

CHAMPION

POWER EQUIPMENT

TM-MC

OPERATOR'S MANUAL



27 Ton LOG SPLITTER



MODEL NUMBER
100370

SAVE THESE INSTRUCTIONS
Important safety instructions
are included in this manual.

MADE IN CHINA
REV 100370-20161209

12039 Smith Ave.
Santa Fe Springs CA 90670
USA / 1-877-338-0999
www.championpowerequipment.com

Have questions or need assistance?

Do not return this product to the store!

WE ARE HERE TO HELP!

Visit our website:

www.championpowerequipment.com

for more info:

- Product Info & Updates
- Tech Bulletins
- Frequently Asked Questions
- Product Registration

– or –

Call our Customer Care Team Toll-Free at:

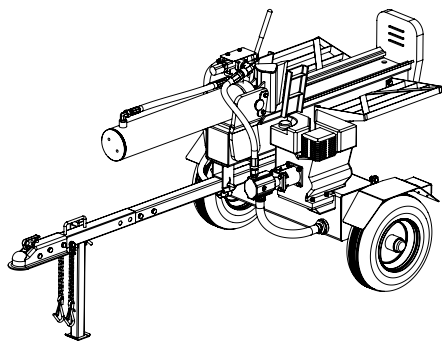
1-877-338-0999

Parts Ordering:

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999

*We are always working to improve our products. Therefore, the enclosed product may differ slightly from the image on the cover.



27 Ton LOG SPLITTER

TABLE OF CONTENTS

| | | | |
|--|-----------|--|-----------|
| Introduction | 1 | Maintenance and Storage | 14 |
| Manual Conventions | 2 | Engine Maintenance | 14 |
| Safety Rules | 3 | Log Splitter Maintenance | 14 |
| Training | 5 | Hydraulic Oil | 14 |
| Preparation | 5 | Maintenance Schedule | 15 |
| Operation | 6 | Cleaning | 15 |
| Maintenance and Storage | 6 | Storage | 16 |
| Controls and Features | 7 | Log Splitter Storage | 16 |
| Log Splitter | 7 | Engine Storage | 16 |
| Assembly | 8 | Troubleshooting | 17 |
| Open Shipping Crate | 8 | Specifications | 18 |
| 1) Install the Tow Bar | 8 | Log Splitter Specifications | 18 |
| 2) Install the Fenders | 8 | Engine Specifications | 18 |
| 3) Install the Wheels | 8 | Hydraulic Oil System | 18 |
| 4) Install the Beam | 8 | Parts Diagram | 19 |
| 5) Install the Cylinder and Wedge | 9 | Parts List | 20 |
| 6) Install the Engine and Hoses | 10 | | |
| 7) Install the Log Catchers | 10 | | |
| Add Engine Oil | 11 | | |
| Add Engine Fuel | 11 | | |
| Add Hydraulic Oil | 11 | | |
| Operation | 12 | | |
| Before Each Use Inspect the Log Splitter | 12 | | |
| Towing Log Splitter Safety | 12 | | |
| Log Splitter Location | 12 | | |
| Starting the Engine | 13 | | |
| Stopping the Engine | 13 | | |
| Log Splitter Operation | 13 | | |

INTRODUCTION

Congratulations on your purchase of a Champion Power Equipment product. Champion Power Equipment and Champion Engine Technology 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, and we reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

Since CPE/CET highly value 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 accidents, property damage, or injury occurs. We want you to continue to use and be satisfied with your CPE/CET product for years to come.

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

| |
|---|
| Champion Power Equipment Support |
| 1-877-338-0999 |
| Model Number |
| 100370 |
| Serial Number |
| |
| Date of Purchase |
| |
| Purchase Location |
| |

This manual uses the following symbols to help differentiate between different kinds of information. The safety symbol is used with a key word to alert you to potential hazards in operating and owning power equipment.

Follow all safety messages to avoid or reduce the risk of serious injury or death.

 **DANGER**

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

 **WARNING**

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

 **CAUTION**

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

CAUTION

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

 **NOTE**

If you have questions regarding your log splitter, we can help. Please call our help line at **1-877-338-0999**

SAFETY RULES

WARNING

Read this manual thoroughly before operating your log splitter. Failure to follow instructions could result in serious injury or death.

DANGER

Log Splitter engine exhaust contains carbon monoxide, a colourless, odourless, 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, enclosure or compartment. DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings. **DANGER CARBON MONOXIDE**, using a log splitter indoors **CAN KILL YOU IN MINUTES**.

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 jewellery. Operate equipment with guards in place. DO NOT wear loose-fitting clothing, dangling drawstrings or items that could become caught.

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 91.4 cm (3 ft.) of clearance on all sides to ensure adequate cooling. Maintain at least 1.5 m (5 ft.) of clearance from combustible materials.

DANGER

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

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.

⚠ DANGER

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 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. Choose a level surface to operate the log splitter.

**NEVER EXCEED MAX. Towing Speed
72 km/h (45 MPH)**

⚠ 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

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

⚠ DANGER

Fuel and fuel vapours are highly flammable and extremely explosive.

Fire or explosion can cause severe burns or death. Unintentional startup can result in entanglement, traumatic amputation or laceration.

When adding or removing fuel:

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

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

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

DO NOT overfill the fuel tank.

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

DO NOT light or smoke cigarettes.

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.

Block the tires to prevent unintended movement.

When storing the log splitter:

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

⚠ CAUTION

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

SAFETY RULES

Training

1. Read the Owner's Manual and Engine Manual completely before attempting to use this log splitter.
2. Do not allow anyone to operate your log splitter who has not read the Owners'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 heeded at all times.
 - a. Do not operate the unit with frayed, kinked, cracked or damaged hoses, fittings, or tubing.
 - b. Stop the engine and relieve hydraulic system pressure before changing or adjusting fittings, hoses, tubing, or other system components.
 - c. Do not adjust the pressure settings of the pump or valve.
 - d. 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.

Preparation

1. Be thoroughly familiar with all controls and with proper use of the equipment.
2. Safety Gear:
 - a. Always wear safety shoes or heavy boots when operating the machine.
 - b. Always wear safety glasses or goggles when operating the machine.
 - c. 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.
 - a. 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:
 - a. Use an approved fuel container.
 - b. Never add fuel to a running or hot engine.
 - c. Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
 - d. 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 hose 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.
 - a. 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.
10. 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.
11. Use only your hand to operate the log splitter controls.
12. Do not refuel the engine until it has cooled for several minutes.

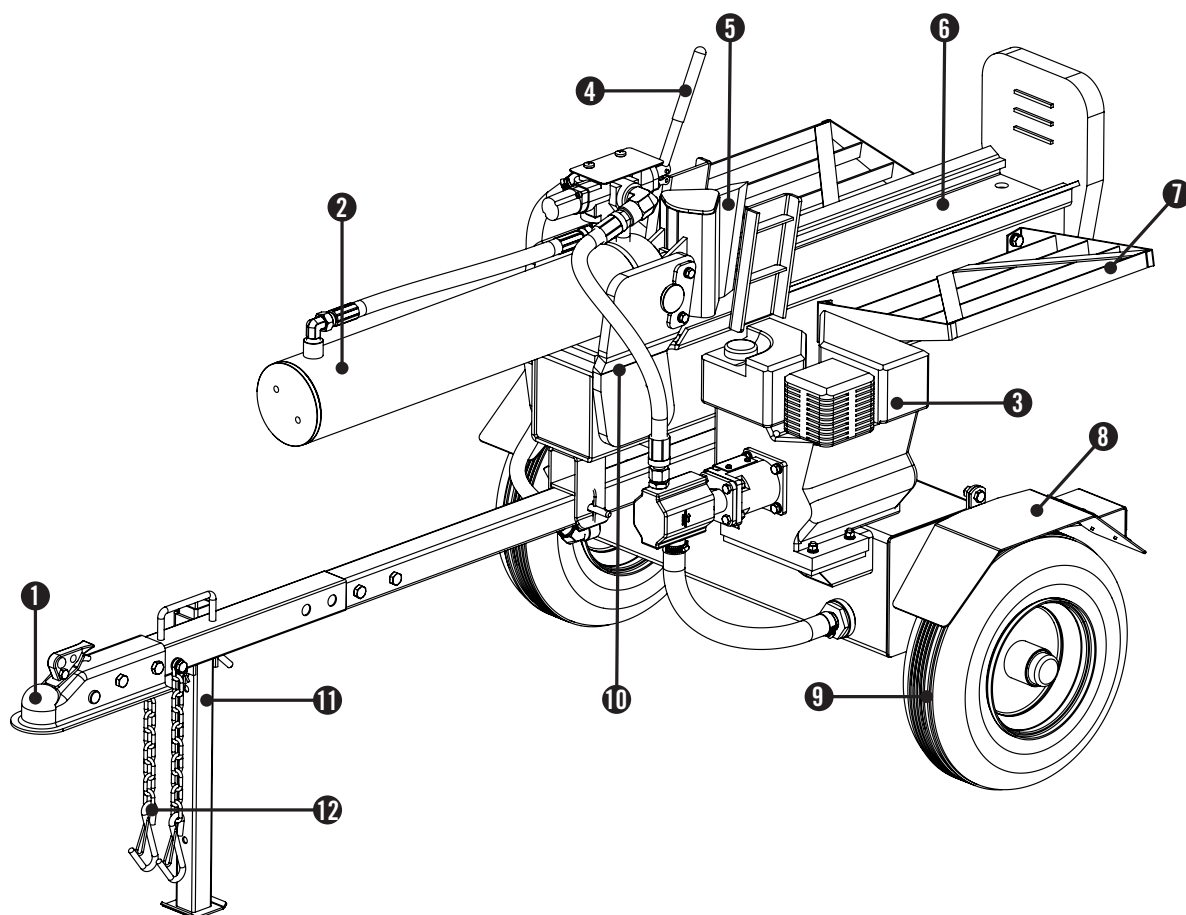
Maintenance and Storage

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, blower house rotation screen, 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 moveable 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.

CONTROLS AND FEATURES

Read this owner'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



- | | |
|--|---|
| <p>(1) 5.1 cm (2 in.) Ball Coupler – For towing the log splitter behind your vehicle.</p> <p>(2) Hydraulic Cylinder – Bore 12 cm (4.7 in.) x 58.4 cm (23 in.) stroke. Rated to 3600 psi.</p> <p>(3) Engine – Honda GX200. (Refer to Honda engine Owner's Manual.)</p> <p>(4) Control Valve Handle – Controls the movement of the cutting wedge.</p> <p>(5) Wedge</p> <p>(6) Splitting Beam</p> | <p>(7) Log Catchers</p> <p>(8) Fenders</p> <p>(9) Tires – Maximum travel speed is 72 km/h (45 MPH).</p> <p>(10) Mounting Plates – Holds hydraulic cylinder in place.</p> <p>(11) Support Leg – Supports log splitter while operating. Raise leg for towing.</p> <p>(12) Safety Chains – For use while towing.</p> |
|--|---|

Your log splitter requires some assembly.

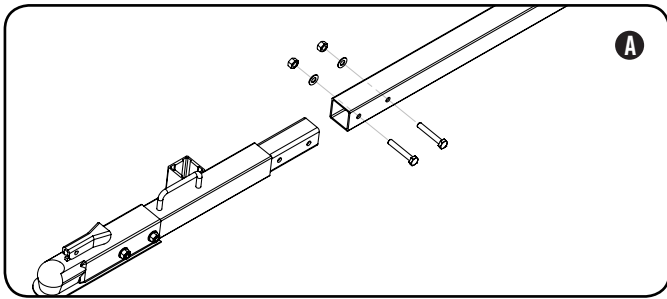
If you have any questions regarding the assembly of your log splitter, call our help line at 1-877-338-0999. Please have your serial number and model number available.

Open Shipping Crate

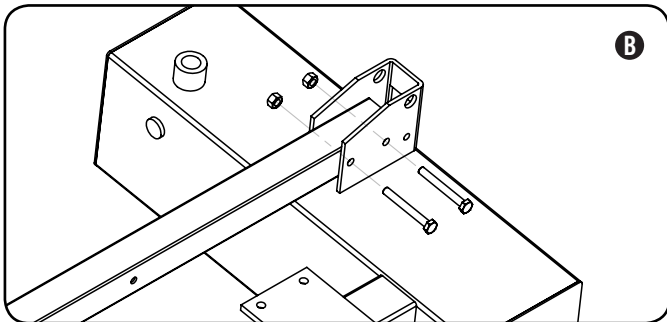
1. Set the shipping crate on a solid, flat surface
2. Carefully cut the shipping bands and remove lid of shipping crate.
3. Locate all hardware before beginning assembly.

1) Install the Tow Bar

1. Assemble two piece tow bar with two M12x65 bolts and M12 lock nuts and washers. (A)

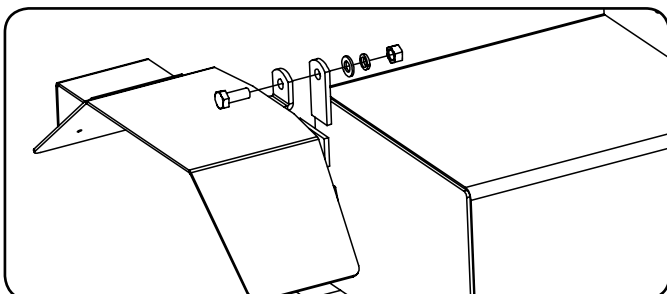


2. Attach the tow bar to the bracket on top of the hydraulic oil tank with two M12x85 bolts and M12 lock nuts. (B)



2) Install the Fenders

1. Attach the fender to the side of the hydraulic oil tank with an M10x30 bolt, M10 washer, M10 lock washer and M10 nut. The safety reflector should be facing the back of the hydraulic oil tank.
2. Repeat with second fender on opposite side.



3) Install the Wheels

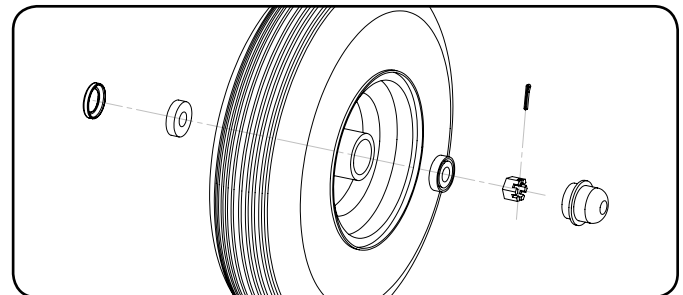
1. Place bearings in the wheel hub
2. Press the seal over the bearing on the inside of the wheel. Use a hammer and wood block to flush the seal with the end of the hub.
3. Slide the wheel over the axle on the hydraulic oil tank.
4. Install the castle nut and tighten by hand. Tighten another ¼ turn with a wrench to seat the bearing.
5. Spin the wheel to distribute grease.
6. Loosen the castle nut and re-tighten by hand.
7. Install the cotter pin through the castle nut and axle to prevent the nut from backing off.
8. Place axle cap over castle nut and axle.
9. Repeat steps 1-8 for the other wheel.

NOTE

Keep the wheel hub clean and free from debris during assembly.

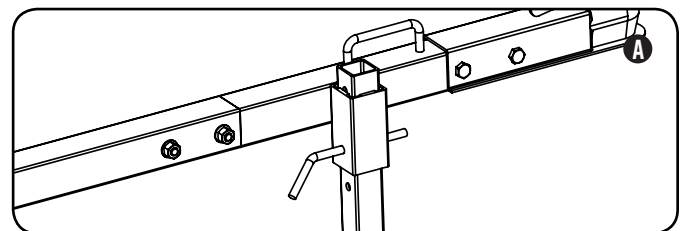
CAUTION

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



4) Install the Beam

1. Install the front support leg and secure with pin and R-pin (hairpin clip). (A)



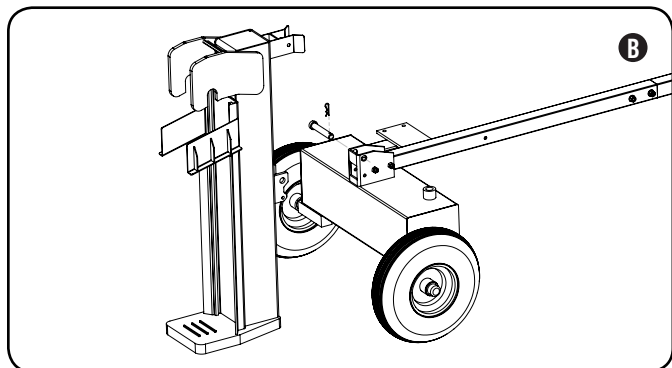
2. Stand the beam upright on foot plate behind the hydraulic fluid tank. (B)

! CAUTION

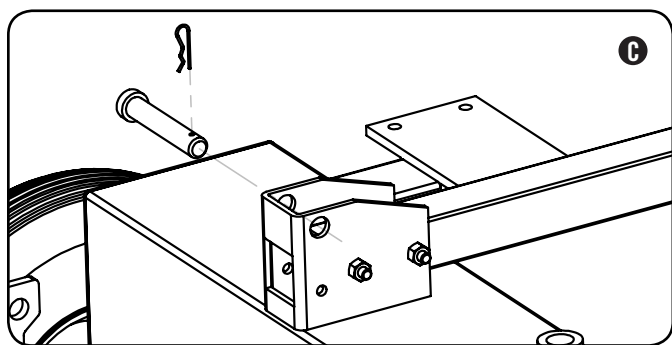
Beam is heavy. Use at least 2 people when lifting or moving the beam.

ASSEMBLY

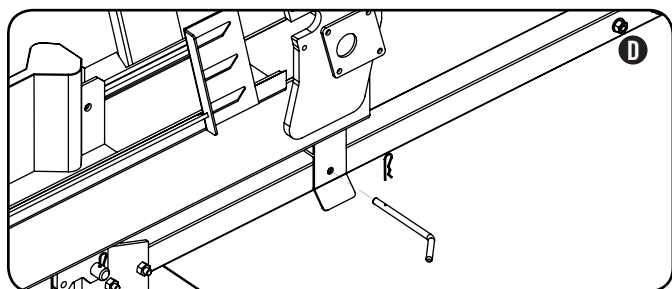
4) Install the Beam Cont'd.



3. Slowly lift the front of the tow bar to roll the frame toward the beam and carefully align the pivot holes on the bottom of the beam and the top of the hydraulic oil tank.
4. Once aligned, secure the beam to the tank with hitch pin and R-pin. (C)

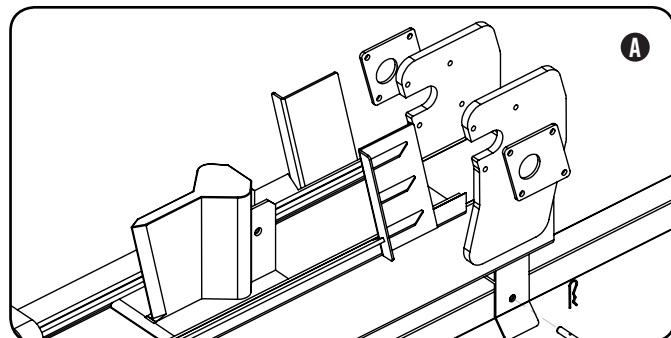


5. Hold the top of the beam by the cylinder mount and carefully rotate the beam toward the tow bar.
6. Once the bracket on the bottom of the beam is aligned with the tow bar, secure with pin and R-pin. (D)



5) Install the Cylinder and Wedge

1. Place the wedge on the beam between the cylinder mounts and slide it forward into the rails. (A)
2. Remove the cylinder mounting plates. (A)



3. Install the cylinder by sliding the pegs at the end of the cylinder into the mounting slots on top of the beam. Be sure to slide the cylinder all the way back into the mounting slots. (B)

NOTE

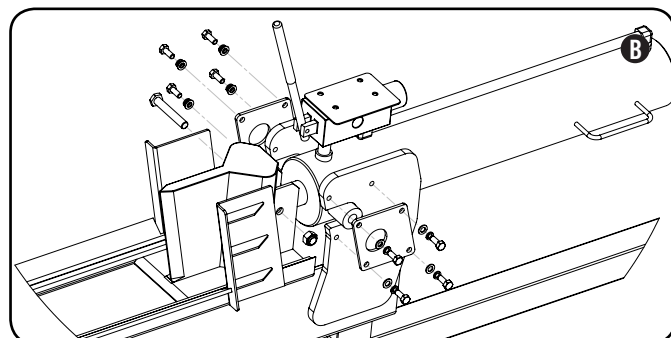
The cylinder will support itself when slid all the way back into the mounting slots.

4. Secure the cylinder mounting plates with hardware removed in step 2. (B)
5. Slide the wedge back toward the cylinder and align the bolt hole in the wedge with the bolt hole in the cylinder rod. (B)

NOTE

The cylinder rod may need to be rotated slightly in order to properly align the the wedge. Insert a screwdriver into the bolt hole in the cylinder rod and slowly rotate as needed.

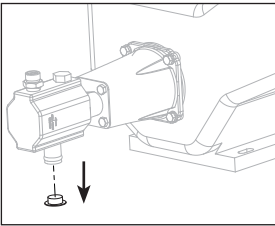
6. Secure the wedge to the cylinder rod with an M12x75 bolt and M12 nut. Lightly tighten the nut to approximately 5 ft-lb. (B)



6) Install the Engine and Hoses

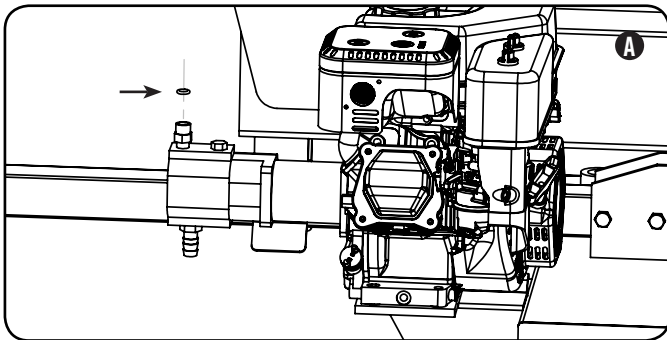
⚠ CAUTION

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.

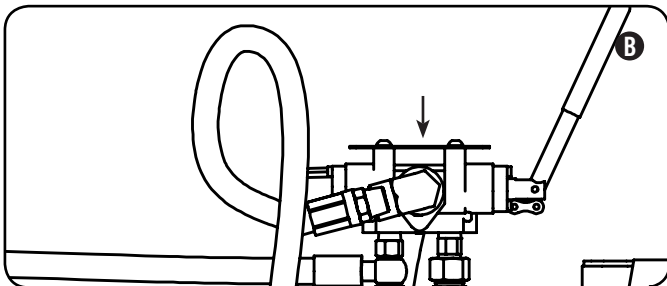
1. Attach the engine/pump to the engine mounting plate on the hydraulic oil tank. (A)
2. Place O-ring into the outlet fitting on the top of the pump. (A)



3. Connect one end of the high pressure hose to the pump outlet fitting and the other end to the inlet on the control valve. (B)

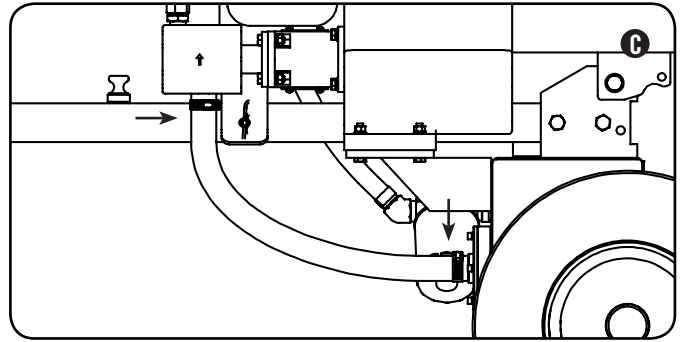
NOTE

The swivel nut end of the high pressure hose connects to the pump outlet.

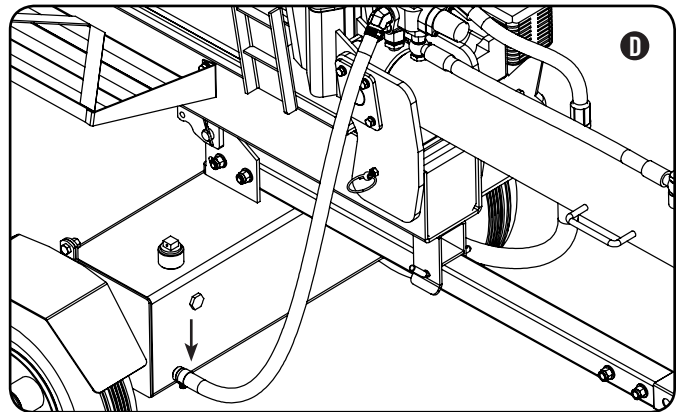


4. Connect one end of the clear oil hose to the hydraulic oil tank just beneath the engine and the other end to the pump inlet on the bottom of the pump. (C)

6) Install the Engine and Hoses Cont'd.

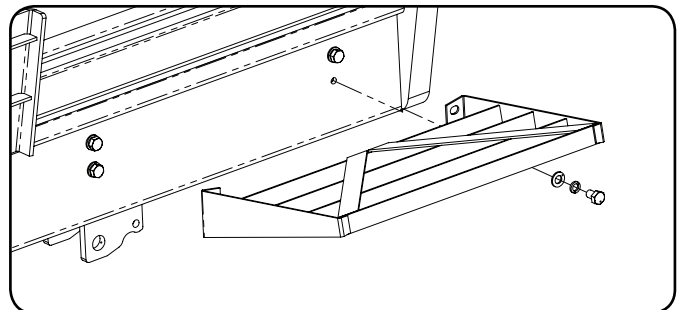


5. Connect one end of the oil return hose to the outlet barb fitting on the control valve and the other end to the barb fitting on the oil tank. (D)



7) Install the Log Catchers

1. Attach log catcher to side of beam with four M10x15 bolts, four M10 lock washers, and four M10 washers.
2. Repeat step 1 for the other side.



ASSEMBLY

Add Engine Oil

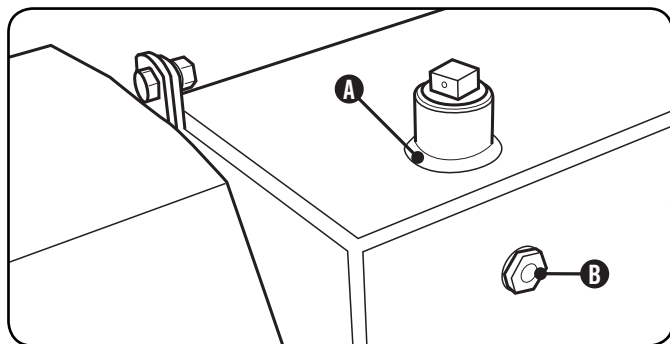
Refer to Honda engine Owner's Manual.

Add Engine Fuel

Refer to Honda engine Owner's Manual.

Add Hydraulic Oil

1. Make sure the log splitter is on a flat, level surface.
2. Remove the oil plug from the oil tank. (A)
3. Add 18.9 L (5 gal.) 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 glass sight. (B)



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. (Refer to Honda engine Owner's Manual.)
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 3.8 L (1 gallon) of hydraulic oil to bring the level back up to the sight glass. Do NOT overfill.

Add Hydraulic Oil Cont'd.

9. Check oil level daily and add as needed.

NOTE

When the outdoor temperature is below 32°F, 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.

NOTE

To check oil level, use the oil sight glass on the beam. 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 leaks, cracks, fraying or other damage.
2. DO NOT operate the log splitter if there is any indication of damage or oily residue.
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 overinflate 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 72 km/h (45 MPH) towing speed.

Towing Log Splitter Safety

1. Always check local and state regulations regarding the requirements for towing, licensing and lights.
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 72 km/h (45 MPH). Towing the log splitter at speeds greater than 72 km/h (45 MPH) 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.

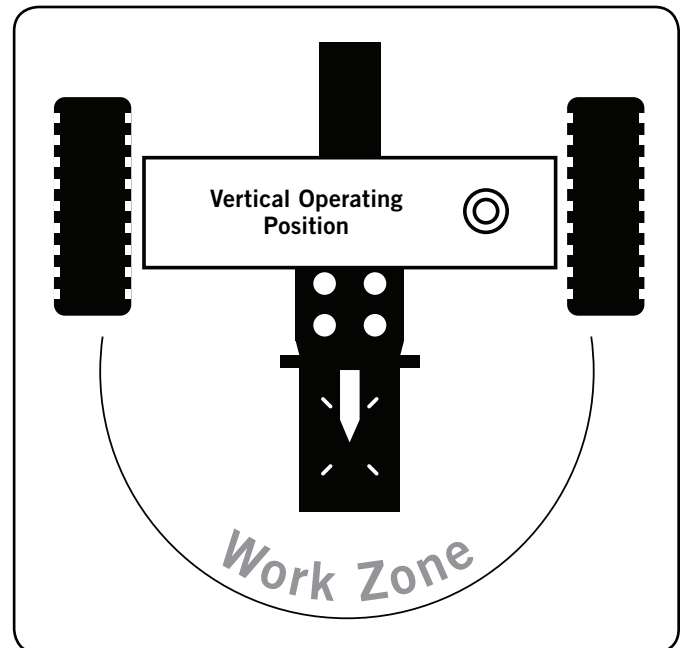
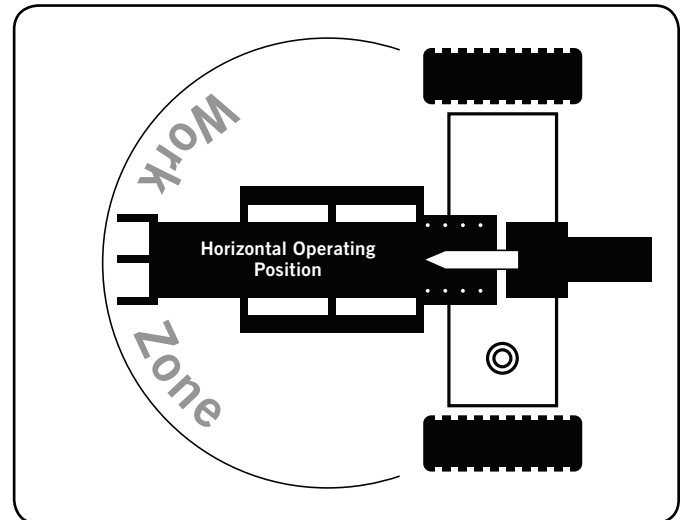
Log Splitter Location

This log splitter must have at least 2.1 m (7 ft.) of clearance from combustible material. Leave at least 91.4 cm (3 ft.) 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. **Always operate the log splitter outdoors.**

Log Splitter Location Cont'd.

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.



NOTE

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

OPERATION

Log Splitter Location Cont'd.

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.

Starting the Engine

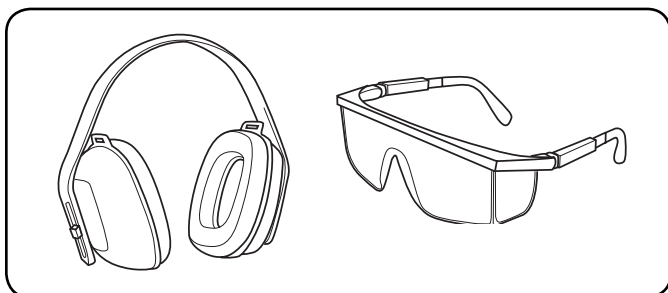
Refer to Honda engine Owner's Manual.

Stopping the Engine

Refer to Honda engine Owner's Manual.

Log Splitter Operation

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



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

Log Splitter Operation Cont'd.

NOTE

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 – 60.3 cm {23.8 in.}).
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.

CAUTION

Do not hold auto control valve in return position. It will damage the stop block or beam.

NOTE

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.

NOTE

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.

NOTE

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

The owner/operator is responsible for all periodic maintenance.

WARNING

Never operate a damaged or defective log splitter.

WARNING

Improper maintenance will void your warranty.

NOTE

For service or parts assistance, contact our help line at **1-877-338-0999**.

Complete all scheduled maintenance in a timely manner. Correct any issue before operating the log splitter.

Engine Maintenance

Refer to Honda engine Owner's Manual.

Log Splitter 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 vapours.

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.

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.

NOTE

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 switch in the "OFF" position.
2. Turn the fuel valve to the "OFF" position. (Refer to Honda engine Owner's Manual.)
3. Release any stored pressure by moving the valve lever forward and backward several times.

Hydraulic Oil Cont'd.

4. 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.
5. To drain the oil,
 - a. 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.

NOTE

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.

- b. 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.

NOTE

Oil will drain from the filter and filter housing.

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

NOTE

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

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

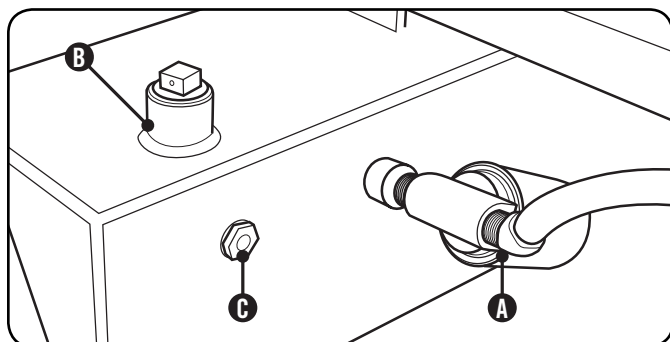
MAINTENANCE AND STORAGE

Hydraulic Oil Cont'd.

- ii. Disconnect hose from fitting and drain oil into the container.
- iii. Using a large wrench, unscrew the fitting from the tank to expose the internal tank filter.
- iv. Check for any debris on the screen. Using a clean towel or air gun, carefully remove any debris.

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

- v. Apply new Teflon® sealing tape to threads, reinsert into tank and tighten. Be careful to tighten, but do not over tighten.
6. Unscrew and remove the tank fill plug on top of the tank. Using a funnel add approximately 18.9 L (5 gal.) of hydraulic oil to the tank. Wipe up any spilled oil. (B)
 7. Turn the fuel valve to the “ON” position, and start the engine (refer to Honda engine Owner’s Manual). Purge the air from the system by extending and retracting the wedge several times until the motion is smooth.
 8. Check the hydraulic oil level using the sight glass. Add 3.8 – 5.7 L (1 - 1.5 gal.) of hydraulic oil, so the oil level is visible in the sight glass. (C)
 9. 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

Hydraulic Oil Cont'd.

NOTE
Refer to Specifications for a list of compatible replacement filters or call Champion Power Equipment at 1-877-338-0999 to order a replacement OEM filter.

Maintenance Schedule

Follow the service intervals indicated in the schedule below. Service your log splitter more frequently when operating in adverse conditions. Contact our help line at **1-877-338-0999** to locate the nearest Champion Power Equipment authorized service dealer for your log splitter or engine maintenance needs.

| Every 8 hours or daily | |
|---------------------------------|--|
| | Check engine and hydraulic oil levels |
| Every 100 hours or every season | |
| | Change hydraulic oil |
| | Change hydraulic oil filter |
| Every year | |
| | Inspect wheel bearings and repack bearing grease as needed |
| Engine and Fuel Maintenance | |
| | Refer to Honda engine Owner’s Manual |

Cleaning

CAUTION
DO NOT use a garden hose to clean the engine or log splitter.
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.

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 Storage

Refer to Honda engine Owner's Manual

WARNING

Never store the log splitter inside 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.

TROUBLESHOOTING

| Problem | Cause | Solution |
|--|--|--|
| Engine will not start | No fuel | Add fuel |
| | Faulty spark plug | Replace spark plug |
| | Unit loaded during startup | Remove load from unit |
| 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 hose connection | Loose hose clamp or hydraulic fitting | Tighten hose clamp or hydraulic fitting |
| 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 |
| Wedge does not Auto-Return | Low hydraulic oil | Check oil level and add as needed |
| | Faulty control valve | Contact Customer Service |
| Excessive bouncing while towing | Under-inflated tires | Inflate tires to proper pressure. Refer to tire sidewall |

For further technical support:

Technical Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999

tech@championpowerequipment.com

Log Splitter Specifications

- Ram Force 27 Ton
- Max Cycle Time 16 seconds
- Hydraulic Tank Capacity 18.9 L (5 gal.)
- Max Log Length 60.3 cm (23.8 in.)
- Max Log Weight 45 kg (100 lb.)
- Coupler Ball Size 5.1 cm (2 in.)
- Tire Size 40.6 cm (16 in.)
- Max Towing Speed 72 km/h (45 MPH)
- Engine Honda GX200
- Cylinder Size 12 cm x 58.4 cm (4.7 in. x 23 in.)
- Cylinder Rod Size 4.5 cm (1.8 in.)
- Gear Pump 2-stage
- Max Pressure 3600 psi
- Max Flow Capacity 41.6 LPM (11 GPM)
- Control Valve Detent (auto-return)
- **Overall Dimensions**
- Gross Weight 220 kg (485 lb.)
- Net Weight 200 kg (440.9 lb.)
- Height 116.5 cm (45.9 in.)
- Width 104 cm (40.9 in.)
- Length 219 cm (86.2 in.)

Engine Specifications

Refer to Honda engine Owner's Manual

Hydraulic Oil System

Oil capacity is 24.6 L (6.5 gallons).

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

- AW-32
- Universal Hydraulic Oil

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

- Automatic Transmission Fluid

Replacement filters:

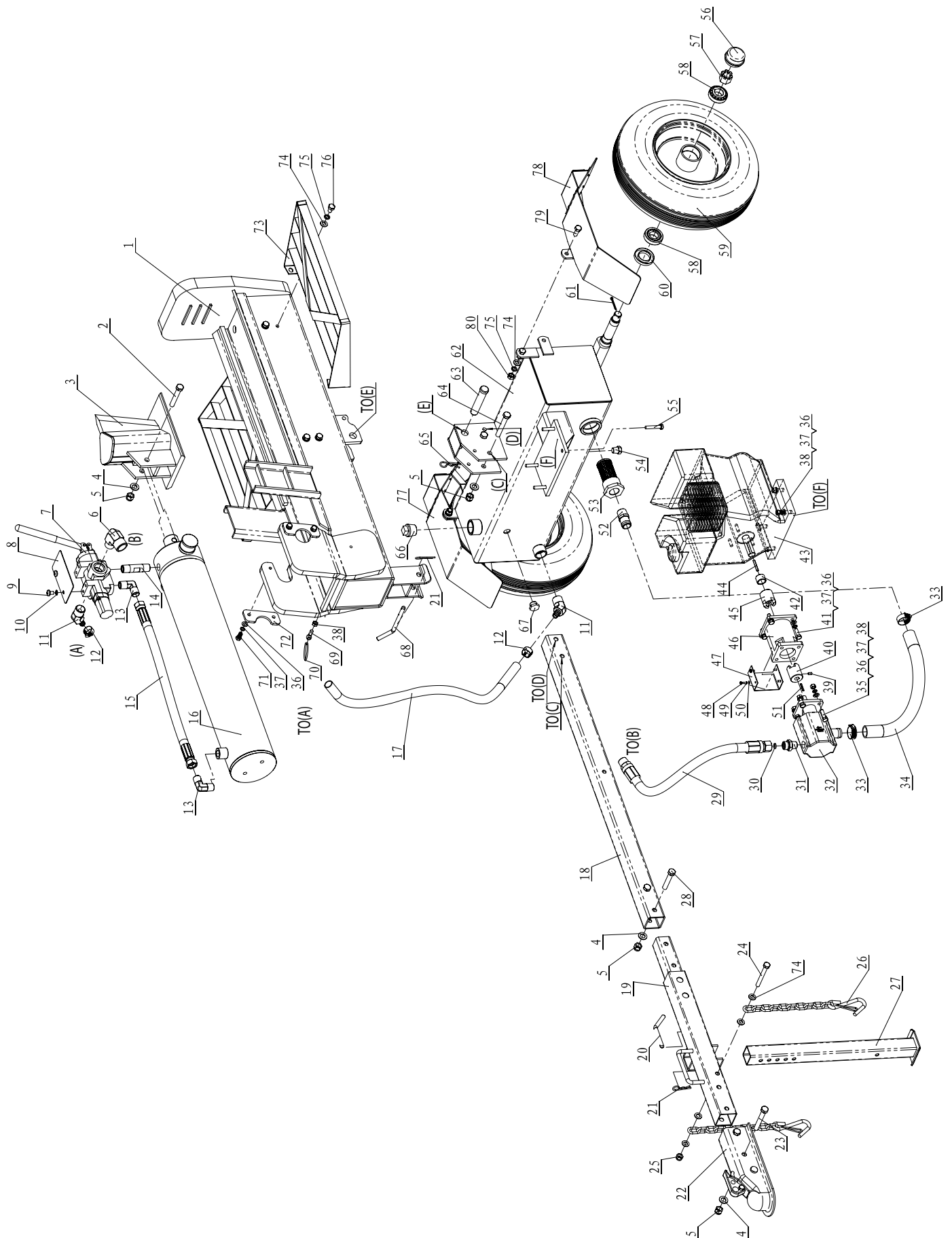
- **Fram PH9342**
- **K&N HP-2008**
- **Wix 51361**

NOTE

When temperature is below 0°C (32°F) use
Automatic Transmission Fluid (Dexron-III or similar).

SPECIFICATIONS

Parts Diagram



| # | Part Number | Description | Qty |
|----|----------------------------|--------------------------------|-----|
| 1 | PMJ27-02-00 | Beam | 1 |
| 2 | GB/T 5782-2000(M12 x 75) | Bolt M12 x 75(12.9) | 1 |
| 3 | PMJ22J-04-00 | Wedge Slide | 1 |
| 4 | GB/T 95-2000(Ø12) | Washer Ø12 | 7 |
| 5 | GB/T 889.1-2000(M12) | Lock Nut M12 | 7 |
| 6 | PMJ22G-51 | Control Valve "IN" Connector | 1 |
| 7 | PMJ22J-12 | Control Valve | 1 |
| 8 | PMJ22J-19 | Plate | 1 |
| 9 | GB/T 818-2000 (M8 x 12) | Bolt M8 x 12 | 2 |
| 10 | GB/T 859-1987(Ø8) | Washer Ø8 | 2 |
| 11 | PMJ22G-49 | Control Valve "OUT" Connector | 2 |
| 12 | JB/T 8870-1999(d25) | Clamp d25 | 2 |
| 13 | PMJ7-15 | Right Angle Joiner | 2 |
| 14 | PMJ7-22 | Through Joiner | 1 |
| 15 | PMJ30-16A | Hydraulic Hose(Valve-Cylinder) | 1 |
| 16 | PMJ30-08A-00 | Cylinder | 1 |
| 17 | PMJ22G-15 | Hydraulic Hose(Valve-Oil Tank) | 1 |
| 18 | PMJ22J-06 | Base Tube | 1 |
| 19 | PMJ23-01-00 | Base Connector | 1 |
| 20 | PMJ22J-10 | Pin | 1 |
| 21 | PMJ22G-30 | R Pin | 2 |
| 22 | PMJ22G-40 | 2-in. Coupler | 1 |
| 23 | GB/T 5782-2000(M12 x 80) | Bolt M12 x 80 | 2 |
| 24 | GB/T 5782-2000(M10 x 85) | Bolt M10 x 85 | 1 |
| 25 | GB/T 889.1-2000(M10) | Lock Nut M10 | 1 |
| 26 | PMJ25M-18-00 | Safety Chain With Hook | 2 |
| 27 | PMJ22J-07-00 | Front Support Leg | 1 |
| 28 | GB/T 5782-2000(M12 x 65) | Bolt M12 x 65 | 2 |
| 29 | PMJ22J-18 | Hydraulic Hose(Valve-Pump) | 1 |
| 30 | GB/T 3452.1-92 (10 x 2.65) | "O" Ring 10 x 2.65 | 1 |
| 31 | PMJ22G-21 | Outlet Connector Of Pump | 1 |
| 32 | PMJ22J-14 | Gear Pump | 1 |
| 33 | JB/T 8870-1999(d40) | Clamp d40 | 2 |
| 34 | PMJ22G-17 | Oil Pipe | 1 |
| 35 | GB/T 5783-2000 (M8 x 30) | Bolt M8 x 30 | 4 |
| 36 | GB/T 95-2000(Ø8) | Washer Ø8 | 16 |
| 37 | GB/T 93-1987(Ø8) | Lock Washer Ø8 | 16 |
| 38 | GB/T 6170-2000(M8) | Nut M8 | 9 |
| 39 | GB/T 77-2000 (M6 x 10) | Screw M6 x 10 | 1 |
| 40 | PMJ22G-26 | Gear Pump Connector | 1 |
| 41 | ASME B18.2.1 1996 | Bolt 5/16"-24x1" | 4 |
| 42 | PMJ22G-29 | Engine Bushing | 1 |
| 43 | GX200 | Engine (Honda) | 1 |

| # | Part Number | Description | Qty |
|----|---------------------------|-----------------------|-----|
| 44 | GB/T 1096-1979 | Flat Key 5 x 5 | 1 |
| 45 | PMJ22G-28 | Engine Connector | 1 |
| 46 | PMJ22G-27 | Gear Pump Stand | 1 |
| 47 | PMJ22G-32 | Connector Cover | 1 |
| 48 | GB/T 845C-1985 | Tapping Screw | 4 |
| 49 | GB/T 848-1985(Ø4) | Lock Washer Ø4 | 4 |
| 50 | GB/T 859-1987(Ø4) | Washer Ø4 | 4 |
| 51 | GB/T 1099-1979 | Flat Key 3 x 3 | 1 |
| 52 | PMJ22Q-22 | Filter Connector | 1 |
| 53 | PMJ22Q-20 | Internal Oil Filter | 1 |
| 54 | PMJ22G-19 | Oil Plug | 1 |
| 55 | GB/T 5782-2000 (M8 x 45) | Bolt M8 x 45 | 4 |
| 56 | PMJ22J-05-02 | Axle Cap | 2 |
| 57 | GB/T 9459-1988(M20 x 1.5) | Slotted Nut M20 x 1.5 | 2 |
| 58 | L44634 LYC DS | Tapered Bearing | 4 |
| 59 | PMJ37N-05 | Wheel | 2 |
| 60 | PMJ22J-05-01 | Cased Seal | 2 |
| 61 | GB/T 91-2000 (4 x 32) | Cotter Pin 4 x 32 | 2 |
| 62 | PMJ27-01-00 | Oil Tank | 1 |
| 63 | PMJ22G-12 | Hinge Pin | 1 |
| 64 | GB/T 5782-2000(M12 x 85) | Bolt M12 x 85 | 2 |
| 65 | GJY12-3 | R Pin | 1 |
| 66 | PMJ22G-18 | Screw NPT 1-in. | 1 |
| 67 | GB 1160.2-89 | Oil Scale | 1 |
| 68 | PMJ22J-15 | Pin | 1 |
| 69 | GB/T 798-1988 (M8 x 28) | Swing Bolt M8 x 28 | 1 |
| 70 | PMJ22G-38 | Big Tension Spring | 1 |
| 71 | GB/T 5783-2000 (M8 x 20) | Bolt M8 x 20 | 4 |
| 72 | PMJ30-03 | Cylinder Fixing Plate | 2 |
| 73 | PMJ30F-01-Y | Log Catcher-Yellow | 2 |
| 74 | GB/T 95-2000(Ø10) | Washer Ø10 | 16 |
| 75 | GB/T 93-1987(Ø10) | Lock washer Ø10 | 12 |
| 76 | GB/T 5781-2000(M10 x 15) | Bolt M10 x 15 | 8 |
| 77 | PMJ22G-34-00 | Left Fender | 1 |
| 78 | PMJ22G-35-00 | Right Fender | 1 |
| 79 | GB/T 5781-2000(M10 x 25) | Bolt M10 x 25 | 4 |
| 80 | GB/T 6170-2000(M10) | Nut M10 | 4 |

WARRANTY

WARRANTY*

CHAMPION POWER EQUIPMENT
2 YEAR LIMITED WARRANTY

For the engine warranty and technical service, refer to Honda Engine Owner's Manual.

Warranty Qualifications

Champion Power Equipment (CPE) will register this warranty upon receipt of your Warranty Registration Card and a copy of your sales receipt from one of CPE's retail locations as proof of purchase.

Please submit your warranty registration and your proof of purchase within ten (10) days of the date of purchase.

Repair/Replacement Warranty

CPE warrants to the original purchaser that the mechanical and electrical components will be free of defects in material and workmanship for a period of two years (parts and labor) from the original date of purchase and 180 days (parts and labor) for commercial and industrial use. Transportation charges on product submitted for repair or replacement under this warranty are the sole responsibility of the purchaser. This warranty only applies to the original purchaser and is not transferable.

Do Not Return The Unit To The Place Of Purchase

Contact CPE's Technical Service and CPE will troubleshoot any issue via phone or e-mail. If the problem is not corrected by this method, CPE will, at its option, authorize evaluation, repair or replacement of the defective part or component at a CPE Service Center. CPE will provide you with a case number for warranty service. Please keep it for future reference. Repairs or replacements without prior authorization, or at an unauthorized repair facility, will not be covered by this warranty.

Warranty Exclusions

This warranty does not cover the following repairs and equipment:

Normal Wear

Products with mechanical and electrical components need periodic parts and service to perform well. This warranty does not cover repair when normal use has exhausted the life of a part or the equipment as a whole.

Installation, Use and Maintenance

This warranty will not apply to parts and/or labor if the product is deemed to have been misused, neglected, involved in an accident, abused, loaded beyond the product's limits, modified, installed improperly or connected incorrectly to any electrical component. Normal maintenance is not covered by this warranty and is not required to be performed at a facility or by a person authorized by CPE.

Other Exclusions

This warranty excludes:

- Cosmetic defects such as paint, decals, etc.
- Wear items such as filter elements, o-rings, etc.
- Accessory parts such as starting batteries, and storage covers.
- Failures due to acts of God and other force majeure events beyond the manufacturer's control.
- Problems caused by parts that are not original Champion Power Equipment parts.

When applicable, this warranty does not apply to products used for prime power in place of a utility.

Limits of Implied Warranty and Consequential Damage

Champion Power Equipment disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this product. THIS WARRANTY AND THE ATTACHED U.S. EPA, CARB and/or ECCC EMISSION CONTROL SYSTEM WARRANTIES (WHEN APPLICABLE) ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

A unit provided as an exchange will be subject to the warranty of the original unit. The length of the warranty governing the exchanged unit will remain calculated by reference to the purchase date of the original unit.

This warranty gives you certain legal rights which may change from state to state or province to province. Your state or province may also have other rights you may be entitled to that are not listed within this warranty.

Contact Information

Address

Champion Power Equipment, Inc.
Customer Service
12039 Smith Ave.
Santa Fe Springs, CA 90670 USA
www.championpowerequipment.com

Customer Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)
Toll Free: 1-877-338-0999
info@championpowerequipment.com
Fax no.: 1-562-236-9429

Technical Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)
Toll Free: 1-877-338-0999
tech@championpowerequipment.com
24/7 Tech Support: 1-562-204-1188

*Except as otherwise stipulated in any of the following enclosed Emission Control System Warranties (when applicable) for the Emission Control System: U.S. Environment Protection Agency (EPA), California Air Resources Board (CARB) and/or Environment and Climate Change Canada (ECCC).