.

⚠ CAUTION

The engine is equipped with a low oil shut-off and will stop when the oil level in the crankcase falls below the threshold level.

🗨 NOTICE

We consider the first 5 hours of run time to be the break-in period for the engine. During the break in period we recommend using standard automotive non-synthetic blended oils. After the break in period synthetic lubricant can be used but is not required. Avoid bogging or lugging the engine down and avoid prolonged running at constant RPM. After the 5 hour break-in period, change the oil. Using synthetic lubricants does not decrease the recommended oil change interval.

🗨 NOTICE

Weather will affect engine oil and engine performance. Change the type of engine oil used based on weather conditions to suit the engine needs.

🗨 NOTICE

Synthetic oil may be used after the 5 hour initial break-in period. Using synthetic oil does not decrease the recommended oil change interval. Full synthetic 5W-30 oil will aid in starting in cold ambient < 41°F (5°C)

Add Fuel

⚠ DANGER




Gasoline vapors are highly flammable and extremely explosive.

DO NOT light or smoke cigarettes. Fire or explosion can cause severe burns or death.

Always fill or drain fuel outdoors in a well-ventilated area.
DO NOT pump gasoline directly into the log splitter. Use an approved container to transfer the fuel to the log splitter.

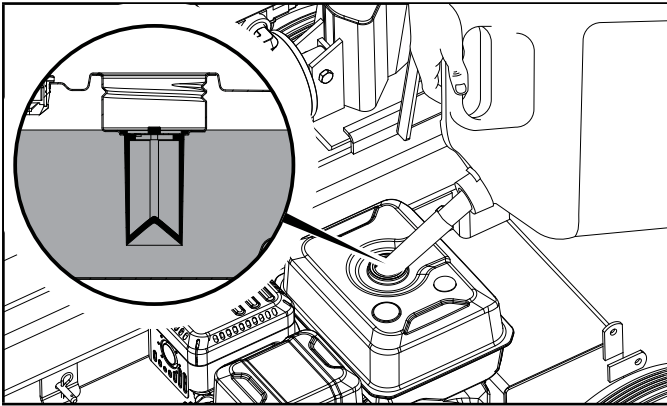
Never use a gasoline container, gasoline tank, or any other fuel item that is broken, cut, torn or damaged.

DO NOT overfill the gasoline tank. Always keep fuel away from sparks, open flames, pilot lights, heat and other sources of ignition.

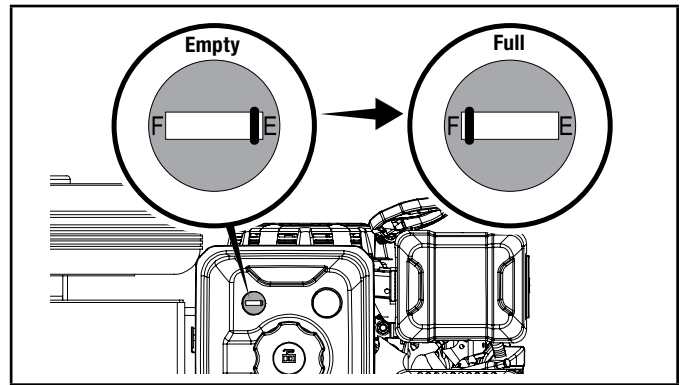
Use clean, fresh, regular unleaded gasoline with a minimum octane rating of 87 and an ethanol content of less than 10% by volume.   

DO NOT mix oil with gasoline.

1. Remove the gasoline cap.
2. Slowly add gasoline to the tank. **DO NOT OVERFILL.** Gasoline can expand after filling. A minimum of ¼ in. (6.4 mm) of space left in the tank is required for gasoline expansion, although more than ¼ in. (6.4 mm) is recommended. Gasoline can be forced out of the tank as a result of expansion if overfilled, and can affect the stable running condition of the log splitter.



3. The approximate fuel level is shown on the fuel gauge on top of the fuel tank.



⚠ CAUTION

Use regular unleaded gasoline with a minimum octane rating of 87 and an ethanol content of less than 10% by volume.

DO NOT light cigarettes or smoke when filling the tank.

DO NOT mix oil and gasoline.

Fill tank to approximately ¼ in. (6.4 mm) below the top of the tank to allow for gasoline expansion.

DO NOT pump gasoline directly into the log splitter at the pump. Use an approved container to transfer the gasoline to the log splitter.

DO NOT fill tank indoors.

DO NOT fill tank when the engine is running or hot.

DO NOT overfill the tank.

⚠ WARNING

Pouring gasoline too fast through the fuel screen may result in blow back of gasoline at the operator while filling.

NOTICE

The engine works well with 10% or less ethanol blended gasoline. When using ethanol-gasoline blends there are some issues worth noting:

- Ethanol-gasoline blends can absorb more water than gasoline alone.
- These ethanol blends can eventually separate, leaving water or a watery goo in the tank, fuel valve and carburetor. The compromised gasoline can be drawn into the carburetor and cause damage to the engine and/or create potential hazards.
- If a fuel stabilizer is used, confirm that it is formulated to work with ethanol-gasoline blends.
- Any damages or hazards caused by using ethanol blended gasoline higher than 10% by volume, improperly stored gasoline, and/or improperly formulated stabilizers, are not covered by manufacturer's warranty.

It is advisable to always shut off the gasoline supply and run the engine to starvation after each use. See *Storage* instructions for extended non-use.

Add Hydraulic Oil

If your log splitter was delivered pre-assembled, follow these instructions:

1. Position the log splitter on a flat, level surface.
2. Remove the plastic shipping plug from the oil tank on the top of the tank (A) and discard. Replace with the steel oil plug (with breather hole) shipped with your log splitter (A).

CAUTION

Do not run the log splitter with temporary shipping plug.

Pressure will build up inside the tank and potential damage could occur.

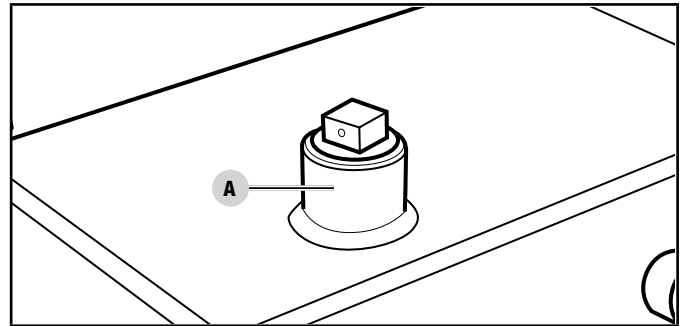
NOTICE

Hydraulic tank is deliberately overfilled before shipping from the factory. When the unit has been operated, oil will adjust to proper level.

3. After running and cycling the unit several minutes (purging air from the system), turn off the engine and check the hydraulic oil level using the oil sight glass. Oil level should visibly fill the glass sight.

If your log splitter was delivered unassembled, follow these instructions:

1. Make sure the log splitter is on a flat, level surface.
2. Remove the oil plug from the oil tank (A).
3. Add 5 gal. (18.9 L) of hydraulic oil - see specification section for types of acceptable oil.
4. Check the hydraulic oil level using the oil sight glass. Oil level should visibly fill the sight glass.

**WARNING**

DO NOT remove the hydraulic oil fill cap when the engine is running or hot. Hot oil can escape causing severe burns. Always allow the log splitter to cool completely before removing the hydraulic oil cap.

High fluid pressure and temperatures are created in the hydraulic log splitters. Hydraulic fluid will escape through a pin-size hole opening and can puncture skin and cause severe blood poisoning.

Inspect hydraulic system regularly for possible leaks. Never check for leaks with your hand while the system is pressurized. Seek medical attention immediately if injured by escaping fluid.

5. Replace and tighten the oil plug and orient the vent hole away from the operator zone.
6. Start Engine. (See starting the engine section)
7. Extend and retract the wedge to purge air from the hydraulic system. When the wedge motion is smooth, the system is properly purged.
8. Check the hydraulic oil tank sight glass. Add approximately 1 gallon (3.8 L) of hydraulic oil to bring the level back up to the sight glass. Do NOT overfill.
9. Check oil level daily and add as needed.

NOTICE

When the outdoor temperature is below 32°F (0°C), Dexron III transmission fluid can be used. Do not mix hydraulic oil and transmission fluid. Drain all oil or fluid before adding the other one.

See hydraulic oil system specifications section for more details.

NOTICE

To check oil level, use the oil sight glass on the tank. The oil sight glass has a marker for the acceptable level of oil. If oil is below the marker, add oil as needed. **DO NOT OVERFILL.**

Before Each Use Inspect the Log Splitter

1. Check the hydraulic oil level and visually inspect all hoses, attachments and cylinder for loose fittings, leaks, cracks, fraying or other damage.
2. **DO NOT** operate the log splitter if there is any indication of damage.
3. Inspect the engine and make sure the oil level is correct before operating. If the engine is equipped with a spark arrestor, clean and inspect it regularly (follow spark arrestor maintenance schedule).
4. The tires need to be fully inflated and in good repair. Reference the tire sidewall for recommended tire pressure.

WARNING

DO NOT over inflate tires. Serious injury can result if tires explode.

DO NOT tow the log splitter if the tires are worn or will not hold air.

DO NOT exceed the maximum 45 MPH (72 KM/H) towing speed.

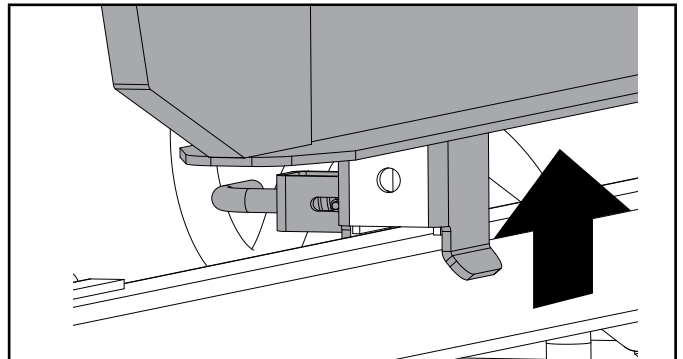
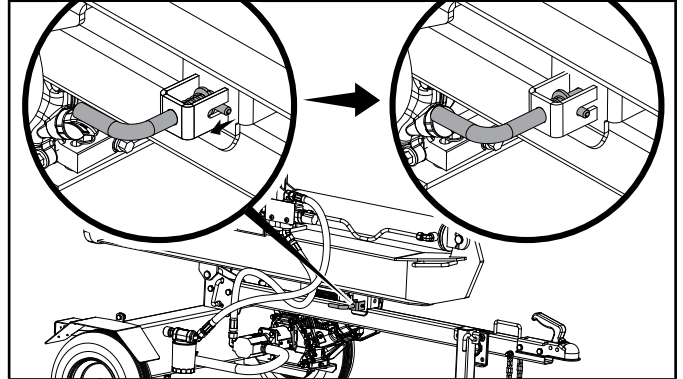
Changing Beam from Horizontal to Vertical Orientation

When logs are too heavy to lift, the log splitter beam can be moved from horizontal to vertical orientation.

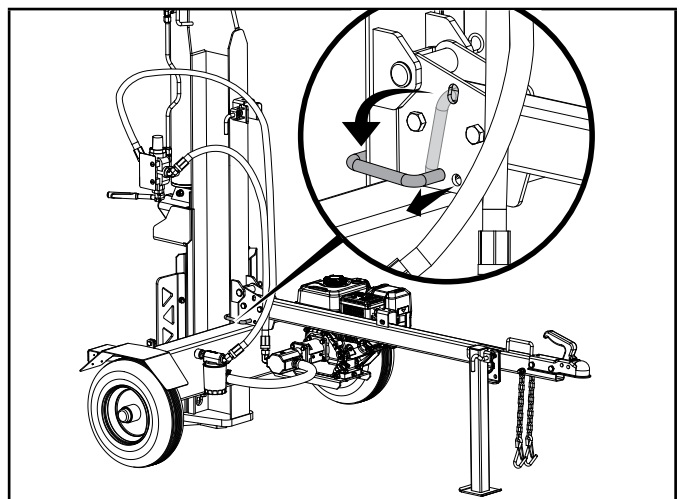
To change from horizontal to vertical orientation:

1. Block the wheels to prevent the unit from rolling.

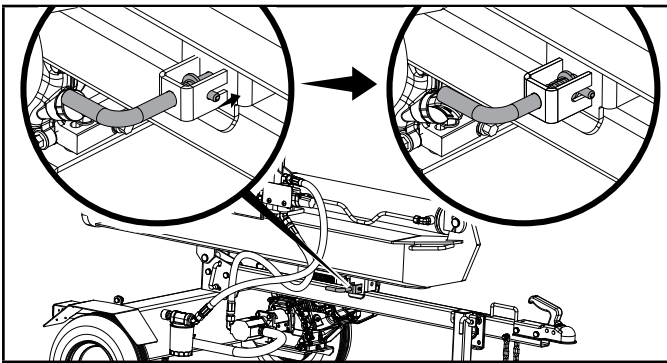
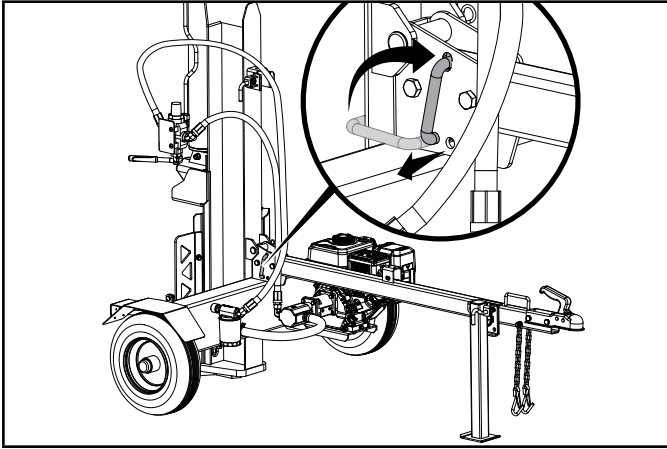
2. Pull the spring loaded pin out on the horizontal beam lock attached to the tow bar to release the beam. Standing alongside the hydraulic ram, (opposite side from the engine) firmly grasp the handle on the beam and lift upward while pushing the beam back until upright. (Caution, beam is heavy.)



3. Pull out the spring loaded quick-lock pin and rotate it around to the 9 o'clock position around the lip on the beam to secure it in the vertical position.



4. To change from vertical to horizontal orientation, reverse the steps. The beam will automatically lock into the auto-lock on the tow bar when lowered into position.



Towing Log Splitter Safety

⚠ WARNING

1. Always check local, state or provincial regulations regarding towing, licensing and lights before towing your log splitter. Review towing safety warnings in your towing vehicle manual.
2. Before towing make sure the log splitter is correctly and securely attached to the vehicle and the safety chains attached with enough slack to allow for turning.
3. Before transporting the log splitter, always check that the fuel valve is OFF and the fuel tank is empty.
4. Support leg must be pinned in the "UP" position for towing.
5. If using a log splitter cover, ALWAYS remove the cover before towing the log splitter.
6. Never exceed the max. travel speed of 45 mph (72 km/h). Towing the log splitter at speeds greater than 45 mph (72 km/h) could result in serious injury or death. Always adjust your towing speed according to the terrain and conditions.
7. Always disconnect the log splitter from the towing vehicle before operating.

Log Splitter Location

⚠ WARNING

ALWAYS operate the log splitter outdoors.

NEVER place or operate the log splitter near windows, doors, vents, air intakes or other openings where poisonous engine exhaust fumes could be drawn into occupied building spaces.

Always maintain a minimum distance of 5 ft. (1.5 m) from dry combustible vegetation to prevent fires when operating this log splitter.

Always leave a minimum of 3 ft. (0.9 m) of clearance on all sides of the log splitter to allow for safe operation, adequate cooling, maintenance and servicing.

Always place the log splitter on a firm level surface to provide for good operational footing.

DO NOT work on mud, ice, or in tall grass, brush or snow.

ALWAYS operate log splitter around work zone as shown below.