DR® HORIZONTAL-VERTICAL LOG SPLITTER
SAFETY & OPERATING INSTRUCTIONS



Model:
Premier 25T
Pro 28T
Pro XL 34T

Serial No. _____

Order No. _____

DR Power Equipment
Toll-free phone: 1-800-DR-OWNER (376-9637)
Website: www.DRpower.com

READ AND SAVE THIS MANUAL. This manual contains important safety precautions which should be read and understood before operating the product. Failure to do so could result in serious injury. This manual should remain with the product.

Specifications, descriptions, and illustrations in this manual are as accurate as known at the time of publication, but are subject to change without notice.

TABLE OF CONTENTS

Introduction 3

Safety Definitions 3

Important Safety Instructions 4

Fuel Safety 6
Training 6
Preparation 7
Operation 7
Maintenance and Storage 7

Controls And Features 9

Log Splitter 9
Engine 10
Parts Included 11

Assembly 12

Open Shipping Crate 12
1) Install the Tow Bar 12
2) Install the Fenders 12
3) Install the Wheels 12
4) Install the Support Leg 13
5) Install the Beam 13
6) Install the Engine 13
7) Install the Hoses 14
8) Install the Log Catchers 14
Add Engine Oil 15
Add Fuel 16
Add Hydraulic Oil 17
Before Each Use Inspect the Log Splitter 18
Changing Beam from Horizontal to Vertical Orientation 18
Towing Log Splitter Safety 18
Log Splitter Location 19

Operation 19

Starting the Engine 19
Stopping the Engine 20
Log Splitter Operation 21

Maintenance 22

Cleaning the Log splitter 22
Changing the Engine Oil 22
Cleaning and Adjusting the Spark Plug(s) 22
Cleaning the Air Filter 23
Changing the Hydraulic Oil 23
Maintenance Schedule 24

Storage 25

Log Splitter Storage 25
Engine Stored for Less than 30 Days 25
Engines Stored for Over 30 Days 25

Specifications 26

Log Splitter Specifications 26
Engine Specifications 26
Oil Specifications 26
Hydraulic Oil System 26
Fuel Specifications 26
Spark Plug Specifications 26
Valve Specifications 26
Important Message About Temperature 26

Troubleshooting 27

Parts List and Schematic 29

INTRODUCTION

Congratulations on your purchase of a **DR** Power Equipment product. **DR** designs, builds, and supports all of our products to strict specifications and guidelines. With proper product knowledge, safe use, and regular maintenance, this product should bring years of satisfying service.

Every effort has been made to ensure the accuracy and completeness of the information in this manual at the time of publication, and we reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

Since **DR** highly values how our products are designed, manufactured, operated and are serviced, and also highly value your safety and the safety of others, we would like you to take the time to review this product manual and other product materials thoroughly and be fully aware and knowledgeable of the assembly, operation, dangers and maintenance of the product before use. Fully familiarize yourself, and make sure others who plan on operating the product fully familiarize themselves too, with the proper safety and operation procedures before each use. Please always exercise common sense and always err on the side of caution when operating the product to ensure no accident, property damage, or injury occurs. We want you to continue to use and be satisfied with your **DR** product for years to come.

SAFETY DEFINITIONS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

· DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

· WARNING

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

· CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

· NOTICE

NOTICE indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

IMPORTANT SAFETY INSTRUCTIONS

⚠ CALIFORNIA WARNING

Can expose you to benzene, a carcinogen and reproductive toxicant – www.P65Warnings.ca.gov

· DANGER

Log splitter engine exhaust contains carbon monoxide, a colorless, odorless, poison gas. Breathing carbon monoxide will cause nausea, dizziness, fainting or death. If you start to feel dizzy or weak, get to fresh air immediately.

Operate log splitter outdoors only in a well ventilated area.

DO NOT operate the log splitter inside any building, including garages, basements, crawlspaces and sheds, enclosure or compartment.

DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings.

· DANGER

Using an engine indoors **CAN KILL YOU IN MINUTES**. Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell.

NEVER use inside a home or garage, **EVEN IF** doors and windows are open.

ONLY use **OUTSIDE** and far away from windows, doors, and vents.



Install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up according to the manufacturer's instructions.

· DANGER

Rotating parts can entangle hands, feet, hair, clothing and/or accessories. Traumatic amputation or severe laceration can result.

Keep hands and feet away from rotating parts.

Tie up long hair and remove jewelry.

Operate equipment with guards in place.

DO NOT wear loose-fitting clothing, dangling drawstrings or items that could become caught.

· WARNING

Operation of this equipment may create sparks that can start fires around dry vegetation.

A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

· WARNING

Sparks can result in fire or electrical shock.

When servicing the engine:

Disconnect the spark plug wire and place it where it cannot contact the plug.

DO NOT check for spark with the plug removed.

Use only approved spark plug testers.

· WARNING

Running engines produce heat. Severe burns can occur on contact. Combustible material can catch fire on contact.

DO NOT touch hot surfaces.

Avoid contact with hot exhaust gases.

Allow equipment to cool before touching.

Maintain at least 3 ft. (91.4 cm) of clearance on all sides to ensure adequate cooling.

Maintain at least 5 ft. (1.5 m) of clearance from combustible materials.

· WARNING

Crush Hazard

Wedge can cut through skin and break bones. Keep all limbs away from wedge and endplate.

· WARNING

Projectile Hazard

Pieces of log may be ejected from the splitter while operating. Wear ANSI approved safety glasses when operating. Be alert.

· WARNING

Keep Operator Work Zone Clear

Keep work zone clear of debris while working to ensure safe footing.

· WARNING

Before removing the pin installed into the front support leg make sure hitch is installed onto vehicle. Releasing the pin before will cause support leg to slide up and possibly cause injury.

· WARNING

Skin Injection Hazard. High pressure hydraulic oil can inject under your skin.

Make sure all fittings are tightly secure before applying pressure. Relieve system of pressure before servicing.

· WARNING

Towing Hazard

ALWAYS check all local and state or provincial regulations regarding towing, licensing and lights before towing your log splitter. Review towing safety warnings in your towing vehicle manual. Drive safely. Be aware of the added length of the log splitter. NEVER ride or transport cargo on the log splitter. DO NOT exceed the maximum 45 MPH (72 KM/H) towing speed.

· WARNING

Rapid retraction of the starter cord will pull hand and arm towards the engine faster than you can let go. Unintentional startup can result in entanglement, traumatic amputation or laceration. Broken bones, fractures, bruises or sprains could result.

When starting engine, pull the starter cord slowly until resistance is felt and then pull rapidly to avoid kickback.

· CAUTION

Parts of the hydraulic circuit (cylinder, pump, valve-body, hoses) can become very hot during operation.

· WARNING

In most states towing on public streets is either prohibited or would require further licensing or modifications. Please check with your local authorities or DMV regarding regulations, restrictions and registration.

· CAUTION

Improper treatment or use of the log splitter can damage it, shorten its life and void your warranty.

Use the log splitter only for intended uses.

Operate only on level surfaces.

DO NOT expose log splitter to excessive moisture, dust, or dirt.

DO NOT allow any material to block the cooling slots.

DO NOT use the engine if:

– Equipment sparks, smokes or emits flames

– Equipment vibrates excessively

Fuel Safety

· DANGER

GASOLINE AND GASOLINE VAPORS ARE HIGHLY FLAMMABLE AND EXPLOSIVE.

Fire or explosion can cause severe burns or death.

Gasoline and gasoline vapors:

- Gasoline is highly flammable and explosive.
- Gasoline can cause a fire or explosion if ignited.
- Gasoline is a liquid fuel but its vapors can ignite.
- Gasoline is a skin irritant and needs to be cleaned up immediately if spilled on skin or clothes.
- Gasoline has a distinctive odor, this will help detect potential leaks quickly.
- In any petroleum gas fire, flames should not be extinguished unless by doing so the fuel supply valve can be turned OFF. This is because if a fire is extinguished and a supply of fuel is not turned OFF, then an explosion hazard could be created.
- Gasoline expands or contracts with ambient temperatures. Never fill the gasoline tank to full capacity, as gasoline needs room to expand if temperatures rise.

When adding or removing gasoline:

DO NOT light or smoke cigarettes.

Turn the engine off and let it cool for at least two minutes before removing the gasoline cap. Loosen the cap slowly to relieve pressure in the tank.

Only fill or drain gasoline outdoors in a well-ventilated area.

DO NOT pump gasoline directly into the engine at the gas station. Use an approved container to transfer the fuel to the engine.

DO NOT overfill the gasoline tank.

Always keep gasoline away from sparks, open flames, pilot lights, heat and other sources of ignition.

When starting the engine:

DO NOT attempt to start a damaged engine.

Make certain that the gasoline cap, air filter, spark plug, fuel lines and exhaust system are properly in place.

Allow spilled gasoline to evaporate fully before attempting to start the engine.

Make certain that the log splitter is resting firmly on level ground.

When operating the log splitter:

DO NOT move or tip the log splitter during operation.

DO NOT tip the log splitter or allow fuel or oil to spill.

When transporting or servicing the log splitter:

Make certain that the fuel valve is in the OFF position, the gasoline tank is empty.

Disconnect the spark plug wire.

When storing the log splitter:

Store away from sparks, open flames, pilot lights, heat and other sources of ignition.

Do not store log splitter or gasoline near furnaces, water heaters, or any other appliances that produce heat or have automatic ignitions.

· WARNING

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

Training

1. Read the Operator's Manual completely before attempting to use this log splitter.
2. Do not allow anyone to operate your log splitter who has not read the Operator's Manual or has not been instructed on the safe use of the log splitter.
3. Never allow children or untrained adults to operate this machine.
4. Many accidents occur when more than one (1) person operates the log splitter. If a helper is assisting in loading logs to be split, never actuate controls until helper is clear of the area.
5. Never allow anyone to ride on the machine.
6. Never transport cargo on the log splitter.
7. High fluid pressures are developed in hydraulic log splitters. Pressurized hydraulic fluid escaping through a pin hole opening can puncture skin and cause sever blood poisoning. Therefore, the following instructions should be always heeded.
   - Do not operate the unit with frayed, kinked, cracked or damaged hoses, fittings, or tubing.
   - Stop the engine and relieve hydraulic system pressure before changing or adjusting fittings, hoses, tubing, or other system components.
   - Do not adjust the pressure settings of the pump or valve.
   - Do not check for leaks with your hand. Leaks can be detected by passing cardboard or wood over the suspected area. Look for discoloration. If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

8. Keep the operator zone and adjacent area clear for safe, secure footing.
9. If your log splitter is equipped with an internal-combustion engine and intended for use near any unimproved forest, brush, or grass covered land, the engine exhaust should be equipped with a spark arrestor. Make sure you comply with local, state, and federal codes. Take appropriate fire-fighting equipment with you.
10. Log splitters should be used only for splitting wood. Do not use for other purposes unless the manufacturer provides attachments and instructions.
11. Only split wood WITH the grain. NEVER split perpendicular to the grain

Preparation

1. Be thoroughly familiar with all controls and with proper use of the equipment.
2. Safety Gear:
   - Always wear nonslip, heavy-duty protective gloves when operating the machine.
   - Always wear safety shoes or heavy boots when operating the machine.
   - Always wear safety glasses or goggles when operating the machine.
   - Never wear jewelry or loose-fitting clothing that might become entangled in moving or rotating parts of the machine.
3. Make sure the splitter is on a level surface. Block tires and ensure support leg is secure to prevent unintended movement of the log splitter during operation.
   - Always operate the splitter from the manufacturer's indicated operator zone.
4. Logs to be split on ram-type units should be cut as squarely as possible.
5. Fuel:
   - Use an approved fuel container.
   - Never add fuel to a running or hot engine.
   - Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
   - Replace gasoline cap securely and clean up any spilled fuel.

Operation

1. Before starting this log splitter, review all safety rules. Failure to follow these rules may result in serious injury to the operator or bystanders.
2. Be sure to confirm all those connections and hose clamps are tight before each use. It is possible for connections to vibrate loose over time.
3. Never leave the machine unattended with the power source operating.
4. Never operate the machine when under the influence of alcohol, drugs, or medication.
5. The machine owner should instruct all operators in safe log splitter operation.
6. Always operate the log splitter with all safety equipment in place and all controls properly adjusted for safe operation.
7. Always operate the log splitter at manufacturer's recommended speed.
8. Always keep hands and feet clear of moving parts.
9. When loading a ram-type log splitter, place your hands on the sides of the log, not the ends. Never place your hands or any part of your body between a log and any part of the log splitter.
10. On ram-type log splitters, never attempt to split more than one (1) log at a time unless the ram has been fully extended and a second log is needed to complete the separation of the first log.
11. On ram-type log splitters on which the logs are not cut square, the longest portion of the log should be rotated down and the most square end placed against the ram.
12. Only split logs with the grain of the wood.
13. Use only your hand to operate the log splitter controls.
14. Do not refuel the engine until it has cooled for several minutes.

Maintenance and Storage

1. Always shut off the power source while repairing or adjusting the splitter except as recommended by the manufacturer.
2. Clean debris and chaff from the engine cylinder, cylinder head fins, recoil starter cover, and muffler areas. If the engine is equipped with a spark arrestor muffler, clean and inspect it regularly (follow manufacturer's service instructions). Replace, if damaged.
3. Never store the unit indoors with fuel in the tank. Fumes might reach an open flame spark. Allow the engine to cool before storing in any enclosure.
4. Clear debris from movable parts, but only when the power source is shut off.
5. Check to be sure all nuts and bolts are tight to assure the equipment is in safe working condition.

Starting the Engine

· DANGER

move log splitter outside and far away from windows, doors and intake ventilation covers.

1. **Check oil level.**
   Recommended oil is 10W-30.
2. Turn the fuel valve to **"ON"** position.
3. Move choke lever to **"CHOKE"** position.
4. Pull the recoil cord.
5. Move the choke lever to **"RUN"** position.

Stopping the Engine

In an emergency, turn the engine switch to the "OFF" position.

Under normal operation:

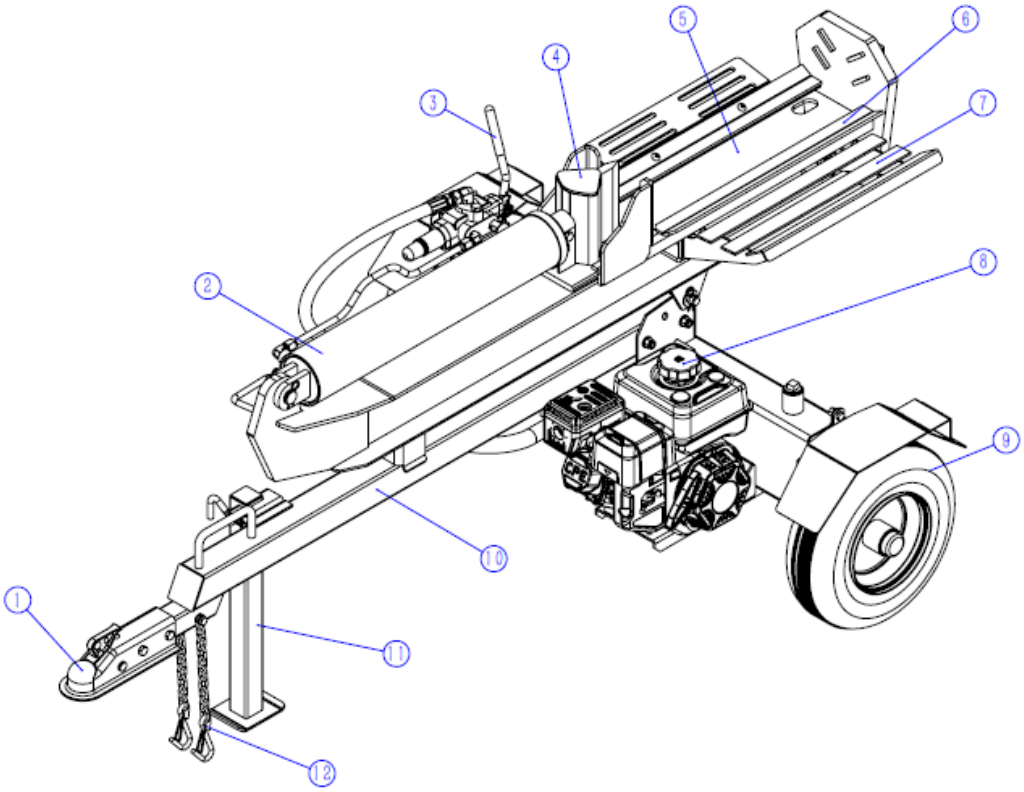
1. Turn the fuel valve to the **"OFF"** position.
2. Let the engine run until fuel starvation has stopped the engine. This usually takes few minutes.

Important: Always ensure that the fuel valve is in the **"OFF"** position when the engine is not in use.

CONTROLS AND FEATURES

Read this operator's manual before operating your log splitter. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

Log Splitter



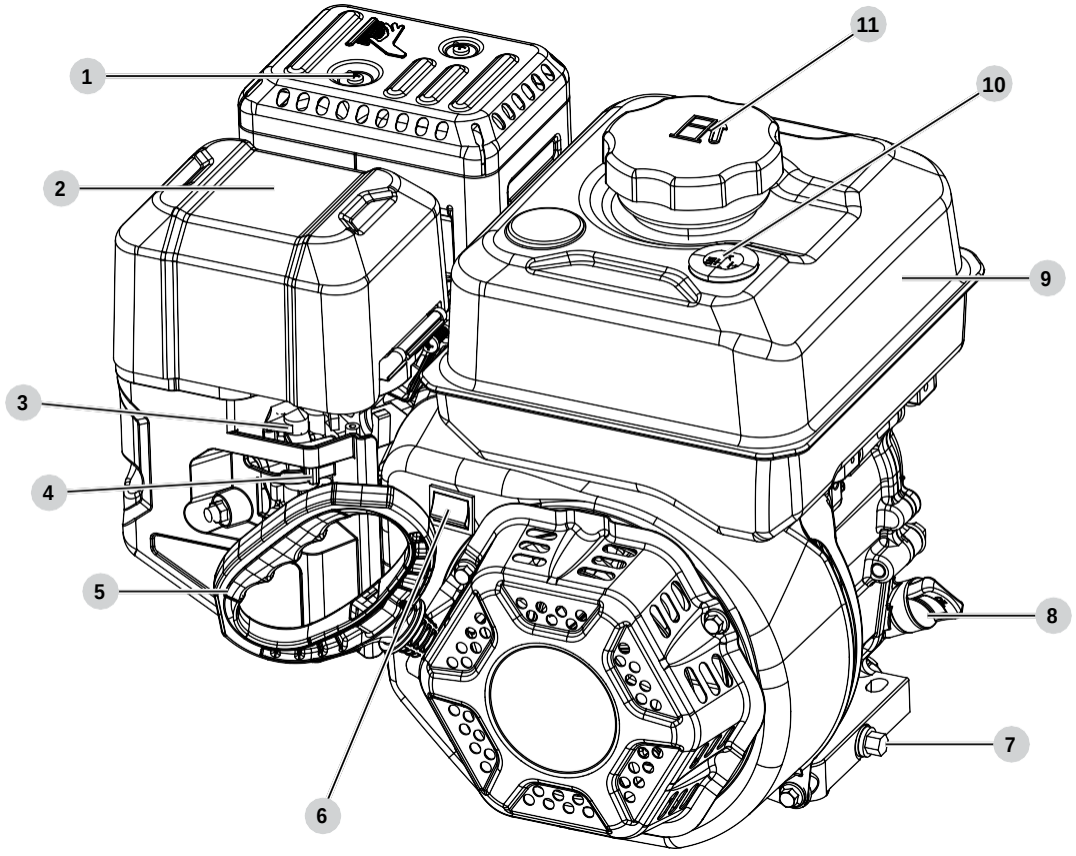
1. **2 in. (5.1 cm) Ball Coupler** – For towing the log splitter behind your vehicle.
2. **Hydraulic Cylinder:**

   25 Ton：4.1 in. bore (10 cm) × 22.6 in. (57.5 cm) stroke.

   28 Ton：4.1 in. bore (10.5 cm) × 22.6 in. (57.5 cm) stroke.

   34 Ton：5in. bore (12.7 cm) × 23in. (58.4 cm) stroke.
3. **Control Valve handle** – Controls the movement of the cutting wedge.
4. **Wedge**
5. **Splitting Beam**
6. **Log Cradle** – Prevents logs from rolling off beam.
7. **Log Catchers**
8. **Engine**：
   25 Ton：212cc, OHV.
   28 Ton：223cc, OHV.
   34 Ton：301cc, OHV.
9. **Tires** – Maximum travel speed is 45 MPH (72 KM/H).
10. **Tow Bar**
11. **Support Leg** – Supports log splitter while operating. Raise leg for towing.
12. **Safety Chains** – For use while towing.

Engine



1. **Muffler**
2. **Air Filter** – Protects the engine by filtering dust and debris from the intake air.
3. **Choke** – Used to start the engine.
4. **Fuel Valve** – Used to turn fuel supply on and off to engine.
5. **Recoil Starter** – Used to manually start the engine.
6. **Engine Switch** – Used to STOP the engine. (may be in a different location on your machine)
7. **Oil Drain Bolt** – Used to drain the oil from the engine.
8. **Oil Fill Cap/Dipstick** – Used to check and fill oil level.
9. **Gasoline Tank：**

   25 Ton：0.8 gal. (3.1 L)

   28 Ton：0.8 gal. (3.1 L)

   34 Ton：1.5 gal. (5.5 L)
10. **Gasoline Gauge**
11. **Fuel Cap** – Remove to add fuel.

Parts Included

Part	Part Qty.	Hardware Needed		Qty.	Tool Needed	
		Premier and Pro	Pro XL		Premier and Pro	Pro XL
Wheels	2	Castle Nut	Castle Nut	2	30mm open-end wrench	30mm open-end wrench
		Cotter Pin Ø4 × 36	Cotter Pin Ø4 × 36	2	Needle nose pliers	Needle nose pliers
		Axle Cap	Axle Cap	2	Soft Faced Hammer	Soft Faced Hammer
Tow Bar	1	Bolt M12 × 100	Bolt M12 × 100	2	18mm wrench or socket	18mm wrench or socket
		Nut M12	Nut M12	2	19mm wrench or socket	19mm wrench or socket
		Flat Washer	Flat Washer	2		
Engine	1	Bolt M8 × 40	M10X45	4	13mm wrench	16mm wrench
		Lock Nut M8	Lock Nut M10	4	14mm wrench	17mm wrench
		Flat Washer M8	Flat Washer M10	4		
Beam	1	Beam Pin	Beam Pin	1		
		Hairpin Clip	Hairpin Clip	1		
		Flat Washer Ø20	Flat Washer Ø20	1		
Fenders	2	Bolt M10 × 25	Bolt M10 × 25	6	16mm wrench or socket	16mm wrench or socket
		Nut M10	Nut M10	6	17mm wrench	17mm wrench
		Lock Washer	Lock Washer	6		
		Flat Washer	Flat Washer	6		
Low Pressure Hydraulic Hose	1				27mm open-end wrench or adjustable wrench	27mm open-end wrench or adjustable wrench
High Pressure Hydraulic Hose	1				27mm open-end wrench or adjustable wrench	27mm open-end wrench or adjustable wrench
Suction Hose	1	Hose Clamp	Hose Clamp	2	Flat head screw driver or 8mm socket	Flat head screw driver or 8mm socket
Log Catchers	2	Bolt M10 × 30	Bolt M10 × 30	2	6mm allen wrench	6mm allen wrench
		Bolt M10 × 20	Bolt M10 × 20	4	16mm wrench or socket	16mm wrench or socket
		Nut M10	Nut M10	2	17mm wrench	17mm wrench
		Lock Washer	Lock Washer	6		
		Flat Washer	Flat Washer	6		
Muffler Wire Cage	1	Bolts (installed in muffler)	Bolts (installed in muffler)	2	8mm socket	8mm socket

ASSEMBLY

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

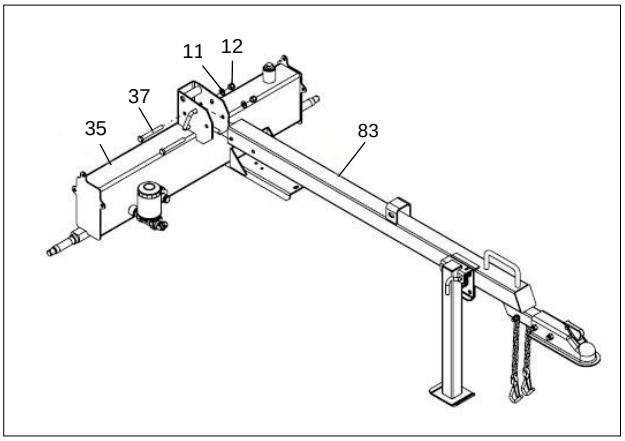
If unassembled, please read and follow these instructions.

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.

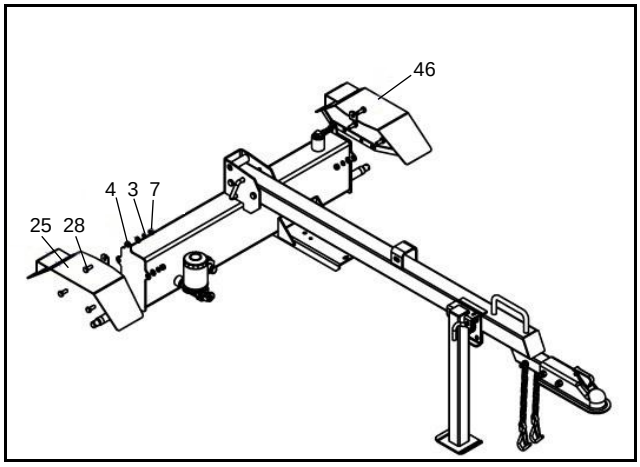
1) Install the Tow Bar

Attach the tow bar (83) to the bracket on top of the hydraulic oil tank (35) with two M12 × 100 bolts (37), Ø12 washers (11) and M12 lock nuts (12).



2) Install the Fenders

1. Attach the fender (25) to the side of the hydraulic oil tank with an M10 × 25 bolt (28), Ø10 washer (4), Ø10 lock washer (3) and M10 nut (7). The safety reflector should be facing the back of the hydraulic oil tank.

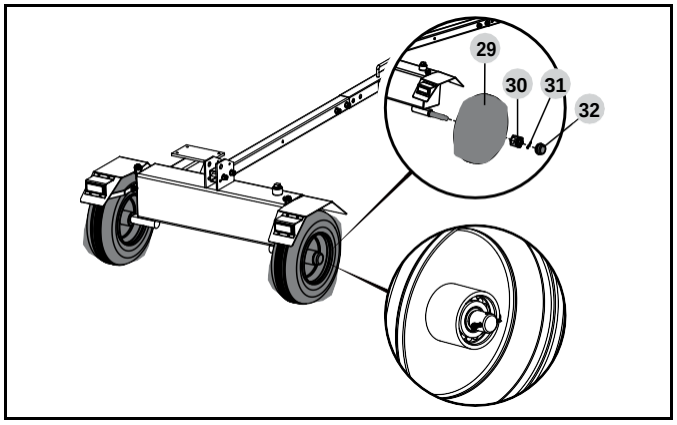


2. Repeat with second fender (46) on opposite side.

3) Install the Wheels

1. Remove the two plastic shipping caps from each wheel hub.
2. Slide the wheel (29) onto the axle.

   – Be sure the tire valve stem is facing out.
3. Thread the castle nut (30) on the axle and tighten by hand. Use a wrench to tighten another ¼ turn.
4. Spin the wheel (29) to distribute the bearing grease.
5. Loosen the castle nut (30) and re-tighten by hand.
6. Install the cotter pin (31) through the axle and castle nut (30).
7. Wheel should spin freely but when grasped on both sides, should not move from side to side (29).
8. Install the axle cap (32) using a soft face hammer or hammer and wood block.
9. Repeat for the other wheel.



· NOTICE

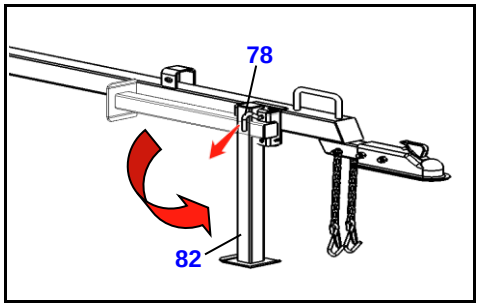
Keep dirt and debris away from the wheel bearings during assembly.

· CAUTION

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

4) Install The Support Leg

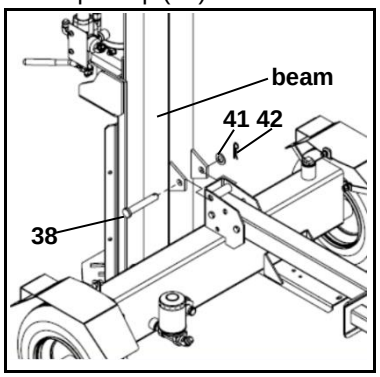
Unplug the pin (78), rotate the support leg (82) down put it right, insert the pin (78) back.



5) Install the Beam

Stand the beam vertical on the foot plate.

1. Roll the tank into position so the pivot holes of the tank and beam are aligned.
2. Insert the beam pin (38) and secure with washer (41) and hairpin clip (42).



· NOTICE

The safety pin (36) must be free to be inserted or pulled.

– When in the vertical position, the location of the safety pin (36) is shown in fig A.

– When in the horizontal position, the location of the safety pin (36) is shown in fig B.

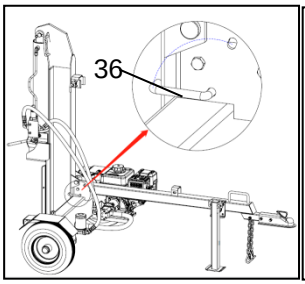


fig A

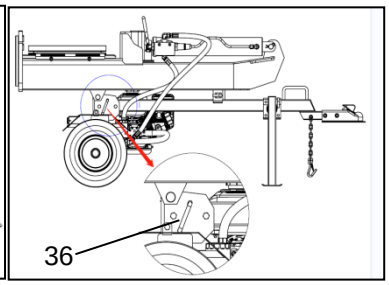
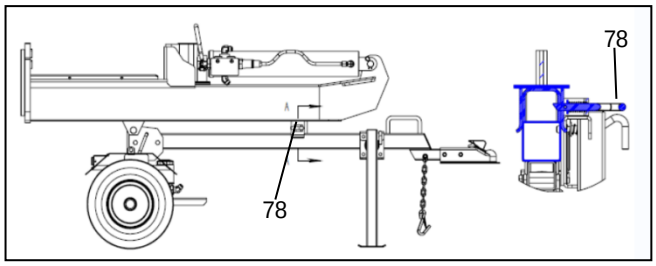


fig B

3. Unplug the pin (78). Pivot the beam to the horizontal position insert the pin (78) back.

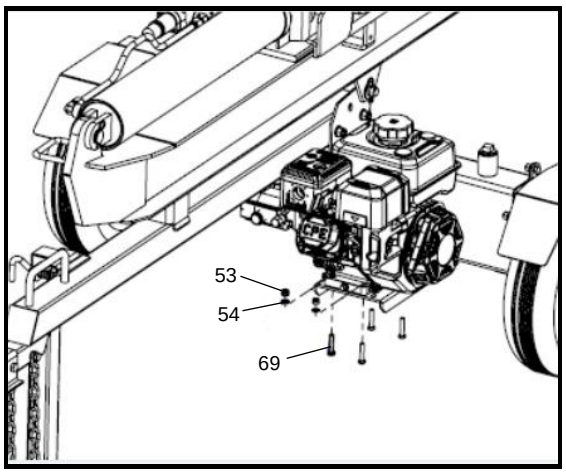


· WARNING

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

6) 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.

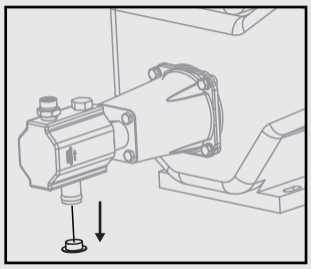


2. Install a bolt (69) up through the hole on the engine platform and through the hole on the engine base.
3. Place a washer (54) on the bolt (69) and thread a nylon lock nut (49)onto the bolt and tighten securely. Tighten to 8.8 lbf-ft – 10.3 lbf-ft (12-14 Nm) or fully, then a ¼ turn further.
4. Repeat steps 2 and 3 for the remaining bolts, washers and lock nuts.
5. Remove 3 bolts on top of muffler with 8mm socket. Install Wire muffler cage and secure with bolts.

7) Install the Hoses

· 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.

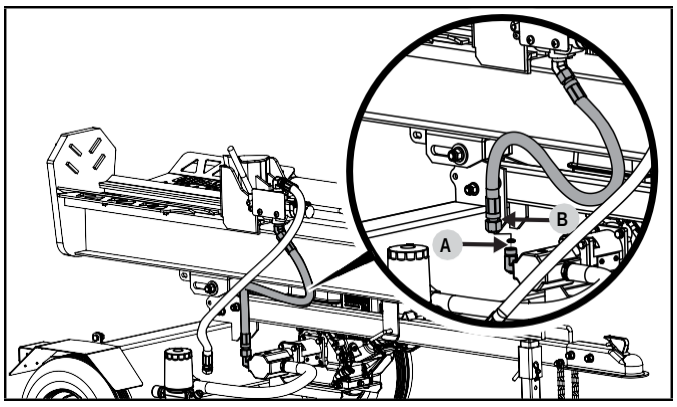
- These hoses are black and have swivel nuts on both ends.
- The Oil Inlet Hose sends hydraulic oil from the pump to the control valve/cylinder.
- The Oil Return Hose returns hydraulic oil from the control valve/cylinder to the tank.
- Hose connections do NOT require thread seal tape. The O-ring seals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

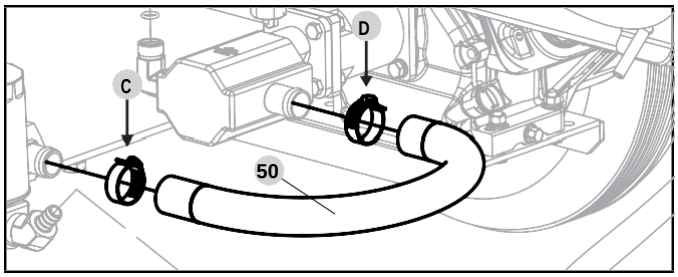
High Pressure hydraulic hose

1. Confirm O-ring is properly placed in inner groove of outlet fitting (A). Connect the loose end of the high pressure hydraulic hose (B) to the pump outlet (A). Securely tighten the high pressure hydraulic hose with a 27mm wrench. Tighten to 44 lbf-ft – 52 lbf-ft (60-71 Nm).



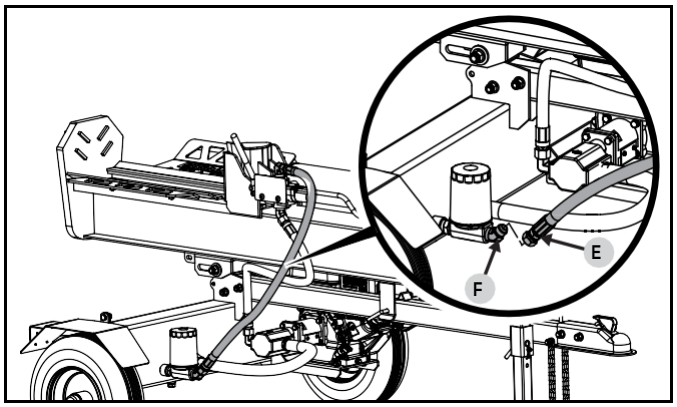
Suction hose

2. Using the provided 32 hose clamps, connect one end of the suction hose (73) to the port on the hydraulic oil tank (C) next to the hydraulic filter and the other end to the pump inlet on the side of the pump (D). Securely tighten the clamps on both ends of the suction hose with either a flat head screw driver or 8mm socket. Torque to 2.9 lbf-ft – 4.4 lbf-ft (4-6 Nm).



Low Pressure hydraulic hose

3. Connect the loose end of the low pressure hydraulic hose (E) to the to the tapered hydraulic fitting on the hydraulic fluid filter (F). The low pressure hydraulic hose will only fit on this fitting to ensure correct connection. Securely tighten the low pressure hydraulic hose with a 27mm wrench. Tighten to 52 lbf-ft – 66 lbf-ft (71-90 Nm).

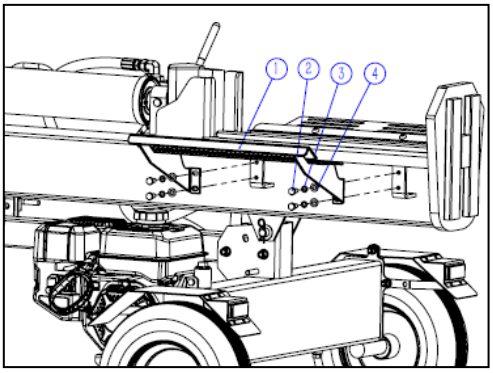


8) Install the Log Catchers

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 splitter beam.

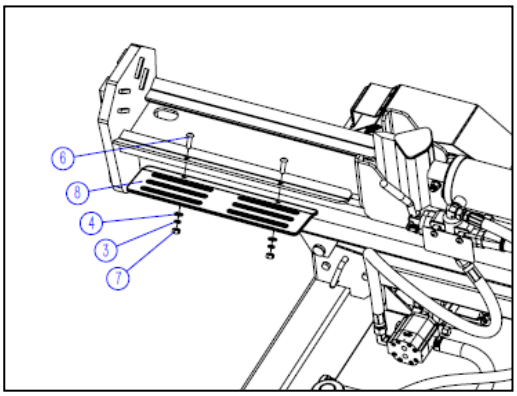
2. Place M10 flat washers (4) and M10 lock washers (3) onto the four M10 x 20 bolts (2) and thread them through the holes on the log catcher (1) and into the holes on the splitter beam and tighten securely.



Small Log Catcher (hydraulic hose Side)

3. With the log catcher angled downward and under the lip of the splitter beam, align the two holes on the log catcher with the two holes on the beam lip.

4. Place the two M10 x 30 bolts (6) through the holes on the beam and through the holes on the log catcher (8). Place a M10 flat washer (4) and a M10 lock washer (3) onto the bolt (6) from the bottom side and thread the M10 nuts (7) onto the bolts and tighten securely.



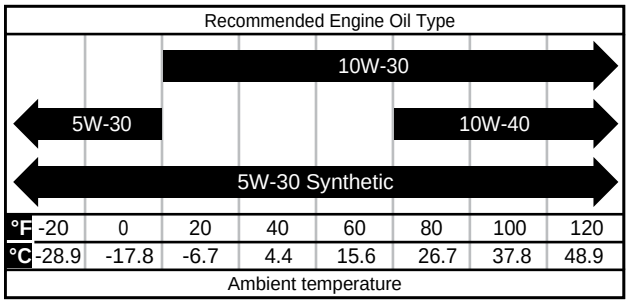
Add Engine Oil

· CAUTION

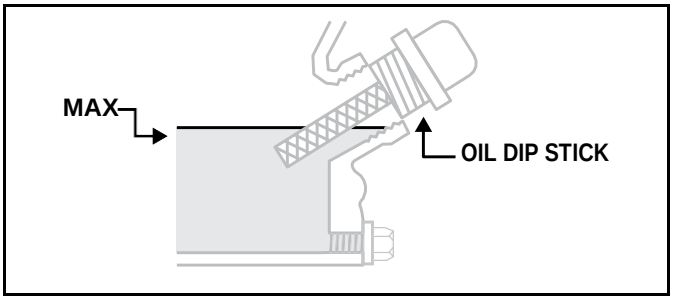
DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the engine as a result of failure to follow these instructions will void your warranty.

· NOTICE

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



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 16.9 fl. oz (500 ml) 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

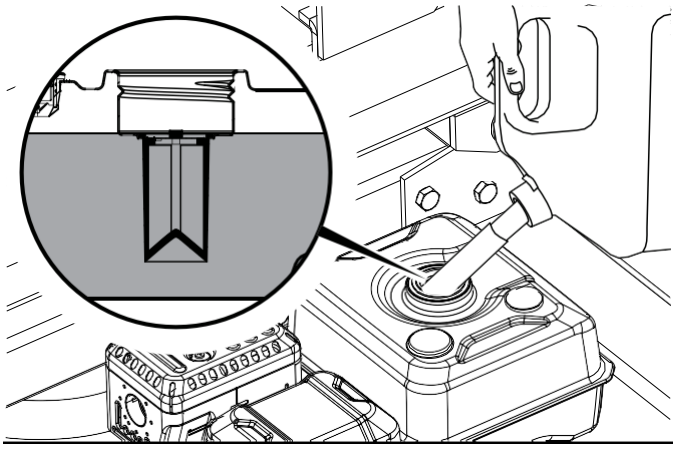
Weather will affect engine oil and engine performance. Change the type of engine oil used based on weather conditions to suit the engine needs.

· NOTICE

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

Add Fuel

1. Use clean, fresh, regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of less than 10% by volume.
2. DO NOT mix oil with gasoline.
3. Remove the gasoline cap.
4. 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.



· CAUTION

Use regular unleaded gasoline with a minimum octane rating of 85 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

Our engines work well with 10% or less ethanol blend gasoline. When using ethanol-gasoline blends there are some issues worth noting:

- Ethanol-gasoline blends can absorb more water than gasoline alone.
- These blends can eventually separate, leaving water or a watery goo in the tank, fuel valve and carburetor.
- With gravity-fed supplies, the compromised gasoline can be drawn into the carburetor and cause damage to the engine and/or potential hazards.
- There are only a few suppliers of fuel stabilizer that are formulated to work with ethanol-gasoline blends.
- Any damages or hazards caused by using improper gasoline, 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, run the engine to starvation and drain the tank when the equipment is not in use for more than 30 days.

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.

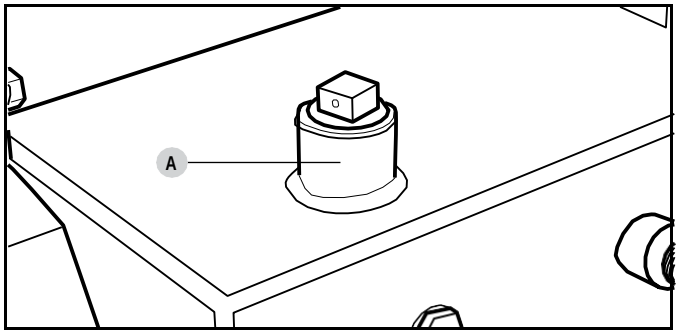
· NOTICE

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 sight glass.

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 4 gal. (15.1 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 0.5 gallon (1.9 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, DexronIII 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.

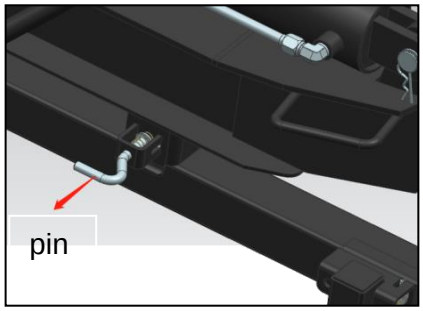
DO NOT exceed the maximum 45 MPH (72 KM/H) towing speed.

Changing Beam from Horizontal to Vertical Orientation

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

To change from horizontal to vertical orientation:

1. Pull out pin and pin that locks the beam to the tow bar.
2. 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. Insert the pin back.
4. Adjust the safety pin according to the position.

—When in the horizontal position, The location of the safety pin(33) is shown in fig B

—When in the vertical position, The location of the safety pin(33) is shown in fig A

To change from vertical to horizontal orientation, reverse steps.

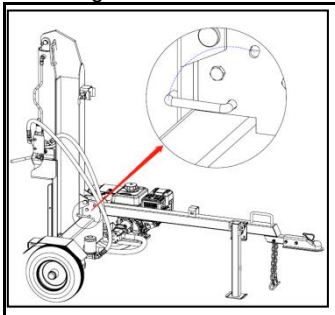


fig A

VERTICAL OPERATING POSITION

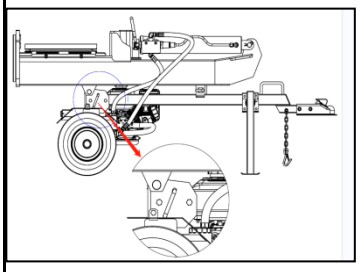


fig B

HORIZONTAL OPERATING POSITION

Towing Log Splitter Safety

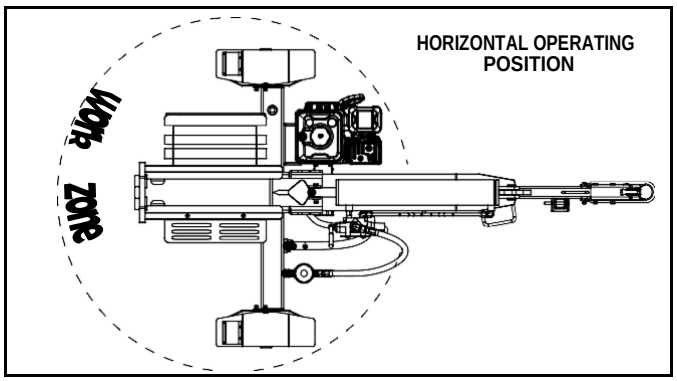
1. Always check local, state, or provincial regulations regarding towing, licensing and lights before towing your log splitter. Review towing safety warnings in your towing vehicle manual.
2. Before towing make sure the log splitter is correctly and securely attached to the vehicle and the safety chains attached with enough slack to allow for turning.
3. Support leg must be pinned in the “UP” position for towing.
4. 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.
5. Always disconnect the log splitter from the towing vehicle before operating.

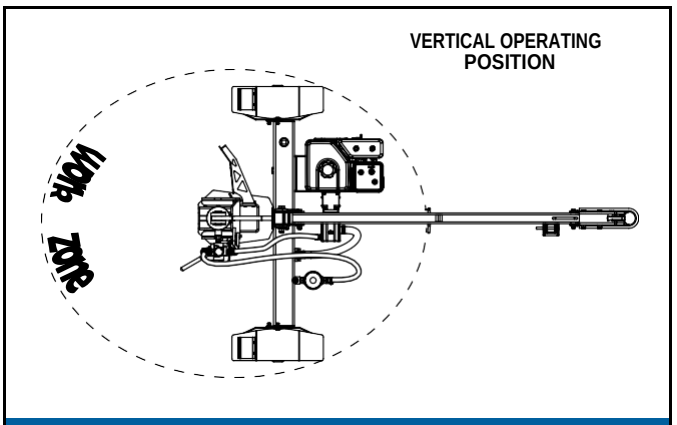
Log Splitter Location

This log splitter must have at least seven feet of clearance from combustible material. Leave at least three feet of clearance on all sides of the log splitter to allow for adequate cooling, maintenance, and servicing. DO NOT place the log splitter near vents or intakes where engine exhaust fumes could be drawn into occupied or confined spaces. **ONLY operate the log splitter outdoors.**

The log splitter needs to be on a dry level surface with good footing. DO NOT work on mud, ice, tall grass, brush, or snow.

Only operate log splitter from work zone shown below.





· NOTICE

For Vertical Operation:

- Remove the beam lock-pin from the beam bracket
- Use handle on cylinder to rotate beam to vertical position.
- Insert beam lock-pin in the pivot bracket.

. WARNING

ALWAYS use the log splitter for its intended use. The log splitter should only be used to split wood logs, length wise with the grain.

NEVER modify, alter, or change the log splitter in anyway. Modifications will void the warranty.

NEVER attach a rope, cable, or other device to the control lever on the log splitter.

DO NOT modify or change the engine and operating speeds or pressure settings. These changes can cause safety issues.

ONLY operate the log splitter in daylight.

NEVER operate, or let anyone else operate, the log splitter while under the influence of alcohol, drugs, or medication.

NEVER leave the log splitter unattended while the engine is running.

DO NOT change the splitting position with the engine running. Contact with the muffler can cause serious burns.

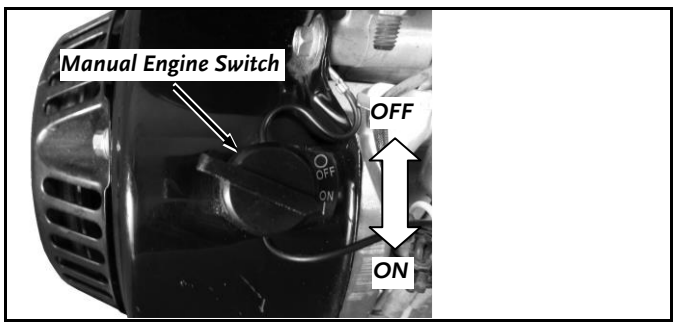
ALWAYS make sure the beam is in the locked position.

DO NOT let the beam drop as it could crush fingers or cause damage to the log splitter.

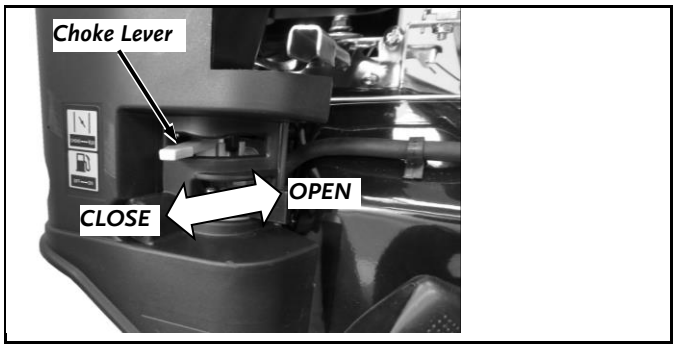
OPERATION

Starting the Engine

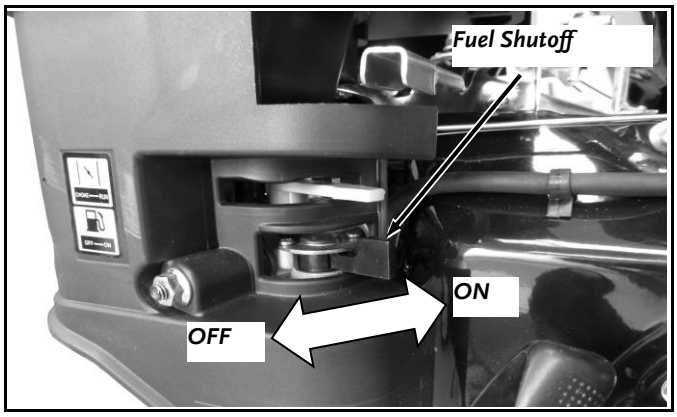
1. Make certain the log splitter is on a flat, level surface.
2. Turn engine on/off switch to “ON”(START) position.



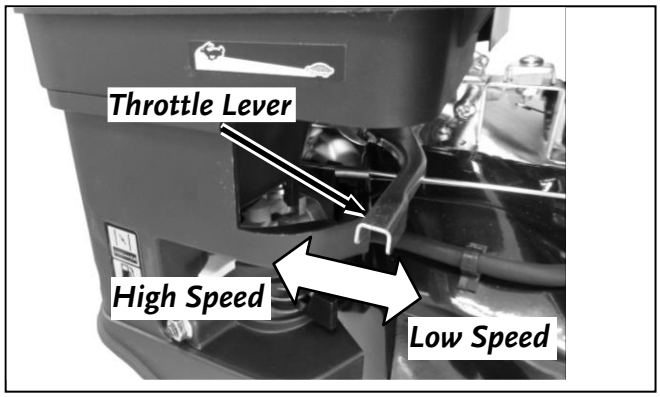
3. Turn the choke lever to the “CLOSE” (CHOKE) position. If the engine is hot from use, don’t close the choke.



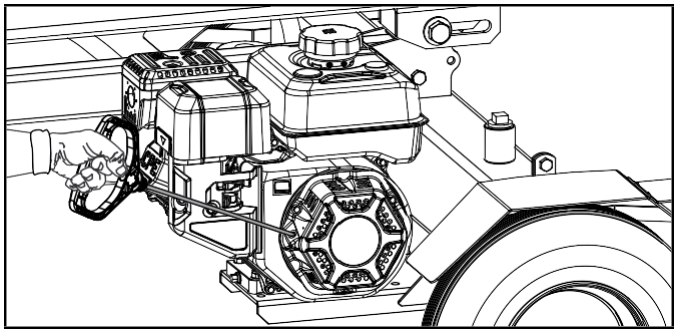
4. Move the fuel valve to the “ON” position.



5. Move throttle lever to the left a little.



6. Pull the starter cord until resistance is felt and then pull rapidly.



7. As engine warms up, move the choke lever to the “OPEN” run position.

· NOTICE

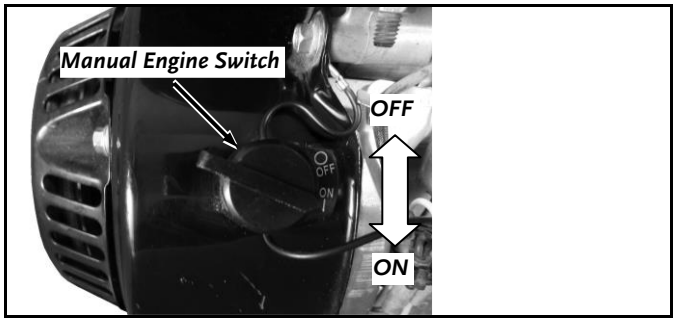
Keep choke lever in “Choke” position for 2 pulls of the recoil starter. After second pull, move choke lever to the “Run” position for up to the next 3 pulls of the recoil starter. Too much choke leads to spark plug fouling/engine flooding due to the lack of incoming air. This will cause the engine not to start.

· NOTICE

If the engine starts but does not run make certain that the log splitter is on a flat, level surface. The engine is equipped with a low oil sensor that will prevent the engine from running when the oil level falls below a critical threshold.

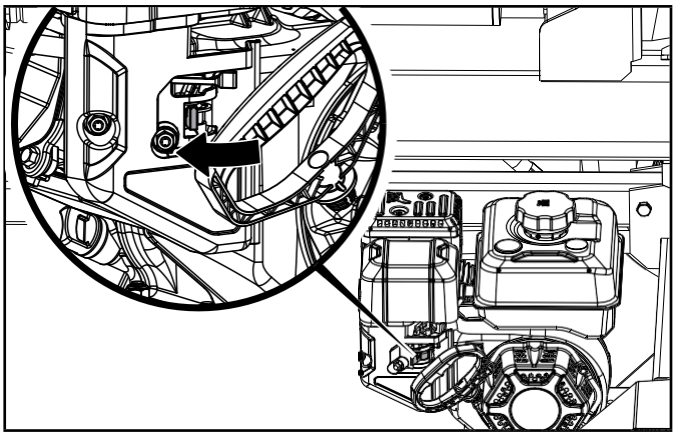
Stopping the Engine

1. Move the Throttle Lever to Low Speed and turn the engine switch to the “OFF” position.



When not in use

1. Turn the fuel valve to the “OFF” position.



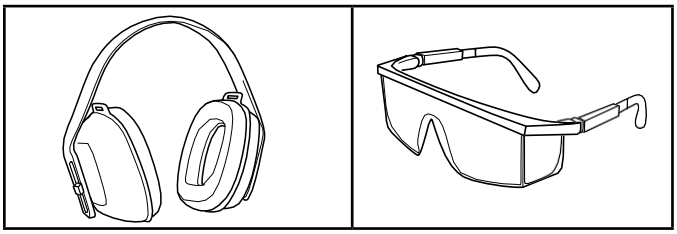
Important: Always ensure that the fuel valve is in the “OFF” position when the engine is not in use.

· NOTICE

If the engine will not be used for a period of two (2) weeks or longer, please see the Storage section for proper engine and fuel storage.

Log Splitter Operation

1. ALWAYS wear ear and eye protection, protective clothing and safety gear.



2. Block tires and ensure support leg is secure to prevent unintended movement of the log splitter during operation.
3. Set log splitter in either the horizontal or vertical position.

· NOTICE

HORIZONTAL position is used for lighter logs that can easily be loaded onto the beam.

VERTICAL position is used for light logs as well as heavy logs that are difficult to load onto the beam.

Back injury can result from lifting logs onto the log splitter if proper lifting techniques are not used.

4. Load a log onto the beam against the end plate (MAX LOG LENGTH – 24 in. [61 cm]).
5. Make sure all limbs are clear of crush zones.
6. Push the control valve handle forward (towards the end plate) to split the log.
7. Push the auto control valve handle backward to return the wedge to its original position.
8. Clear the split wood from the work zone.

· NOTICE

It is normal for the hydraulic fluid to appear foamy/frothy during operation. This can be caused by agitated oil in the tank collecting air.

· NOTICE

If a log gets stuck, embedded or will not split completely, push the control handle in the reverse direction and allow the splitter to strip the log from the wedge.

ALWAYS keep hands clear of the log and wedge while it is retracting.

· NOTICE

The cylinder stroke is designed so the wedge stops approximately 1.5 in. (3.8 cm) from the end plate.

MAINTENANCE

Make certain that the log splitter is kept clean and stored properly. Only operate the unit on a flat, level surface in a clean, dry operating environment. DO NOT expose the unit to extreme conditions, excessive dust, dirt, moisture, or corrosive vapors. Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

Clean spark arrester every 100 hours.

Check and tighten all bolts and nuts before operating the log splitter.

· WARNING

Never operate a damaged or defective log splitter.

· WARNING

Improper maintenance will void your warranty.

The owner/operator is responsible for all periodic maintenance.

Complete all scheduled maintenance in a timely manner.

Correct any issue before operating the log splitter.

Cleaning the Log splitter

· CAUTION

DO NOT spray engine with water.

Water can contaminate the fuel system and can enter the engine through the cooling slots and damage the engine.

Clear the debris from the beam, wedge and endplate.

Use a damp cloth to clean exterior surfaces of the engine and log splitter.

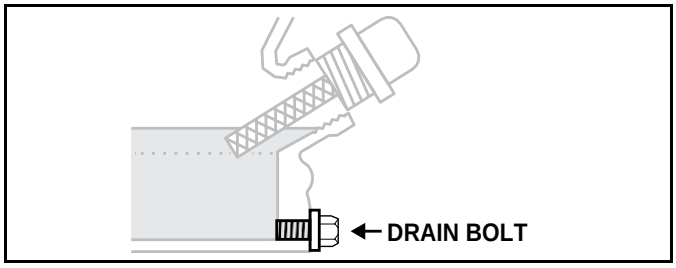
Use a soft bristle brush to remove excess dirt and oil. Use an air compressor (25 PSI) to clear dirt and small debris.

Wipe all metal parts with an oily rag to help prevent rust and corrosion.

Changing the Engine Oil

Change oil when the engine is warm. Refer to the oil specification to select the proper grade for your operating environment.

1. Remove the oil drain plug with a 10 mm socket (not included) and extension.



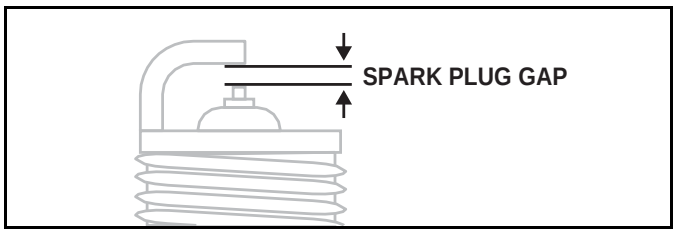
2. Allow the oil to drain completely into an appropriate container.
3. Replace the oil drain plug.
4. Remove the oil fill cap/dipstick to add oil.
5. Add oil according to *Add Engine Oil* in *Assembly* section. DO NOT OVERFILL. Oil not included for routine maintenance.
6. Dispose of used oil at an approved waste management facility.

· 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.

Cleaning and Adjusting the Spark Plug(s)

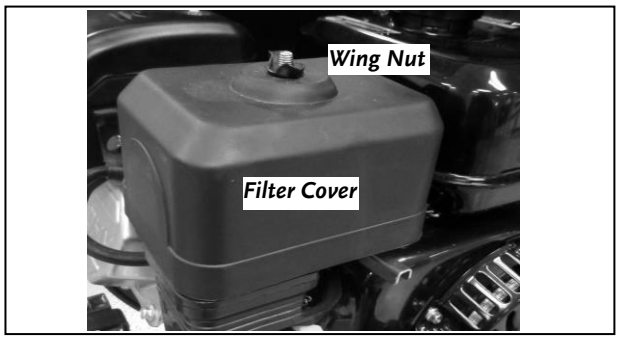
1. Remove the spark plug cable from the spark plug.
2. Use a spark plug socket tool (not included), or a 13/16 in. (21 mm) socket (not included) to remove the plug.
3. Inspect the electrode on the plug. It must be clean and not worn to produce the spark required for ignition.
4. Make certain the spark plug gap is 0.028-0.031 in. (0.7-0.8 mm).



5. Refer to the spark plug types in *Specifications* when replacing the plug.
6. Firmly re-install the plug.
7. Attach the spark plug cable to the spark plug.

Cleaning the Air Filter

1. Remove the wing nut from the filter cover and remove the cover.



2. Remove the wing nut from air filter and pull the air filter with pre-cleaner from the threaded stud.



3. Pull the pre-cleaner off the paper filter assembly and shake the dirt from the foam pre cleaner and from the paper filter.

Note: If the foam Pre-cleaner or paper filter is too dirty to clean (clogged) or damaged you must replace the filter with a new filter.

4. Clean the air filter cover and inner surface with wet cloth. Be careful not to allow the dust to enter into the carburetor.
5. Reinstall the air filter with pre-cleaner and secure with the wing nut.
6. Reinstall the filter cover and secure with the wing nut.

Changing the Hydraulic Oil

Always shut off the engine, disconnect the spark plug.

Change the hydraulic oil filter after the first 50 hours of use, then every 100 hours or seasonally.

· NOTICE

When log splitters are not used for extended periods of time and they are exposed to changing temperature conditions, moisture through condensation can build up inside the tank.

1. Begin with the cylinder retracted and the engine fuel valve in the “OFF” position.
2. Release any stored pressure by moving the valve lever forward and backward several times.
3. Place a container under the hydraulic tank. Make sure it is large enough to hold the contents of the tank. See model specification section of this manual for hydraulic oil capacities.

· NOTICE

The drain plug is sealed with Teflon® tape. Add 2-3 wraps of new Teflon® tape as needed when replacing the drain plug to prevent oil leak.

4. To drain the oil,
   - Place an oil drain container under the drain plug. Unscrew (counter-clockwise) and remove the tank drain plug on the bottom of the hydraulic tank. Allow oil to completely drain from the tank into the container. Re-apply Teflon® sealing tape to the drain plug threads, then reinsert and turn (clockwise) in the tank drain plug. Tighten, but do not over tighten.
   - Place an oil drain container under the external oil filter (If your log splitter includes this feature). If not, skip to step “C”. Unscrew (counter-clockwise) and remove the external hydraulic oil filter and drain any oil in the filter into the container. A strap or oil filter wrench may be needed.

· NOTICE

Oil will drain from the filter and filter housing.

   - Locate an approved replacement filter.
   - Lubricate the gasket of the new filter with a thin film of clean oil.
   - Install a new hydraulic oil filter (A). Screw the new filter on clockwise. Tighten 3/4 - 1 turn after the gasket makes contact.

· NOTICE

Install a new hydraulic oil filter each time the hydraulic oil is changed (if your log splitter includes this feature).

   - Place an oil drain container under the large clear hose that runs from the tank to the pump.
     - Loosen the hose clamp attached to the fitting on the tank.
     - Disconnect hose from fitting and drain oil into the container.

– Using a large wrench, unscrew the fitting from the tank to expose the internal tank filter.

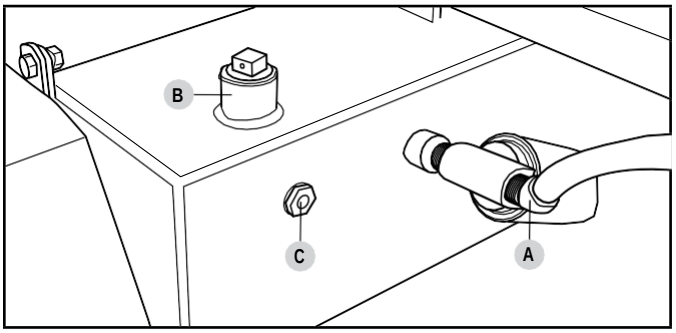
– Check for any debris on the screen. Using a clean towel or air gun, carefully remove any debris.

· NOTICE

Be careful when handling the screen as it can be easily damaged.

– Apply new Teflon® sealing tape to threads, reinsert into tank and tighten. Be careful to tighten, but do not over tighten.

5. Unscrew and remove the tank fill plug on top of the tank. Using a funnel add approximately 4 gal. (15.1 L) of hydraulic oil to the tank. Wipe up any spilled oil (B).
6. Turn the fuel valve to the "ON" position, and start the engine. Purge the air from the system by extending and retracting the wedge several times until the motion is smooth.
7. Check the hydraulic oil level using the sight glass. Add 0.5 gal (1.9 L) of hydraulic oil, so the oil level is visible in the sight glass (C).
8. Dispose of used oil at approved recycling locations in accordance with Federal, State, Local or Provincial regulations.



· WARNING

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

Maintenance Schedule

Follow the service intervals indicated in the following maintenance schedule.

Service your log splitter more frequently when operating in adverse conditions.

EVERY 8 HOURS OR DAILY

— Check engine and hydraulic oil levels
— Clean around air intake and muffler

FIRST 5 HOURS

— Change oil

EVERY 50 HOURS OR EVERY SEASON

— Clean air filter
— Change oil if operating under heavy load or in hot environments

EVERY 100 HOURS OR EVERY SEASON

— Change oil
— Clean/adjust spark plug
— Check/adjust valve clearance*
— Clean spark arrestor
— Clean fuel tank and filter*
— Change hydraulic oil
— Change hydraulic oil filter

EVERY 250 HOURS

— Clean combustion chamber*

EVERY YEAR

— Inspect wheel bearings and repack bearing grease as needed.

EVERY 3 YEARS

— Replace fuel line*

STORAGE

Refer to the *Maintenance* section for proper cleaning instructions.

Log Splitter Storage

1. The log splitter needs to be cool for at least 5 minutes before storing.
2. Clean the log splitter before storage according to the Maintenance section.
3. Retract the wedge to protect the rod from corrosion.
4. Wipe the beam and wedge with an oily rag to prevent rust and corrosion.

Engine Stored for Less than 30 Days

1. Allow the engine to cool completely before storage.
2. Clean engine according to the *Maintenance* section.
3. To extend the fuel storage life add a properly formulated fuel stabilizer to the tank.
4. Ensure the fuel valve is in the “OFF” position.

Engines Stored for Over 30 Days

1. Add a properly formulated fuel stabilizer to the tank.
2. Run the engine for a few minutes so the treated fuel cycles through the fuel system and carburetor.
3. Turn the fuel valve to the “Off” position.
4. Let the engine run until fuel starvation has stopped the engine. This usually takes a few minutes.
5. The engine needs to cool completely before cleaning and storage.
6. Clean the engine according to the maintenance section.
7. Change the oil.
8. Remove the spark plug and pour about 14.8 mL (½ounce) of oil into the cylinder. Using the Recoil, crank the engine slowly to distribute the oil and lubricate the cylinder.
9. Reattach the spark plug.

· WARNING

Never store the log splitter indoors next to appliances where there is a source of heat or open flame, spark, or pilot light because they can ignite gasoline vapors.

DO NOT store a log splitter near fertilizer or any corrosive material. Even with an empty gas tank, gasoline vapors could ignite.

SPECIFICATIONS

Log Splitter Specifications

Ram Force..... 25, 28, 34 Ton
Cycle Time, No Load..... 12, 12, 15 seconds
Hydraulic Tank Capacity ..... 4, 4, 5 gal (15.1,15.1,18.9 L)
Max Log Length..... 24 in. (61 cm)
Max Log Weight..... 100 lb. (45 kg)
Coupler Ball Size..... 2 in. (5.1 cm)
Tire Size ..... 4.8-8, 16 in. outer diameter
Max towing speed ..... 45 MPH (72 KM/H)
Gear Pump 2-stage
Max pressure..... 3700, 4100, 3600 psi
Max flow capacity..... 11-13 GPM (41.6-49.2 LPM)
Control Valve..... Detent (auto-return)
Gross Weight ..... 515, 530, 634 lb. (234, 241, 288 kg)
Net Weight ..... 429.5, 451.5, 550.7 lb. (195, 205, 250 kg)
Height ..... 40.6 in. (103.1 cm)
Width ..... 51.3 in. (130.2 cm)
Length..... 89.5 in. (227.3 cm)

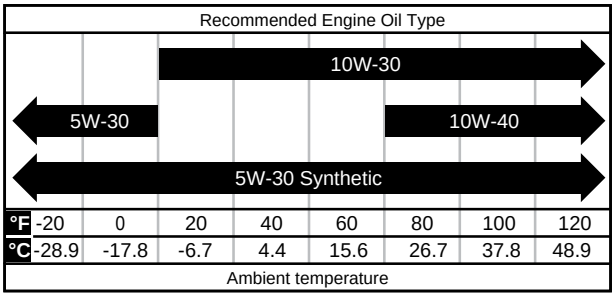
Engine Specifications

Model..... R212, R225, R300
Displacement..... 212, 223, 301 cc
Type..... 4-Stroke OHV
Start Type..... Manual

Oil Specifications

DO NOT OVERFILL.

Type..... See chart below
Capacity..... 16.9, 16.9, 37.2 fl. oz (500, 500, 1100 ml)



· 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.

Hydraulic Oil System

Capacity ..... 4.5, 4.5, 6.0 gal. (17, 17, 23 L)

For year round use in warmer climates (always ABOVE 32˚F/ 0˚C):

– ISO 32/SAE10W
– Universal Hydraulic Oil

For year round use in colder climates (BELOW 32˚F/ 0˚C):

– Dexron III Automatic Transmission Fluid

Fuel Specifications

Use regular unleaded gasoline with a minimum octane rating of 85 and an ethanol content of less than 10% by volume. DO NOT USE E15 or E85. DO NOT OVERFILL.

Gasoline Capacity..... 0.8, 0.8, 1.5 gal. (3.1, 3.1, 5.5 L)

Spark Plug Specifications

OEM Type NHSP F6RTC
Replacement Type ..... NGK BPR6ES or equivalent
Gap ..... 0.028-0.031 in. (0.7-0.8 mm)

Valve Specifications

Intake Clearance ..... 0.002-0.0039 in. (0.05-0.1 mm)
Exhaust Clearance ..... 0.002-0.0039 in. (0.05-0.1 mm)

Important Message about Temperature

Your product is designed and rated for continuous operation at ambient temperatures up to 40°C (104°F). When your product is needed it may be operated at temperatures ranging from 2°F (-10°C) to 122°F (50°C) for short periods of time. If exposed to temperatures outside this range during storage, it should be brought back within this range before operation. In any event, the product must always be operated outdoors, in a well-ventilated *area and away from doors, windows and vents.*

TROUBLESHOOTING

Problem	Cause	Solution
Engine will not start.	No fuel.	Add fuel.
	Faulty spark plug.	Replace spark plug.
	Unit loaded during start up.	Remove load from unit.
Engine will not start; Engine starts but runs roughly.	Low oil level.	Fill crankcase to the proper level.
		Place log splitter on a flat, level surface.
	Choke in the wrong position.	Adjust choke.
	Spark plug wire loose.	Attach wire to spark plug.
Engine shuts down during operation.	Out of fuel.	Fill fuel tank.
	Low oil level.	Fill crankcase to the proper level. Place log splitter on a flat, level surface.
Engine cannot supply enough power or overheating.	Insufficient ventilation.	Check for air restriction. Move to a well ventilated area.
Wedge movement is slow or erratic.	Air in the hydraulic oil system.	Purge air by extending and retracting the wedge several times until motion is smooth.
	Debris lodged in beam guides.	Clear debris from beam.
	Low hydraulic oil.	Check oil level and add as needed.
Oil leak from cylinder.	Faulty cylinder rod seal.	Contact Customer Service.
	Scored or bent cylinder rod.	Contact Customer Service.
	Loose hydraulic fitting.	Tighten hydraulic fitting.
	Faulty combination washer seal on cylinder hydraulic fitting.	Contact Customer Service.
Wedge will not extend or retract.	Faulty control valve.	Contact Customer Service.
	Faulty hydraulic pump.	Contact Customer Service.
	Low hydraulic oil.	Check oil level and add as needed.
Excessive bouncing while towing.	Under-inflated tires.	Inflate tires to proper pressure. Refer to tire sidewall.

Notes:

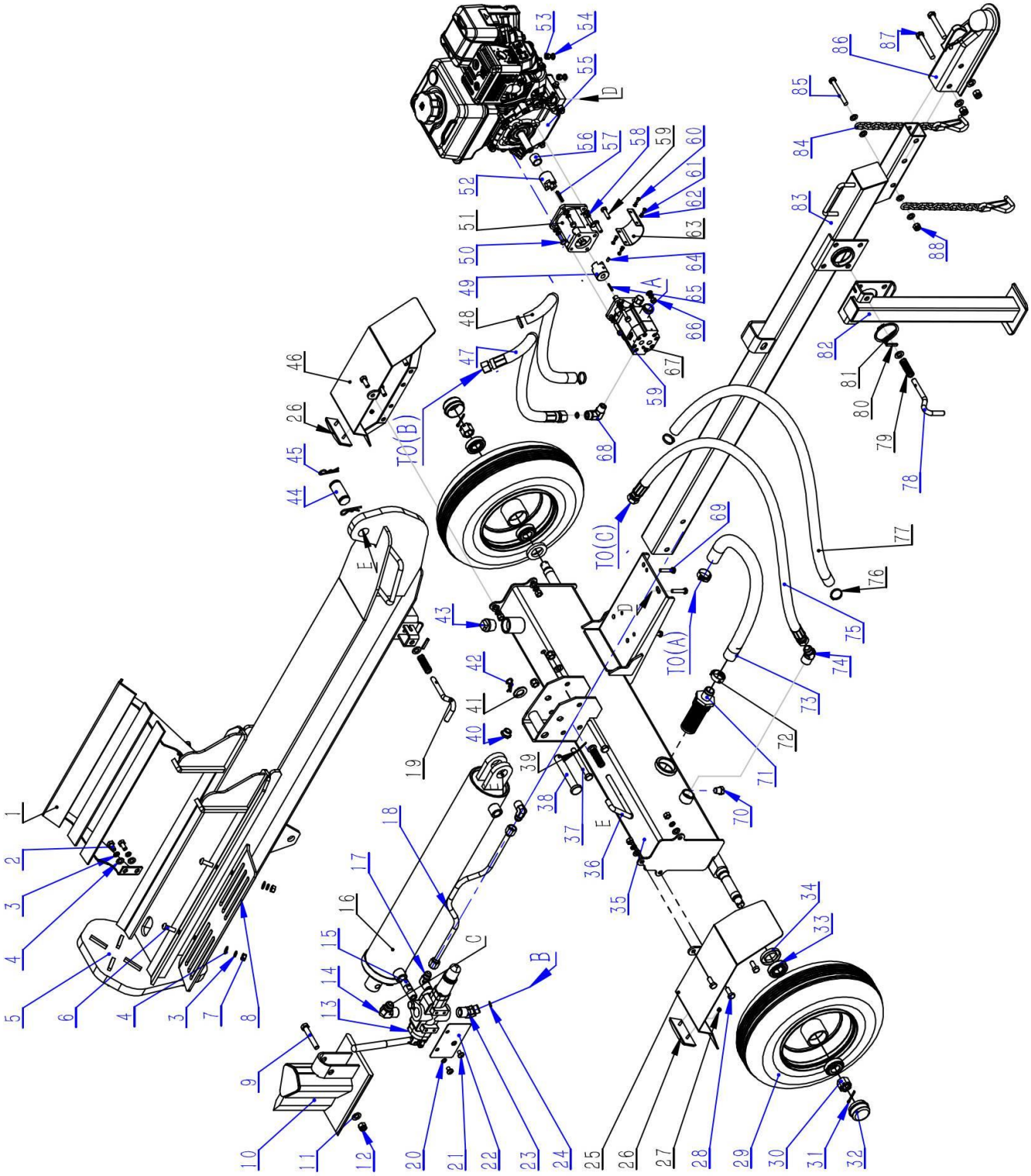
Parts List – Horizontal-Vertical Log Splitter

Note: *Part numbers listed are available through DR Power Equipment.*

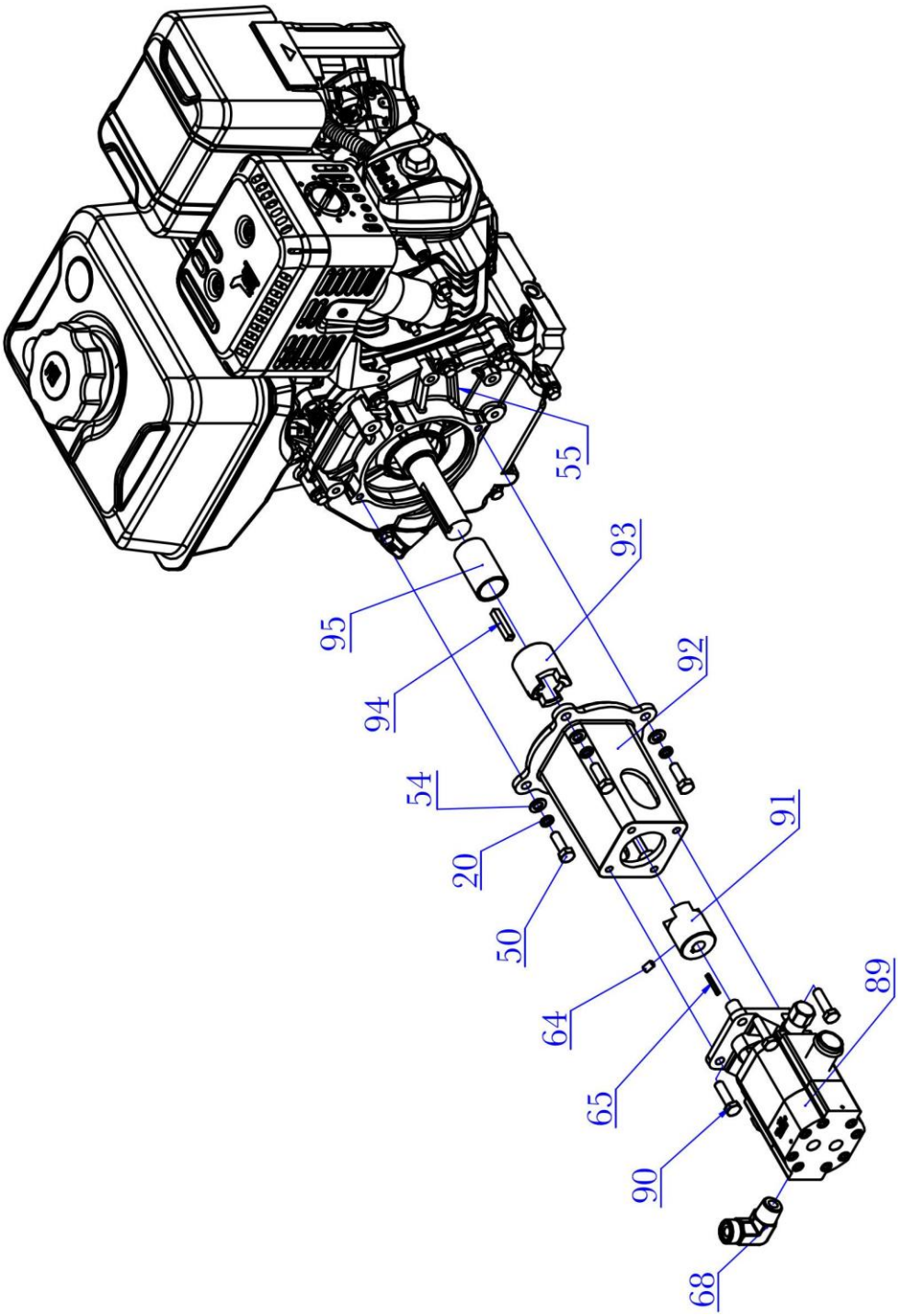
Ref#	Part#	Description	Machine Specific
1	A0002308619	Catcher, Log	
2	G051756	Screw, HHC, M10-1.5 X 20, C8.8	
3	A0002308660	Washer, Spring, M10	
4	G070264	Washer, Flat, M10	
5	A0002308663	Assembly, Beam WH3	Premier 25T, Pro 28T
5	A0002394701	Assembly, Beam 34T WH3	Pro XL 34T
6	A0002364584	Screw, BHC, M10-1.5 X 30	
7	G045772	Nut, Hex, M10-1.5, G8, Yel Chr	
8	A0002308668	Catcher, Log, Short	
9	A0002364590	Screw, HHC, M12-1.75 X 75 WH3	
10	A0002308670	Slide, Wedge WH3	
11	G049808	Washer, Flat, M12	
12	A0002364632	Nut, Hex, Nylon Lock, M12-1.75 NY INS WH3	
13	A0002308673	Valve, Control WH3	
14	A0002308675	Fitting, Hyd Angle-1 WH3	
15	A0002308689	Fitting, Hyd Valve WH3	
16	A0002308701	Cylinder WH3	Premier 25T, Pro 28T
16	A0002308701	Cylinder 34T WH3	Pro XL 34T
17	A0002308706	Fitting, Hyd Angle-2 WH3	
18	A0002308708	Pipe, Hydraulic WH3	Premier 25T, Pro 28T
18	A0002308708	Pipe, Hydraulic 34T WH3	Pro XL 34T
19	A0002354095	Pin w/ Handle WH3	
20	A0000940903	Washer, Split Lock, M8	
21	A0002308710	Screw, Cross Pan Head, M8 X 12 WH3	
22	A0002308711	Plate WH3	
23	A0002308714	Fitting, Filter, Out WH3	
24	A0002308713	O-Ring, Dia 10 X 2.65 WH3	
25	A0002308716	Fender, Left WH3	
26	A0002869163	Reflector Fender WH3	
27	0H3535	Nut Flange M5-0.8 Nylock	
28	G052212	Screw, HHC, M10-1.25 X 25, C8.8	
29	A0002308724	Wheel Assembly, 4.8-8 WH3	
30	A0002366257	Nut, Castle, M20 X 1.5	
31	337541	Pin, Cotter, 4 X 35mm, WH1	
32	A0002308725	Cap, Axle, WH3	
33	A0002308726	Bearing, Tapered WH3	
34	A0002308727	Seal, Dust, WH3	
35	A0002308729	Tank, Oil, WH3	Premier 25T, Pro 28T
35	A0002394704	Tank, Oil, 34T WH3	Pro XL 34T
36	A0002308730	Pin, Pivot Lock, WH3	
37	G052623	Screw, HHC, M12-1.75 X 100, PC8.8	
38	A0002325702	Pin, Clevis, Metric, 22 X 127	
39	A0002366253	Pin, Cotter, 2.5 X 36	
40	A0002325707	Scale, Oil WH3	
41	G045900	Washer, Flat, 3/4", Zinc	
42	A0002325709	Pin, Cotter, Metric, 3 X 54.5 WH3	
43	A0002325708	Screw, Oil WH3	
44	A0002325724	Pin, Clevis, Headless-W/Grooves WH3	Premier 25T, Pro 28T
44	A0002394703	Pin, Clevis, Headless-W/Grooves 34t WH3	Pro XL 34T
45	A0002325721	Pin, Cotter, Metric, 3 X 62 WH3	
46	A0002325722	Fender, Right WH3	

Ref#	Part#	Description	Machine Specific
47	A0002325720	Hose, Hydraulic, High Pressure WH3	
48	A0002869169	Cover-Hose High Press WH3	
49	A0002325725	Fitting, Gear Pump WH3	Premier 25T, Pro 28T
50	A0001346725	Bolt, HCS, 5/16-24 X 1", GR5, ZP	Premier 25T, Pro 28T
51	A0002325723	Mount, Gear Pump WH3	Premier 25T, Pro 28T
52	A0002325728	Coupler, Engine Shaft WH3	Premier 25T, Pro 28T
53	G049820	Nut, Hex, Nylon Lock, M8-1.25 NY INS	Premier 25T, Pro 28T
53	G045772	Nut, Hex, M10-1.5 G8 YEL CHR	Pro XL 34T
54	G058653	Washer, Flat, M8	Premier 25T, Pro 28T
54	G070264	Washer, Flat, M10	Pro XL 34T
55	A0002536326	Engine-R210 WH3	Premier 25T
55	A0002308797	Engine-R225 WH3	Pro 28T
55	A0002394709	Engine-R300 WH3	Pro XL 34T
56	A0002308522	Spacer WH3	Premier 25T, Pro 28T
57	A0002325726	Key-4.78 c 4.78 x 35 WH3	Premier 25T, Pro 28T
58	334871	Spring Washer, M8*2.3, WE1	Premier 25T, Pro 28T
59	G042909	Screw HHC M8-1.25 X 30 C8.8	Premier 25T, Pro 28T
60	G075475	Screw PPHM M4-0.7 X 10	Premier 25T, Pro 28T
61	G022264	Washer Lock #8-M4	Premier 25T, Pro 28T
62	G043180	Washer Flat M4	Premier 25T, Pro 28T
63	A0002325727	Cover-Coupler WH3	Premier 25T, Pro 28T
64	A0002325731	Socket Set Screw-M6 X 10 WH3	Premier 25T, Pro 28T
65	A0002325733	Key-Flat-Metric 3.2 X 3.2 X 25 WH3	Premier 25T, Pro 28T
66	G045771	Nut Hex M8-1.25 G8 Clear Zinc	Premier 25T, Pro 28T
67	A0002325732	Pump-Gear WH3	Premier 25T, Pro 28T
68	A0002325739	Fitting Outlet Pump WH3	
69	G057821	Screw HHC M10-1.25 X 40 C8.8 FT	Premier 25T, Pro 28T
69	G064416	Screw HHC M10-1.5 X 45 C8.8 FT	Pro XL 34T
70	A0002325737	Plug Oil WH3	
71	A0002325742	Filter, Hydraulic Internal WH3	
72	A0002325738	Clamp, Worm Drive, Bridge 1.25 WH3	
73	A0002325740	Hose Return 25 X 540 WH3	
74	A0002325749	Fitting Hydraulic Tapered 135 DEF WH3	
75	A0002325747	Hose Hydraulic Low Pressure WH3	
76	157031	Cable Tie 7-1/2 IN L	
77	A0002869171	Cover Hose Low Press WH3	
78	A0002354095	Pin – W/Handle WH3	
79	A0002354096	Spring-Pin WH3	
80	A0002366242	Pin-Roll 6X35	
81	A0002354094	Ring-Retaining WH3	
82	A0002325748	Leg Support-Front WH3	
83	A0002325746	Tube-Base WH3	
84	A0002325743	Chain-w/Hook WH3	
85	G061652	Screw HHC M10-1.5 X 85 C8.8	
86	161011	Coupler 2 IN Ball 2 IN Mount	
87	G052891	Screw HHC M12-1.75 X 80 C8.8	
88	A0001055475	Nut-M10 X 1.5 Lock Flanged	
89	A0002394706	Pump-Gear 34T WH3	Pro XL 34T
90	G047411	Screw HHC M6-1.0 X 16 C8.8	Pro XL 34T
91	A0002394714	Fitting-Gear Pump 34T WH3	Pro XL 34T
92	A0002394828	Bracket-Gear Pump 34T WH3	Pro XL 34T
93	A0002394707	Coupler-Engine Shaft 34T WH3	Pro XL 34T
94	A0002394717	Key-6.3 X 6.3 X 35 WH3	Pro XL 34T
95	A0002394711	Spacer – 34T WH3	Pro XL 34T

Schematic – Horizontal-Vertical Log Splitter



Schematic – Engine and Pump Components (Pro XL 34T Splitter Only)



DR® HORIZONTAL-VERTICAL LOG SPLITTER

2-Year Limited Warranty

Terms and Conditions

The DR® HORIZONTAL-VERTICAL LOG SPLITTER is warranted for two (2) years against defects in materials or workmanship when put to ordinary and normal consumer use; ninety (90) days for any other use. The Engine manufacturer warrants the Engine separately. The Battery is warranted for one (1) year.

For the purposes of all the above warranties, "ordinary and normal consumer use" refers to non-commercial residential use and does not include misuse, accidents, or damage due to inadequate maintenance.

DR® Power Equipment certifies that the DR® HORIZONTAL-VERTICAL LOG SPLITTER is fit for ordinary purposes for which a product of this type is used. DR® Power Equipment, however, limits the implied warranties of merchantability and fitness in duration to a period of two (2) years in consumer use, ninety (90) days for any other use.

The 2-Year Limited Warranty on the DR® HORIZONTAL-VERTICAL LOG SPLITTER starts on the date the machine ships from our factory. The 2-Year Limited Warranty is applicable only to the original owner.

The warranty holder is responsible for the performance of the required maintenance as defined by the manufacturer's owner's manuals. The warranty holder is responsible for replacement of normally wearing parts such as the Spark Plug, Air Filters, and Tires. This warranty does not cover attachments and accessories to the machine.
During the warranty period, the warranty holder is responsible for the machine transportation charges, if required.
During the warranty period, warranty parts will ship by standard method at no charge to the warranty holder.
Expedited shipping of warranty parts is the responsibility of the warranty holder.

SOME STATES DO NOT ALLOW LIMITATIONS ON THE LENGTH OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.
DR® Power Equipment shall not be liable under any circumstances for any incidental or consequential damages or expenses of any kind, including, but not limited to, cost of equipment rentals, loss of profit, or cost of hiring services to perform tasks normally performed by the DR® HORIZONTAL-VERTICAL LOG SPLITTER.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.
THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

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