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26 TON HORIZONTAL/VERTICAL 6.5 HP GAS LOG SPLITTER



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WARRANTY & SERVICE INFORMATION



1-YEAR LIMITED WARRANTY FOR 26 TON 6.5 HP GAS LOG SLITTER

KING CANADA TOOLS OFFERS A 1-YEAR LIMITED WARRANTY FOR NON-COMMERCIAL USE.



BEFORE CALLING THE ABOVE TOLL-FREE NUMBER, PLEASE READ THIS MANUAL, SPECIFICALLY THE SAFETY PRECAUTIONS, THE INSPECTION BEFORE OPERATION AND THE TROUBLESHOOTING GUIDE.

• DO NOT RETURN THE DEFECTIVE PRODUCT TO THE RETAILER.

WARRANTY INFORMATION

PROOF OF PURCHASE

Please keep your dated proof of purchase for warranty and servicing purposes.

REPLACEMENT PARTS

Replacement parts for this log splitter are available through our authorized KING CANADA generator service centers across canada. For servicing, call the above toll free number to get servicing instructions and be sure to have your proof of purchase if you are claiming warranty work.

LIMITED TOOL WARRANTY

KING CANADA makes every effort to ensure that this product meets high quality and durability standards. KING CANADA warrants to the original retail consumer a 1-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials.

THIS WARRANTY IS NOT TRANSFERABLE AND DOES NOT COVER

- Damage or liability caused by shipping, improper handling, improper installation, improper maintenance, improper modification, or the use of accessories and/or attachments not specifically recommended.
- Repairs necessary because of operator abuse or negligence, or the failure to install, operate, maintain, and store the product according to the instructions in the owner's manual.
- Damage caused by cold, heat, rain, excessive humidity, corrosive environments and materials, or other contaminants.
- Expendable items that become worn during normal use such as fuel filters, air cleaners, spark plugs, engine oil or hydraulic oil.
- Cosmetic defects that do not interfere with product functionality.
- Freight costs from customer to an authorized warranty service location.
- Repair and transportation costs of products or parts determined not to be defective.
- ANY INCIDENTAL, INDIRECT OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE OR MALFUNCTION OF THE PRODUCT.

• RETAIN THE ORIGINAL CASH REGISTER SALES RECEIPT AS PROOF OF PURCHASE FOR WARRANTY WORK.

KING CANADA shall in no event be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products. Shipping and handling charges may apply. If a defect is found, KING CANADA will either repair or replace the product.

PARTS DIAGRAM & PARTS LISTS

Refer to the Parts section of the King Canada web site for the most updated parts diagram and parts list.

KING CANADA TOOLS INC. DORVAL, QUEBEC, CANADA H9P 2Y4



BASIC & SPECIFIC SAFETY PRECAUTIONS FOR GAS ENGINES

BASIC SAFETY INFORMATION

EXHAUST FUMES ARE DANGEROUS

•Never operate the engine in a closed area or it may cause unconsciensness and death within a short time. Operate in a well ventilated area.

FUEL IS HIGHLY FLAMMABLE AND POISONOUS

•Always turn off the engine when refueling.

•Never refuel while smoking or in the vicinity of an open flame.

•When operating or transporting engine and log splitter, be sure to keep it upright. If it tilts, fuel may leak from the carburetor or fuel tank.

ENGINE AND MUFFLER MAY BE HOT

•Place the engine/log splitter in an appropriate location, away from children and pedestrians.

•Avoid placing any flammable materials near the exhaust outlet during operation.

•Keep a 4ft. clearance from buildings or other equipment around the engine/log splitter to prevent overheating.

WARNING! The engine muffler will be very hot after use, avoid touching the engine or muffler while they are still hot.

ELECTRIC SHOCK PREVENTION

•Never operate in rain or snow.

•Never touch the engine with wet hands or electric shock could occur.

FUEL

Make sure there is sufficient fuel in the tank.

SPECIFIC SAFETY INFORMATION

TAMPERING WITH FACTORY SET ENGINE SPEED SETTINGS.

Engine speed has been factory set to provide safe operation. Tampering with the engine speed adjustment could result in over-heating and could cause a fire. Never attempt to "speed-up" the engine to obtain more performance.

ATTEMPTING TO FILL THE FUEL TANK WHILE THE ENGINE IS RUNNING.

Gasoline and gasoline vapors can become ignited by coming in contact with hot components such as the muffler, engine exhaust gases, or from an electrical spark.

Turn engine off and allow it to cool before adding fuel to the tank. Equip area of operation with a fire extinguisher certified to handle gasoline or fuel fires.

SPARKS, FIRE, HOT OBJECTS

Cigarettes, sparks, fires, or other hot objects can cause gasoline or gasoline vapors to ignite.

Add fuel to tank in well ventilated area. Make sure there are no sources of ignition near the engine.

INADEQUATE VENTILATION

Materials placed against or near the engine or operating in areas where the temperature exceeds 40° C ambient (such as storage rooms or garages) can interfere with its proper ventilation features causing overheating and possible ignition of the materials or buildings. Operate engine in a clean, dry, well ventilated area a minimum of four feet from any building, object or wall. DO NOT OPERATE UNIT IN-DOORS OR IN ANY CONFINED AREA.

RISK OF BREATHING - INHALATION HAZARD

Operate engine in clean, dry, well ventilated area. Never operate unit in enclosed areas such as garages, basements, storage, sheds, or in any location occupied by humans or animals.

Keep children, pets and others away from area of operating unit. Breathing exhaust fumes will cause serious injury or death. **Gasoline** engines produce toxic carbon monoxide exhaust fumes.





WHEN REFUELING

STOP ENGINE! NO SMOKING! DO NOT SPILL GASOLINE!



KEEP FLAMMABLE MATERIALS AWAY. RISK OF FIRE.



GASOLINE ENGINES PRODUCE TOXIC CARBON MONOXIDE EX-HAUST FUMES.

BASIC & SPECIFIC SAFETY PRECAUTIONS FOR LOG SPLITTER



1) All operators of this equipment must read and completely understand all safety information, operating instructions, maintenance and storage instructions. Failure to properly operate and maintain the log splitter could result in serious injury to the operator and bystanders from moving parts that can crush or cut, flying objects, burns, fire or explosion, escaping high pressure hydraulic fluid, or carbon monoxide poisoning in particular, be aware of the following hazards.

-Crush and Cut Hazards

Moving parts can crush and cut hands and fingers. Keep hands clear of endplate, wedge, logs, and log strippers while splitting.

-High Pressure Hydraulic Fluid Hazards

High fluid pressures and temperatures are developed in hydraulic log splitters. Hydraulic fluid escaping through even a pin-size hole opening 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.

-Fire Hazards

Keep a fire extinguisher with you that is rated for ordinary combustibles and flammable liquids.

- NEVER remove the hydraulic oil fill cap when the engine is running or hot. Hot oil can escape causing severe burns. Allow log splitter to cool completely before removing hydraulic oil fill cap.
- 3) If a part needs replacement, only use parts that meet the manufacturer's specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operation of the log splitter.
- 4) Intended use. Log splitters should only be used for splitting wood logs, lengthwise with the grain. Do not use for other purposes as unforeseen hazards may result.
- Modifications. Never modify or alter the log splitter in any way. Modifications can create serious safety hazards and will void the warranty.
- 6) Engine speed. The maximum engine speed is preset at a safe limit. Never attempt to modify the engine speed setting to run at a higher speed.
- 7) Fuel/exhaust system. NEVER modify or add to the exhaust system, fuel tanks, or fuel lines. Fire can result.
- 8) Pressure setting. NEVER increase the pressure setting of the pump or control valve.
- 9) Daylight only. Only use the log splitter in daylight so you can see what you are doing.
- 10) Adjusting / repairing. Always make sure the engine is off before cleaning, repairing or adjusting the splitter. Move control lever back and forth to relieve system pressure before changing or adjusting hydraulic system components such as hoses, tubing, fittings or other components.
- 11) Wear the following protective clothing and safety gear:

-Eye protection. Always wear safety glasses or goggles when operating. Pieces of log may fly out and serious eye injury can occur.

-Boots. Falling logs can crush feet. Always wear safety shoes or heavy boots when operating or helping to load logs.

-Gloves. Wear snug fitting gloves without drawstrings or loose cuffs.

-Hearing protection. The use of earplugs or other hearing protection device is recommended.

-No Loose / dangling clothing. Loose or dangling apparel can become entangled in moving parts. Never wear jewelry or loose-fitting clothing.
12) Block the wheels to prevent unintended movement of the log splitter.

Check; -The outrigger legs are both locked in the DOWN position. -The wheels are blocked.

- 13) Never place your hands or any part of your body between a log and any part of the log splitter.
- 14) NOTE for vertical position loading: Place the log on the endplate and turn it until it leans against the beam and is stable. If the log is too big or oddly shaped, stabilize the log with wooden shims between the log and endplate or ground. DO NOT use your leg or knee to stabilize the log. NEVER stabilize the log by placing your hand on top of the log.
- 15) Wedge moving. NEVER load or unload logs while the wedge is moving.
- 16) Straddling / reaching across. Never straddle, reach across, or step over the beam while the engine is running and the log splitter is in the horizontal position. You could trip, actuate the controls, and get seriously injured.
- 17) Unsplit log pile. Do not pile logs to be split in a place that will make you reach across the log splitter in order to load them.
- 18) Square log ends. Logs that are not cut square can slide out while splitting and become a safety hazard or cause excessive force to log splitter components. Use a chainsaw to cut logs square on each end before attempting to split them.
- 19) Single log. Never attempt to split more than one log at a time. Pieces of log can unexpectedly be thrown from the machine causing serious injury.
- 20) Split along grain. Do not use the log splitter to split logs across the grain. Doing so will damage the log splitter and could also cause pieces of log to be thrown, injuring the operator or bystanders.
- 21) Forked logs. Splitting forked logs can cause damage the log splitter. Trim the forked log with a chain saw prior to splitting the log.
- 22) Changing splitting position. Do not change splitting positions (horizontal/vertical) with the engine running. You may contact the muffler and receive serious burns. Be careful to avoid contact with hot muffler even after the engine is turned off.
- 23) Change hydraulic oil annually or every 100 hours. Relieve hydraulic system pressure by moving the control lever back and forth several times.
- 24) General safety while moving;

-Horizontal position. Make sure the log splitter is secured in the horizontal position before moving the log splitter. DO NOT move the log splitter when it is in the vertical position because it will be unstable and could tip.

-Hills. Do not move the log splitter up or down hills by hand – use a towing vehicle.

- -Engine off. Never move the log splitter with engine is running.
- -No riding. Never allow anyone to sit or ride on the log splitter.
- -No cargo. Never transport cargo or wood on the log splitter.
- 25) Safety during towing;

-Read instructions. Review towing safety instructions in your towing vehicle manual.

-Securely attached. Be sure the log splitter is securely attached to the towing vehicle before towing.

26) Never try to split logs larger than the rated capacity. This could be dangerous and may damage the machine.



GETTING TO KNOW YOUR GAS OPERATED LOG SPLITTER



- 1. Cylinder. Pushes wedge to split wood.
- 2. Control lever. Forward/neutral/return positions.
- **3. Wedge.** 4-way wedge splits wood into 4.
- 4. Log craddle. Prevent logs from falling off the beam.
- 5. Endplate.
- 6. Rear outrigger leg.
- 7. Gas engine assembly.
- 8. DOT Pneumatic wheel. Max speed of 70 km/h.
- 9. Hydraulic pump.
- 10. Front outrigger leg.
- 11. Outrigger leg lock pin.
- 12. Towing safety chains.
- 13. 2" Ball coupler.
- 14. Beam.
- 15. Beam horizontal position lock pin.
- 16. Hydraulic fluid axle/tank.
- 17. Dipstick for hydraulic fluid tank.
- **18. Spark plug/cover.** The spark plug must be check periodically for carbon deposits and/or discoloration, see maintenance section.
- 19. Oil drain bolt.
- 20. Oil gauge dipstick. Check the oil level using this oil gauge dipstick.

- **21. Power ON/OFF switch.** This switch must be switched to "ON" before pulling recoil starter.
- 22. Recoil starter. Starts the engine.
- **23. Fuel Shut-off Valve.** Regulates the flow of fuel to the engine. The fuel shut-off valve must be fully opened before starting the engine.
- 24. Carburetor throttle lever. Once the engine is started, move the trottle lever to increase or decrease engine speed.
- **25. Choke lever.** Once the engine is started, it is necessary to gradually move the choke lever to the "OPEN" position, see instructions futher in this manual. On warm starts, choke is not needed.
- **26. Muffler.** Be careful, the muffler can get very hot during operation, keep hands away.
- 27. Air cleaner element/cover. Periodically the air cleaner filter must be checked and maintained, see maintenance section.
- 28. Fuel cap. Make sure the fuel cap is always screwed on tightly.
- 29. Fuel tank. Unleaded gasoline only!

LOG SPLITTER ASSEMBLY



ASSEMBLY

Installing wheels to axle/tank

- 1) Slide wheel (A) Fig.1 onto axle (C) with valve stem (B) facing out.
- 2) Slide outer bearing (D) onto axle (C) (outer bearing may be shipped loose in parts bag or loose inside wheel). Outer bearing taper points towards log splitter.
- 3) Slide wheel washer (E) onto axle.
- 4) Thread axle nut (F) onto Axle (hand tighten only). Back axle nut off 1/4 turn. Make sure wheel spins freely.
- 5) Insert cotter pin (G) through hole in axle (C) and bend it so axle nut (F) can't come off. Make sure wheel spins freely.
- 6) Tap dust cap (H) onto wheel with a soft faced mallet. Repeat for the other wheel.

Installing towbar to axle/tank

- Connect towbar (A) Fig.2 to axle/tank (B) using 2 hex. bolts and 2 nylon hex. nuts (C) (already in place).
- 2) Tighten bolts/nylon hex. nuts to 90 ft-lbs with a torque wrench.



Installing outrigger legs to towbar

- 1) Connect an outrigger leg (A) Fig.3 to the front of towbar (B) using a hex. bolt and a nylon hex. nut (C) (already in place).
- 2) Use wrench to tighten nylon hex. nut until snug then back off 1/2 turn.
- Insert locking pin (D) to lock outrigger leg in vertical position. The next step requires the outrigger leg to be locked in vertical position as shown (Fig.3).
- 4) Connect the remaining outrigger leg (A) Fig.4 to the back of towbar (B) using a hex. bolt and a nylon hex. nut (C) (already in place).
- 5) Use wrench to tighten nylon hex. nut until snug then back off 1/2 turn.
- 6) Insert locking pin (D) to lock outrigger leg in vertical position. The next step requires the outrigger leg to be locked in vertical position as shown (Fig.4).



LOG SPLITTER ASSEMBLY

ASSEMBLY

Installing beam to towbar

1) Remove beam (A) Fig.5 from shipping pallet. Get someone to help you or use lifting equipment.

2) Tip beam up onto endplate (B) as shown in Fig.5. Make sure to obtain a helper to hold the top of the beam during the remainder of this step. The beam is very heavy and dangerous if it tips over.

3) Connect beam to the towbar (C) using the beam fixing shaft and cotter pin (D). Insert cotter pin through hole in beam fixing shaft and bend it so it can't come off.

4) Pivot and lower beam (A) Fig.5 to its horizontal position. Fix beam into position using the horizontal beam spring lock bolt (A) Fig.6.



Figure 5







Figure 7



Installing gas engine/pump assembly to the axle/tank

1) Position the gas engine/pump assembly (A) Fig.7 onto the axle/tank plate (B) and secure it into place using 4 hex. bolts and hex. nuts (C). (The beam is not shown for clarity purposes).

Installing suction hose from axle/tank to pump

- 1) Slightly loosen the hose clamps (A) Fig.8 at both ends of the suction hose (B) (transparent hose).
- 2) Remove the shipping plug from the pump then slide suction hose onto the bottom fitting (C) of the pump, secure hose by tightening the hose clamp.
- 3) Slide suction hose onto the axle/tank fitting (D), secure hose by tightening the hose clamp.

LOG SPLITTER ASSEMBLY & INITIAL SET-UP BEFORE OPERATION

ASSEMBLY

Installing control valve, fittings and hoses

- 1) First install the control valve/control lever assembly (A) Fig.9 to the beam mounting plate (B) using 2 hex. bolts.
- 2) Install the fitting (C) Fig.9 to the side port of the control valve.
- 3) Install the fitting (D) Fig.9 to the port underneath the control valve.
- 4) Install the fitting (E) Fig.9 to the lowest port underneath the control valve.
- 5) Thread the hose (#1) Fig.9 to the fitting (C) Fig.9 and thread the other end of hose (#1) Fig.10 to the fitting (A) Fig.10 on top of the pump.
- Thread the hose (#2) to the fitting (E) Fig.9 and thread the other end of hose (#2) to the fitting (B) Fig.10 at the front of the cylinder.
- 7) Thread the hose (#3) Fig.9 (the shortest hose with fittings) to the fitting (D) Fig.9 and thread the other end of hose (#3) Fig.10 to the fitting (C) Fig.10 at the rear of the cylinder.
- 8) Slide the return hose (#4) Fig.9 & Fig.10 onto the return valve fitting (D) Fig.10 on the axle/tank and slide the other end of hose (#4) Fig.9 onto the return valve fitting at the rear of the control valve. Secure both ends of the hose by tightening the hose clamps.

Note: Secure all hose threaded couplings to the control valve to 44-45 ft-lbs using a torque wrench. Tighten all other threaded couplings to 47 ft-lbs using a torque wrench.

INITIAL SETUP BEFORE OPERATION

ENGINE OIL LEVEL

WARNING! This engine has been shipped from the factory without oil or very little oil in the crankcase. Operating your engine without the correct amount of oil can damage it. Oil crankcase capacity: 0.6 litres.

Always check the oil level before starting the engine, make sure the engine is on a level surface. To check oil level;

- 1) Turn the oil gauge dipstick (A) Fig.11 counterclockwise, remove it and clean it with a clean cloth.
- 2) Fully reinsert the oil gauge dipstick and pull it out to check the oil level.
- 3) If the oil level is halfway up the dipstick or below, refill with SAE 10W30 oil through the dipstick hole until the oil level reaches 3/4 up the dipstick or until it reaches the bottom lip of the dipstick hole as shown in illustration Fig.12.
- 4) Reposition the oil gauge dipstick and tighten it by turning clockwise.



















INITIAL SETUP BEFORE OPERATION

ENGINE FUEL LEVEL

WARNING! Make sure there is enough fuel in the fuel tank before operating.

- 1) If it is necessary to add fuel, first make sure the engine switch is OFF, then open the fuel cap (A) Fig.13 by turning it counterclockwise.
- 2) When refueling, keep in mind all safety precautions and make sure to add enough fuel based on usage. Use clean unleaded gasoline with a minimum of 87 octane. Do not mix oil with gasoline. Fuel tank capacity: 3,6 litres.

ENGINE AIR CLEANER FILTERS

The air cleaner filters should be checked before every start-up and after prolonged storage, the following steps should be done when checking air cleaner filters;

- 1) Remove the wing nut (B) Fig.14, lift to remove the air cleaner cover (A) as shown.
- 2) Remove the wing nut and washer (D) Fig.14, lift and remove air filters (C) Fig.14 from its base. Remove the foam filter (A) Fig.15 from the paper filter (B), wash foam filter in kerosene, squeeze kerosene out, soak foam filter in engine oil and squeeze engine oil out.
- 3) In a well ventilated area, use pressurized air to blow dust out of the paper filter (B) from the side opposite the filter's normal air flow (clean side).
- 4) Replace filters and replace the air cleaner filter cover. Secure all parts with wing nuts.

FILL LOG SPLITTER (AXLE/TANK) WITH HYDRAULIC FLUID

WARNING: High fluid pressures and temperatures are developed in hydraulic log splitters. Hydraulic fluid escaping through a pin hole sized opening can burn or puncture skin, resulting in wounds that could cause blood poisoning, infection, disability, gangrene, amputation, or death. Therefore, the following instructions should be heeded at all times when inspecting or servicing the hydraulic components of the log splitter.

-NEVER check for leaks with your hand. Leaks can be located by holding a piece of cardboard or wood (at least two feet long) with your hand at one end and passing the other end over the suspected area (wear eye protection). Look for discoloration of the cardboard or wood.

-NEVER adjust the pressure of the pump or valve.

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

- 1) Remove hydraulic oil dipstick (A) Fig.16.
- 2) Approximate hydraulic oil capacity: 16 litres.
- 3) Fill axle/tank with ISO 32 hydraulic oil. Use a funnel. Fill until the oil level reaches approximately 1" from the top of the oil dipstick.
- 4) Start engine (see starting engine section for instructions) and use the control valve

lever (see operation section for instructions) to extend and retract wedge 5 (five) times to remove air from the high pressure lines. This step can also be done by manually cranking the engine by pulling the recoil starter handle several times.

5) With wedge retracted, check oil level again, fill the axle/tank until the oil level reaches approximately 1" from the top of the oil dipstick. Reinstall oil dipstick.



Figure 13



Figure 14



INITIAL SET-UP BEFORE OPERATION & SPLITTING POSITION

INITIAL SETUP BEFORE OPERATION & BEFORE EACH USE

GREASE KEEPERS

1) Pump grease into grease zerks (B) Fig.17 found under each keeper (A). This will help prevent wear between the keepers and beam.

SELECT AN APPROPRIATE LOCATION FOR OPERATING THE LOG SPLITTER

Requirements:

- 1) Dry-level surface with good footing. Stay clear of areas with mud, ice, tall grass, weeds, brush, or snow.
- 2) Outdoors, away from air intakes. WARNING: A running engine gives off carbon monoxide, a poisonous gas that can kill you. You CANNOT smell it, see it, or taste it. ONLY run log splitter OUTDOORS and away from air intakes. NEVER run log splitter inside homes, garages, sheds, or other buildings or semi-enclosed spaces. These spaces can trap poisonous gases, EVEN if you run a fan or open windows. If you start to feel sick, dizzy, or weak while using the log splitter, shut off the engine and get to fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.

Fire precautions. Take the following precautions against fire:

- Keep a fire extinguisher available (classified for both ordinary combustibles & flammable liquids) as a precautionary measure when operating the log splitter in dry areas.
- 3) Position splitter 7 feet from any combustibles or flammable liquids. Position muffler at least 7 feet from combustible objects during operation. Hot exhaust fumes from engine could cause fire. Also, hydraulic oil leaking or spraying on hot engine can ignite.
- 4) Lock both outrigger legs (A) Fig.18 in the DOWN position before operating.
- 5) Block the wheels to prevent unintended movement of the log splitter.

SET LOG SPLITTER INTO EITHER THE HORIZONTAL OR VERTICAL SPLITTING POSITION

The HORIZONTAL splitting position is used for lighter logs that can be easily loaded onto the beam. The VERTICAL splitting position is used for light logs as well as heavy logs that are difficult to load onto the beam. The use of the vertical splitting position can greatly reduce the need to lift logs onto the splitter.

WARNING: NEVER change splitting positions with the engine running. You may contact the muffler and receive serious burns.

Horizontal position

1) Make sure beam is locked securely in the horizontal position by checking the horizontal lock (A) Fig.6. The rear and front outrigger legs (A & B) Fig.18 must be locked in horizontal splitting position.

Vertical position

- 1) The rear and front outrigger legs (A & B) Fig.19 must be locked in the down position while in vertical splitting position.
- 2) Pull out horizontal lock catch pin (A) Fig.6, lift beam until it rotates into vertical position.

WARNING: Crush hazard. The beam is heavy - do not let it just drop. It could crush fingers or cause damage to hydraulic lines or the splitter.

3) To return to horizontal position, lower beam carefully in a controlled manner until it rests on the tow bar, lock beam in the horizontal position with catch pin.



Figure 17



Figure 18



Figure 19





STARTING ENGINE, LOADING **& SPLITTING LOGS**

STARTING YOUR ENGINE

To safely start your engine, follow these steps (Fig.20).

Note: No choke is required on warm engines. Pull the recoil starter handle until resistance is felt, then pull it out with a rapid full arm stroke. Let the starter rope rewind slowly, repeat if necessary. Allow engine to run at no load for 5 minutes upon each initial start-up to allow engine to stabilize.

Open fuel valve (A) to

"On" position

Check engine oil level, fill to recommended level if necessary



Put switch to "On" position

Check gasoline level



Open choke lever

Close the choke lever (B)

Open throttle lever (C)









3







STOPPING YOUR ENGINE

- 1) Move the throttle lever (step 9, Fig.20) towards the right.
- 2) Turn the engine switch (step 6, Fig.20) to the "OFF" position (upwards).
- 3) Close the fuel shut-off valve (step 3, Fig.20) by moving it towards the left.

LOADING LOGS (Fig.21)

Load log onto beam with a cut end against the endplate - positioned for a lengthwise cut.

Notes:

- a) The log splitter is designed only for cutting lengthwise with the grain, NOT for cutting across the grain.
- b) This log splitter is designed for cutting logs only up to a maximum of 16" in diameter and 24" long. Larger diameter logs could get stuck on the wedge and longer logs will not fit on the beam.

WARNING: ALWAYS keep hands and feet away from the endplate, wedge, and partially split logs while loading, operating and unloading the log splitter.

Important safety instruction: Vertical position loading: Place the log on the endplate and turn it until it leans against the beam and is stable. If the log is too big or oddly shaped, stabilize the log with wooden shims between the log and endplate or ground. DO NOT use your leg or knee to stabilize the log. NEVER stabilize the log by placing your hand on top of the log.

Splitting Operation

1) Move split control lever (A) Fig.22 toward endplate to extend wedge and split log.

2) Release split control lever to stop wedge movement when log is split.

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





SPLIT CONTROL LEVER OPERATION · OPÉRATION DU LEVIER DE FENDAGE



Figure 23



SPLITTING LOGS, MOVING AND TOWING LOG SPLITTER

Splitting Operation continued....

- 3) A log can become stuck to the wedge if the wedge becomes embedded in the log and the log doesn't split and separate. This can happen if the log is too stringy or tough to split completely. A stuck log will move back with the wedge on the initial attempt to retract the wedge. If this happens, retract the wedge completely to allow the splitter to strip the log from the wedge. Keep hands clear of log and wedge while wedge is retracting.
- 4) Move split control lever (A) Fig.22 away from end plate to return wedge. Once the control valve is actuated in the return direction, the wedge is designed to keep returning by itself completely and then stop automatically.

WARNING: Stay clear while the wedge is returning. It is still powerful enough on the return stroke to cause serious injury.

5) Remove split wood.

6) After use, turn off engine. If in the vertical position, return log splitter to the horizontal position for greater stability and to prepare for transportation. Avoid contact with hot muffler.

MOVING THE LOG SPLITTER

- 1) Make sure the log splitter is locked in the horizontal position with hitch pin before moving. NEVER ATTEMPT to move log splitter when it is in vertical position.
- 2) Make sure the engine is off. Never move the log splitter with its engine running.
- 3) Turn engine fuel valve off to prevent carburetor flooding and reduce the chance of fuel leakage.
- 4) Lock the front outrigger leg (A) Fig.24 in the "DOWN" position and the rear support leg (B) in the "UP" position before you move the log splitter.
- 5) Move log splitter by hand either directly to chosen work site or to vehicle hitch for towing.

Important safety instructions:

-Do not move the log splitter up or down hills by hand—use a towing vehicle. -Never allow anyone to sit or ride on the log splitter. -Never transport cargo or wood on the log splitter.

TOWING THE LOG SPLITTER

- 1) Review towing safety instructions in your vehicle manual.
- 2) Check tires. Make sure tires are fully inflated and in good repair. **WARNING:** Do not over-inflate tires. Do not exceed 30 PSI. Pressures higher than 30 PSI can cause the tire and wheel to rupture and explode.
- 3) Attach the 2" ball coupler (Fig.25) to a class 2 or higher vehicle hitch with 2" ball (only).
- 4) Adjust coupler to ball by raising locking lever (A) Fig.25 and turning lock nut (B) with fingers.
- 5) Proper adjustment is obtained when coupler is as tight as possible on ball and locking lever can still be opened and closed.
- 6) Lower the locking lever to its closed position to secure the attachment.
- 7) Attach safety chains (C) Fig.26 to vehicle. The two safety chains must be used while towing. Cross safety chains under the coupler allowing only enough slack for vehicle turns.





Figure 25



Figure 26

8) Lock the front outrigger leg (A) Fig.26 in the "UP" position and the rear support leg (B) in the "UP" position. (Both outrigger legs must remain in the up position during towing.)



STORAGE & MAINTENANCE

Storage

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.

Follow the instructions below for storing your log splitter between uses. 1) Retract the wedge completely to keep the rod protected from corrosion.

- 2) Allow the machine to cool 5 minutes before storing. WARNING: A hot engine can be a fire hazard.
- 3) Wipe the beam and wedge with an oily rag to prevent corrosion.
- 4) Store the log splitter in a location away from corrosive material, sources of heat, open flames, sparks or pilot lights. WARNING: Never store log splitter inside where there is a source of heat or an open flame, spark or pilot light such as water heaters, space heaters, furnaces, clothes dryers, or other gas appliances EVEN IF the log splitter's gas tank is empty, residual gasoline vapors could ignite. NOTE: Do not store the log splitter near fertilizer or any other corrosive material.

Engine storage guidelines

If you plan on storing your engine/log splitter for an extended period of time, the following steps should be followed;

- 1) Add fuel stabilizer to fuel tank to minimize the formation of fuel gum deposits during storage.
- 2) Run engine at least 5 minutes after adding stabilizer to allow it to enter the fuel system. NOTE: If a fuel stabilizer is not used, all gasoline must be drained from the tank and carburetor to prevent gum deposits from forming on these parts and causing possible malfunction of the engine. To drain gasoline;
- 3) Turn fuel shut-off valve to the "OFF" position as shown in Fig.27.
- 4) Position a drain pan under the caburetor.
- 5) Remove drain hex. bolt (A) Fig.28 from the carburetor (B) and drain the fuel from the carburetor and hose.
- 6) Turn fuel shut-off valve to the "ON" position.
- 7) Drain fuel from tank.
- 8) Reinstall the carburetor drain hex. bolt once the fuel is completely drained.
- 9) Drain engine oil from engine as described in "Engine Oil Replacement" in the Engine Maintenance section.
- 10) Gently pull the recoil starter handle to distribute oil into the cylinder, pull until resistance is felt.
- 11) Cover and store in a dry, well ventilated area.

Note: To prevent corrosion or moisture build-up during storage, do not cover the engine with a poly-bag or similar material.

Periodic Maintenance- Log Splitter

Change log splitter hydraulic oil annually or every 100 hours.

- 1) Use ISO 32 hydraulic oil.
- 2) Relieve hydraulic system pressure by moving split control lever back and forth several times.
- 3) Remove hydraulic oil dipstick. WARNING: NEVER remove the hydraulic oil dipstick when the engine is running or hot. Hot oil can escape causing severe burns. Allow the log splitter to cool completely before removing hydraulic oil dipstick.
- 4) Remove the drain plug located under the axle/tank to drain the hydraulic oil into a large pan. reinstall drain plug.
- 5) Refer to "Initial Setup" instruction for filing the axle/tank with hydraulic oil.







Figure 28

MAINTENANCE



Maintaining your engine

Engine Oil Replacement

Oil crankcase capacity: 0.6 litres.

Engine oil should be replaced after the first 20 hours of operation or after the first month of use, it should be replaced every 100 hours or 6 months after. To replace engine oil;

- 1) Loosen the oil gauge dipstick (B) Fig.29.
- 2) Place an oil pan underneath drain hex. bolt (A), remove hex. bolt (A) and drain oil.
- Once all the oil has completely drained, retighten the hex. bolt (A).

Recommended Engine Oil

It is recommended to use SAE 10W30 4-stroke gasoline engine oil. For cold weather (below -15°C) use SAE 5W30.

4) Fill with clean engine oil through the oil gauge dipstick hole, fill then check oil level until the oil level reaches 3/4 up the dipstick or until it reaches the bottom lip of the dipstick hole as shown in illustration above.

Inspecting, Replacing or Cleaning Spark Plug (F6RTC or equivalent)

The spark plug should be checked every 100 hours of operation or every 6 months. To replace or clean spark plug;

- 1) Dismantle the spark plug cap (A) Fig.30 by pulling it off the spark plug (B). Using a spark plug wrench, undo the spark plug by turning it counterclockwise.
- 2) Check to see if there is carbon sediment build-up, if so just remove it. If the carbon sediment is excessive, replace the spark plug.
- 3) Measure the electrodes clearance. See Fig.31. The spark plug electrode clearance should be between 0.7-0.8mm. If the clearance exceeds 0.8mm, replace the spark plug with an CH F6RTC or equivalent (NGK BPR6ES, Champion RN9YC).
- 4) Reinstall spark plug in the reverse order.

Cleaning Deposit Cup

- 1) Push the fuel valve to the closed (left) position.
- 2) Remove centre deposit cup bolt (B) Fig.32 using a wrench. Place a pan under the deposit cup to catch any gasoline inside the carburetor.
- 3) Remove deposit cup (A) Fig.32 and o-ring (C), wash both in solvent.
- 4) Reinstall parts in reverse order.

Engine maintenance schedule

After initial 20 hours of operation: Change engine oil. Every 25 hours of operation thereafter: Clean/replace air filter. Inspect/clean spark plug. Every 50 hours of operation: Change engine oil. Every 100 hours of operation: Replace spark plug. Replace air filter.





Figure 29



Figure 30



Figure 31



Figure 32