Owner's Manual

33 Ton Hydraulic

Log Splitter

Model Nos. 247.794520



CAUTION: Before using this product, read this manual and follow all Safety Rules and Operating Instructions.

Sears, Roebuck And Co., Hoffman Estates, IL 60179, U.S.A.

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OPERATION TRAVITENANCE ADJUSTRIENTS STURAGE PAANS BST

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WARRANTY INFORMATION

ONE-YEAR WARRANTY ON CRAFTSMAN LOG SPLITTER

For one year from the date of purchase, when this Craftsman log splitter is maintained, lubricated, and tuned up according to the operating and maintenance instructions in the operator's manual, Sears will repair, free of charge, any defect in material or workmanship.

This warranty excludes the tires, spark plug, oil filter and air cleaner, which are expendable parts and become worn during normal use.

If this log splitter is used for commercial or rental purposes, this warranty applies for only 30 days from the date of purchase.

Warranty service is available by contacting the nearest Sears service center in the United States. This warranty applies only while this product is in use in the United States.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck And Co., DEPT. 817WA, Hoffman Estates, IL 60179

PRODUCT SPECIFICATIONS

| and a second | |
|--|-------------------|
| Horsepower: | 9 |
| Engine Oil | SAE 30/26 ounces |
| Fuel Capacity: | unleaded/1 gallon |
| Hydraulic Fluid | |
| Tire Pressure | • |
| Spark Plug (Gap .030") | |

| Model Number . 247.794520 | |
|--|--|
| Serial Number | |
| Date of Purchase | |
| Record model number, serial number and date of purchase of the log splitter and keep in a safe place for future reference. | |

SAFE OPERATION PRACTICES



This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate your log splitter. Failure to comply with these instructions may result in personal injury. When you see this symbol—heed its warning.



Your log splitter was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.



The engine exhaust from this product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Towing

- This unit should not be towed on any street, highway or public road without checking the existing federal, local or state requirements. Such information may be obtained by calling your state or local bureau of motor vehicles. Any licensing or modifications needed to comply with federal, local or state vehicle requirements is the sole responsibility of the purchaser.*
- Make sure you follow the wiring diagram color codes when installing the light kit on the log splitter. (e.g. ground to ground, left turn to left turn, etc.). Failure to wire unit correctly may cause the tow vehicle wiring to overheat and/or the log splitter lights to operate incorrectly. It may be necessary to replace the turn signal flasher unit in your tow vehicle if it is not capable of operating the additional lights on the log splitter.
- Before towing the log splitter on a street, highway or public road, verify that all lights are functioning properly and the yellow side reflectors are in position. Replace bulbs if they are burnt out.
- Before towing, always check to be certain the log splitter is correctly and securely attached to the tow vehicle, and safety chains are in place. Leave slack in chains for turning allowance.
- Use a class I or higher hitch with a 1-7/8" ball.
 Keep ball socket and clamp face lubricated with chassis grease.
- Be sure the coupler is secured to the hitch ball and the lock lever is down tight and locked.
- Check_vehicle hitch, ball and coupler for signs of wear or damage. Replace any parts that are worn or damaged before towing.
- The coupler must be secured to the log splitter tongue tube with the original equipment bolts and nuts. See your authorized service dealer for replacement parts. Coupler nuts should be tightened securely (20 foot pounds).
- · Make sure beam assembly is securely latched in

the horizontal position and jack stand (if provided) is pivoted and secured in the up position before towing log splitter. Never tow with the beam in vertical position.

- Do not tow the log splitter faster than 45 MPH.
 Higher speeds may damage log splitter.
 Excessive high speeds may cause the log splitter to "fishtail" or otherwise become unstable.
- Check the tire pressure on the log splitter tires. It should not exceed 30 p.s.i. for highway travel.
- When parking, storing or using your log splitter, keep the coupler off the ground so dirt will not build up in the ball socket.
- Do not allow anyone to sit or ride on your log splitter. They can easily fall off and be seriously injured.

Training

- Before operating this log splitter, read and understand this operator's manual completely.
 Become familiar with it for your own safety. To fail to do so may cause serious injury. Do not allow anyone to operate your log splitter who has not read this manual. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- Never use your splitter for any other purpose than splitting wood. It is designed for this use and any other use may cause an injury. Your log splitter is a precision piece of power equipment, not a toy. Therefore, exercise extreme caution at all times.
- Never allow children to operate your log splitter. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your log splitter.
- Only the operator is to be near your log splitter during use. Keep all others, including pets and children, a minimum of 20 feet away from your work zone. Flying wood can be hazardous. If a helper is assisting in loading logs, never activate

the control until the helper is clear of the area. More accidents occur when more than one person operates the log splitter than at any other time.

• No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions. A clear mind is essential for safety. Never allow a person who is tired or otherwise not alert to use your log splitter.

Preparation

- Never wear loose clothing or jewelry that can be caught by moving parts of your log splitter and pull you into it. Keep clothing away from all moving parts of your log splitter.
- Wear proper head gear to keep hair away from moving parts. Always wear protective hearing devices as needed.
- Always wear safety shoes. A dropped log can seriously injure your foot.
- Always wear safety glasses or goggles while operating your splitter. A piece of splitting log could fly off and hit your eyes.
- Wear leather work gloves. Be sure they are tight fitting without loose cuffs or draw strings.
- Use your log splitter in daylight, or under good artificial light.
- Never operate your splitter on slippery, wet, muddy or icy surfaces. Safe footing is essential in preventing accidents.
- Never operate your splitter while attached to a towing vehicle.
- Only operate your splitter on level ground and not on the side of a hill. It could tip, or rolling logs or poor footing could cause an accident. Operating the splitter on level ground also prevents the spillage of gasoline from the fuel tank.
- Never attempt to move the log splitter over hilly or uneven terrain without a tow vehicle or adequate help.
- Always block the wheels to prevent movement of log splitter while in operation.
- Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the gasoline tank indoors, when the engine is running, or while the engine is still hot. Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
- Both ends of each log must be cut as square as possible to help prevent the log from riding out of the splitter during operation.

Operation

 Vertical Operating Position: Stand in front of the log splitter. Horizontal Operating Position: Stand behind the reservoir tank. See illustrations.



- Know how to stop the unit and disengage the controls.
- Never place hands or feet between log and splitting wedge or between log and end plate during forward or reverse stroke. To do so may result in crushed or amputated fingers or toes, or worse, you may lose an arm or foot.
- Do not straddle the splitter when using it. A slip in any position could result in a serious injury.
- Do not step over your log splitter when the engine is running. You may trip or accidentally activate the splitting wedge if you step over. If you need to get to the other side, walk around.
- Never try to split two logs on top of each other. One may fly out and injure you.
- When loading the log splitter, place your hands on the side of the log, not at the ends. Never attempt to load your splitter while the splitting wedge is in motion. You may get caught by the wedge and injured.
- Only use your hand to operate the splitting wedge or control lever. Never use your foot or a rope or any other extension device. This could result in your inability to stop your splitter quickly enough to avoid injury.
- Always keep fingers away from any cracks that open in the log during splitting operation. They can quickly close and pinch or amputate your fingers.
- Never attempt to split woods across the grain.
 Some types of wood may burst or fly out of your splitter and result in injury to you or a bystander.

- For logs that are not cut square, the longest portion of the log should be rotated down and the most square end placed against the splitting wedge.
- Keep your work area clean. Immediately remove split wood around your splitter so that you do not stumble over it. Clean chips and dirt off end plate (wood platform) after each log is split, or whenever necessary to maintain flat contact between wood and end plate (platform).
- Never move the log splitter while the engine is running.
- Never leave your log splitter unattended with the engine running. Shut off the engine if you are leaving your splitter, even for a short period of time. Someone could accidentally activate the splitting wedge and be injured.
- Do not run engine in an enclosed area. Exhaust gases contain carbon monoxide. This odorless gas can be deadly when inhaled.
- Be careful not to touch the muffler after the engine has been running. It will be HOT!
- If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- When cleaning, repairing or inspecting, make certain all moving parts have stopped.
 Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.

Customer Responsibilities

- Do not operate your splitter in poor mechanical condition or when in need of repair.
- Periodically check that all nuts, bolts, screws, hose clamps and hydraulic fittings are tight to be sure equipment is in safe working condition.
 Where appropriate, check all safety guards and shields to be sure they are in the proper position.
 Never operate your splitter with safety guards, shields or other protective features removed.
 These safety devices are for your protection.
- Replace all damaged or worn parts such as hydraulic hoses and fittings immediately with manufacturer approved replacement parts.
- Do not change the engine governor settings or overspeed the engine. This increases the hazard of personal injury. The maximum engine speed is preset by the manufacturer and is within safety limits.
- Do not alter your log splitter in any manner such as attaching a rope or extension to the control lever or adding to the width or height of the wedge. Such alterations may cause your splitter to be unsafe.

- Perform all recommended maintenance procedures before you use your splitter.
- Do not service or repair your log splitter without disconnecting the spark plug wire and moving it away from the spark plug.
- Never store the equipment with gasoline in the tank inside of a building where ignition sources are present, such as hot water and space heaters, clothes dryers and the like. Allow the engine to cool before storing in any enclosure.
- Always store gasoline in an approved, tightly sealed container. Store the container in a cool, dry place. Do not store in a building where ignition sources are present.
- To reduce fire hazard, keep engine free of grass, leaves, wood chips, and excessive grease and oil.
- The hydraulic system of your log splitter requires careful inspection, along with the mechanical parts. Be sure to replace frayed, kinked, or otherwise damaged hydraulic components.
- Fluid escaping from a very small hole can be almost invisible. Do not check for leaks with your hand. Escaping fluid under pressure can have sufficient force to penetrate skin, causing serious personal injury. Leaks can be located by passing a piece of cardboard or wood over the suspected leak and looking for discoloration.
- Should it become necessary to loosen or remove any hydraulic fitting or line, be sure to relieve all pressure by shutting off the engine and moving the control handle back and forth several times.
- Do not remove the cap from the hydraulic tank or reservoir while your log splitter is running. Hot oil under pressure could cause injury.
- The pressure relief valve on your splitter is preset at the factory. Do not adjust the valve.
 Only a qualified service technician should perform this adjustment.
- Completely drain fuel tank prior to storage. This guards against accumulation of fuel fumes which could result in a fire hazard.
- Never store log splitter outside without a waterproof cover. Rain will cause rust on the inside of the cylinder.

Important Information

Always:

- Use clean fluid and check fluid level regularly
- Use Dexron III Automatic Transmission Fluid or 10W non-foaming hydraulic fluid.
- Use a filter (clean or replace regularly)
- Use a breather cap on fluid reservoir

- Make certain pump is mounted and aligned properly
- Use a flexible "spider" type coupling between
 engine and pump drive shafts
- Keep hoses clear and unblocked
- Bleed air out of hoses before operating
- Flush and clean hydraulic system before startup after any malfunction or servicing
- Use "pipe dope" on all hydraulic fittings
- Allow time for warm-up before splitting wood
- Prime the pump before initial start-up by turning over the engine with spark plug disconnected

Split wood with the grain (lengthwise) only

Never:

- Use when fluid is below 20° F, or above 150° F.
- Use a solid engine/pump coupling
- Force pump when mounting
- Operate through relief valve for several seconds
- Attempt to adjust unloading or relief valve settings without pressure gauges
- Operate with air in hydraulic system
- Use Teflon tape on hydraulic fittings
- Attempt to cut wood across the grain.

ACCESSORIES

These accessories were available when the log splitter was purchased. These are also available at most Sears retail outlets, catalog and service centers. Most Sears stores can order repair parts for you when you provide the model number of your log splitter.



ASSEMBLY

IMPORTANT: This unit is shipped **without gasoline** in the engine. After assembly, see OPERATION section of this manual for proper fuel fill-up.

Tools and Other Items Required

Crowbar or large screwdriver A pair of 9/16" or adjustable wrenches* Screwdriver Cutters Engine oil Unleaded gasoline Dexron III automatic transmission fluid or 10W nonfoaming hydraulic fluid (approximately 7 gallons)

Unpacking from Crate



WARNING: Exercise extreme caution as parts are very heavy. Mechanical handling equipment or sufficient manpower should be used to prevent injury.

- Pry the top, sides and ends off crate using a crowbar or large screwdriver.
- Set panels aside to avoid tire punctures or personal injury.
- Remove and discard plastic bag that covers unit.

Note: Do not remove the banding from around the tank until the log splitter is assembled.

Disconnecting Spark Plug

 Before you start the assembly procedure, disconnect the spark plug wire from the spark plug on the log splitter engine and move the wire away from the spark plug. This will prevent accidental starting. See Figure 1.



Setting Up Log Splitter

NOTE: All hardware needed for assembling your Craftsman log splitter has been placed in position on the equipment.

- Remove the two bolts, lock washers and hex nuts that secure the tongue assembly to the beam assembly. See Figure 2.
- Unlock the two beam locks by pulling out on the beam locks and pivoting them down. Remove the tongue assembly.



Figure 2

Place the end of the tongue assembly in between the brackets on the wheel and the reservoir tank assembly. Secure with hardware removed earlier. See Figure 3.



Figure 3

 Pull spring lever outward and rotate the jack stand counter-clockwise till it locks into the upright position. Release spring lever. See Figure 4.



Figure 4

- Cut the two straps from around the reservoir tank assembly.
- Remove the lag screw and washer which secures the beam assembly to the bottom of the crate.

- Lower the beam assembly to its horizontal position. Make certain the beam is locked securely with the horizontal beam lock. See Figure 5.
- Pull the log splitter off the pallet.

Final Assembly

Tire Pressure

The tires may have been over-inflated for shipping purposes.

 Check tire pressure regularly. The tire pressure should not exceed 30 p.s.i.

Preparing Log Splitter

- Place the log splitter on a firm, level surface.
- Lubricate the beam area where the splitting wedge will slide with engine oil (*do not use grease*). Make certain to oil both front and back of the beam face.
- Fill the reservoir with hydraulic fluid following instructions on page 10.
- Check engine oil level and refill, if necessary.
 Follow instructions for oil fill-up on page 10.



Figure 5

OPERATIONS

Know Your Log Splitter



Read this owner's manual and safety rules before operating your log splitter. Compare the illustrations on this page with your equipment to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference. The operation of any log splitter can result in foreign objects being thrown into the eyes, which can result in severe eye damage. **Always wear safety glasses**, for operating your log splitter, or while performing any adjustments or repairs on it.



MEETS ANSI SAFETY REQUIREMENTS

Sears log splitters conform to the safety standards B71.7-1985 of the American National Standards Institute.

OPERATING CONTROLS

(See Figure 6.)



WARNING: Before using your log splitter, again refer to the safety rules on pages 3-6 of this manual. Always be careful.

Do not operate the log splitter without the proper amount of hydraulic oil in the reservoir tank. Failure to refill the tank will void your warranty.

Beam Locks

Located on the tongue and reservoir tank assemblies, these are used to secure the beam in the horizontal or the vertical position.

Choke Lever

Used to enrich the fuel mixture in the carburetor when starting a cold engine.

Starter Handle

Used to manually start the engine.

Throttle Control

Permits selection of fast or slow engine speed.

Control Handle

The control handle has three positions. See Figure 7.



Figure 7

 Move control handle FORWARD or DOWN to split wood.

NOTE: Control handle will return to neutral position from forward position as soon as handle is released.

- Release the control handle to stop the wedge movement.
- Move control handle BACK or UP to return the wedge.

Before Starting

Oil Fill-Up

 Only use high quality detergent oil rated with API service classification SF, SG or SH. Select the oil's viscosity grade according to the expected operating temperature. Follow the chart below.

NOTE: Although multi-viscosity oils (5W30, 10W30, etc.) improve starting in cold weather, these multiviscosity oils will result in increased oil consumption when used above 40°F. Check the oil level more frequently to avoid possible engine damage from running low on oil.



WARNING: SAE 30 oil, if used below 40°F, will result in hard starting and possible **engine bore damage** due to inadequate lubrication.

NOTE: If the unit was shipped with oil in the engine, check the oil level and refill if necessary.

Fill engine with the appropriate oil as follows:

- Remove oil fill dipstick.
- With log splitter on level ground, use a funnel to fill engine oil to FULL mark on dipstick. Capacity is approximately 26 ounces. Be careful not to overfill.
- Replace the dipstick on to the engine and tighten. Then remove the dipstick again and wipe off the oil from the end of the dipstick with a clean cloth.
- Screw the dipstick firmly back to place. Remove to check the oil level.
- Refill oil to FULL mark on dipstick if necessary. Replace dipstick and tighten.

Gasoline Fill-Up

- Remove fuel cap. See Figure 6.
- Make certain the gasoline container is clean and free from rust or foreign particles. Never use gasoline that may be stale from long periods of storage in the container.
- Fill fuel tank with about one gallon of clean, fresh, lead-free grade automotive gasoline. DO NOT use Ethyl or high octane gasoline.
- Replace fuel cap.



WARNING: Do not fill closer than 1/2 inch of top of fuel tank to prevent spills and to allow for fuel expansion. If gasoline is accidently spilled, move log splitter away from area of spill. Avoid creating any source of ignition until gasoline vapors have disappeared.

Reservoir Fill-Up

- Remove reservoir vent plug. See Figure 8.
- Fill the reservoir tank to about 2" from the top with 7 gallons of Dexron III automatic transmission fluid, or 10W non-foaming hydraulic fluid. Replace vent plug securely.

- Make sure the spark plug wire is disconnected. Prime the pump by pulling the recoil starter as
- far as it will go. Repeat approximately 10 times.
- Reconnect the spark plug wire and start engine. Use the control handle to engage the wedge to
- the far extended position. Refer to Figure 7. Retract the wedge.
- Fill tank to within 1-1/2" to 2" from the top of the tank.



- Extend and retract the wedge 12 complete cycles to remove trapped air in the system (system is "self-bleeding").
- Refill the reservoir to within 1-1/2" to 2" from the top of the tank. Much of the original fluid has been drawn into the cylinder and hoses. Make certain to refill the reservoir to prevent extreme damage to the hydraulic pump.

NOTE: Some fluid may overflow from the vent plug as the system builds heat and the fluid expands and seeks a balanced level.

Move control handle BACK or UP to return the wedge. See Figure 7.

Starting Engine

- Attach spark plug wire and rubber boot to spark plug. See Figure 9.
- Place the throttle control lever in FAST position. See Figure 6 and Figure 9.
- Move choke lever to FULL CHOKE position.



Figure 9

- Grasp starter handle and pull rope out slowly until engine reaches start of compression cycle (rope will pull slightly harder at this point). Let the rope rewind slowly.
- Pull rope with a rapid, continuous, full arm stroke. Keep a firm grip on starter handle. Let rope rewind slowly. Do not let starter handle snap back against starter.
- Repeat preceding two instructions until engine fires. When engine starts, move choke lever on engine halfway to Half Choke position and then gradually to No Choke position.
- If engine falters, move choke lever to Half Choke until engine runs smoothly and then move it to No Choke position.
- Run wedge up and down beam 6 to 8 times to circulate the hydraulic fluid, which will warm and thin the fluid.

Stopping Engine

- Move throttle control lever to STOP position.
- Disconnect spark plug wire and move away from spark plug to prevent accidental starting while equipment is unattended.

Raising and Lowering Beam

- Place log splitter on a firm, level surface. To raise the beam for vertical operation, pull out the beam lock on the tongue and pivot it down to release the beam.
- Move the beam to the vertical position. Secure it with the beam lock on the reservoir tank assembly. See Figure 10.



Figure 10

- To lower the beam, pull out the beam lock on the reservoir tank and pivot it down to release the beam. Carefully pull back on beam and lower it to the horizontal position. See Figure 10.
- Pull out the beam lock on the tongue, pivot it upwards and release it to hold the beam. Make certain it is latched securely.



WARNING: Always use the log splitter in the vertical position only when splitting heavy logs.

Transporting the Log Splitter

- Lower the beam to its horizontal position. Make certain the beam is locked securely with the horizontal beam lock.
- Raise or lower jack stand to attach the hitch to a towing vehicle. Make certain to latch securely.
- Pull spring lever on jack stand outward and rotate the jack stand clockwise till it is parallel with the tongue assembly. Release the spring lever after it locks into position.
- Attach the safety chains to the towing vehicle.

Operating Position

Vertical

- For vertical operation, pull out the horizontal beam lock and pivot it down to release the beam. Pivot the beam to the vertical position.
- Lock the beam in the vertical position, by pulling out on the vertical beam lock and pivoting it to the left.
- Stand in front of the log splitter. Operate the control handle with your right hand and stabilize the log, if necessary, with your left hand. See Figure 11.



Figure 11

Horizontal

- For horizontal operation, pull out the vertical beam lock and pivot it down. Pivot the beam to the horizontal position.
- Lock the beam in the horizontal position, by

- pulling out on the horizontal beam lock and pivoting it upwards. Refer to Figure 5 for location of beam locks.
- Stand behind the reservoir tank. See Figure 12. Operate the control handle with your right hand and stabilize the log, if necessary, with your left hand.
- Attach spark plug wire to the spark plug.



Figure 12

Before Each Use

- Remove the vent plug and check hydraulic fluid level. Refill if necessary.
- Check engine oil level. Refill if necessary.
- Fill up gasoline if necessary.
- Lubricate with engine oil the beam area where splitting wedge will slide. Do not use grease to lubricate. Make sure to lubricate both the front and the back of the beam face.

Operating the Log Splitter



WARNING: Wear leather work gloves, safety shoes and safety glasses to operate the log splitter. Watch your footing during operation and while handling the log.

- Place the log splitter on a dry, firm, level surface.
- Block the front and back of the wheels when operating (and when storing) to prevent it from moving or rolling away.
- Lock in either the horizontal or the vertical position.
- Set the engine throttle at maximum speed.
- Place the log against the end plate. Only split wood in the direction of the grain.
- Stabilize the log on its sides, never on the end between the log and the splitting wedge.
- Only one adult should stabilize the log and operate the control handle so that the operator has full control over the log and the wedge.



WARNING: If the hydraulic fluid becomes very hot at any time during the operation, stop the unit and **allow the fluid to cool down**. Otherwise the performance of your log splitter will be affected.

MAINTENANCE

| | Mainte | nand | ce Sc | hedu | lle | | | | | <u> </u> |
|----------|----------------------------------|----------|---------|------------|-----------------------|-------|-----------|----------|-----------|----------|
| | | Belfor | First c | Even hours | Even. | Even. | sinoy ool | l in ser | vice date | s here |
| | Check reservoir fluid | ✓ | | | | | | | | |
| nct | Change hydraulic fluid | | | | | 1 | | | | |
| Product | Change hydraulic filter | | | | 1 | | | | + | |
| <u>م</u> | Lubricate beam and wedge | 1 | | | | | | | | |
| | Check engine oil | v | | | | | | | | |
| | Change engine oil | | 1 | | 1 | ···· | | | - | |
| e | Service air cleaner foam filter | | | 1 | | | | | | |
| Engine | Service air cleaner paper filter | | 1 | | | 1 | | | | · |
| <u> </u> | Clean engine | ✓ | 1 | | | | | | | |
| | Service spark plug | | | | ✓ | | | | | |
| | Remove combustion deposits | | 1 | | 1 | 1 | | | · · · · · | |
| | Service muffler | | | | | | 1 | | | |

General Recommendations

- Always observe safety rules when performing any maintenance.
- The warranty on this log splitter does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain the log splitter as instructed in this manual.
- Some adjustments will need to be made periodically to maintain your unit properly.
- All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.
- Follow the maintenance schedule given below.
- Periodically check all fasteners and make sure these are tight.



WARNING: Always stop the engine and **disconnect** spark plug wire before performing any maintenance or adjustments.

Hydraulic Fluid

 Check the hydraulic fluid level in the log splitter reservoir tank before each use. Fluid level should be 1.5" to 2" from the top of the tank (seven gallons approximately).

Change the hydraulic fluid in the reservoir every 100 hours of operation. Disconnect the suction hose from the bottom of the reservoir tank, and drain the fluid into a suitable container. Refill using only Dexron III automatic transmission fluid or 10W non-foaming hydraulic fluid. Also, make sure to change the hydraulic filter.

NOTE: Drain the fluid and flush the reservoir tank and hoses with kerosene whenever any repair work is performed on the tank, hydraulic pump or valve. Contaminants in the fluid will damage the hydraulic components. Any repair to the hydraulic components should be performed by Sears service center.

Hydraulic Filter

 Change the hydraulic filter every 50 hours of operation. Use only a 10 micron hydraulic filter.

Beam And Splitting Wedge

 Lubricate both sides of the beam (where it contacts the splitting wedge) with engine oil before each use. However, normal wear will occur. Periodically adjust the bolts on the side of the wedge plate as follows to eliminate excess space between the wedge plate and the beam.

- Loosen the lock nuts on the two adjustment bolts on the side of the gib plate, located beneath the splitting wedge. See Figure 13.
 Turn the adjustment bolts in until snug, then back them off slowly until the wedge assembly will slide on the beam.
- Tighten the lock nuts securely against the gib plate to hold the adjustment bolts in this position.



Figure 13

Periodically remove and replace the "gibs" (spacers) between the wedge plate and the back plate as follows.

NOTE: If desired, the gibs may be rotated and/or turned over for even wear.

- Remove the center bolt on top of the wedge plate. Slide the gib plate out. See Figure 13.
- Remove and replace the gibs. Reassemble the gib plate, making certain flat washer is in place above the gib plate.
- Readjust the bolts on the side of the wedge plate as instructed previously.

Engine Maintenance

Changing engine oil

- Only use high quality detergent oil rated with API service classification SF, SG or SH. Select the oil's viscosity grade according to the expected operating temperature. Refer to page 10 of this manual for viscosity chart.
- Stop engine and wait several minutes before checking oil level. With engine on level ground, the oil must be to FULL mark on dipstick.
- Change engine oil after the first five hours of operation, and every 50 hours thereafter.
 Change oil every 25 hours of operation if the engine is operated under heavy load, or in high ambient temperatures.

To drain oil

Drain oil while engine is warm. Follow the instructions given below.

- Remove oil drain plug and dipstick. Catch oil in a suitable container.
- When engine is drained of all oil, replace drain plug securely.
- Refill with fresh oil. Refer to GAS AND OIL FILL-UP section of this manual.
- Replace dipstick.

Air Cleaner

The air cleaner prevents damaging dirt, dust, etc., from entering the carburetor and being forced into the engine and is important to engine life and performance. The air cleaner consists of a precleaner or foam filter, and a paper filter. **Never run** the engine without air cleaner completely assembled.

- 1. Service pre-cleaner after every 25 hours of use, or at least once a season.
- 2. Service filter every 100 hours of use, or at least once a season.
- 3. Service pre-cleaner and filter more often under dusty conditions.
- Remove wing nut and cover.
- Slide pre-cleaner off filter. Clean the inside of base and cover thoroughly.
- Clean pre-cleaner as follows: (See Figure 14.)
 - a. Wash in water and detergent solution, and squeeze (do not twist) until all dirt is removed.
 - b. Rinse thoroughly in clear water. Wrap in a clean cloth and squeeze (do not twist) until completely dry, or allow it to air dry.
 - c. Saturate with engine oil and squeeze (don't twist) to distribute oil and remove excess oil.



Figure 14

NOTE: If the pre-cleaner is torn or damaged in any way, replace it.

- If necessary, replace paper filter (do not attempt to clean). Install new filter on base.
- Slide pre-cleaner over filter.
- Install cover and wing nut.
- Tighten wing nut securely.

Clean engine

- Clean engine periodically. Remove dirt and debris with a cloth or brush. Cleaning with a forceful spray of water is not recommended as water could contaminate the fuel system.
- Frequently remove grass clippings, dirt and debris from cooling fins, air intake screen and levers and linkages. See Figure 15. This will ensure adequate cooling and correct engine speed.



Spark Plug

 Clean spark plug and reset the gap to .030" at least once a season or every 50 hours of operation. See Figure 16. Spark plug replacement is recommended at the start of each season. Refer to engine parts list for correct spark plug type.

NOTE: Do not sandblast spark plug. Spark plug should be cleaned by scraping or wire brushing and washing with a commercial solvent.



Figure 16

Muffler



WARNING: Do not operate the log splitter **without a muffler,** or tamper with the exhaust system. Damaged mufflers or spark arresters could create a fire hazard.

SERVICE & ADJUSTMENTS



WARNING: Always stop engine, disconnect spark plug wire, and move it away from spark plug before performing any adjustments or repairs.

Tires

 See sidewall of tire for recommended pressure. Maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.



WARNING: Excessive pressure (over 30 p.s.i.) when seating beads may cause tire/ rim assembly to burst with force sufficient to cause serious injury.

Carburetor

If you think the carburetor on your log splitter engine needs to be adjusted, contact Sears service center. Engine performance may be affected in altitudes above 4,000 feet. To improve engine performance, install a High Altitude Adjustment Kit which is available at any authorized Tecumseh service outlet.

Engine Speed

The engine speed on your log splitter has been set at the factory. Do not attempt to increase engine speed or it may result in personal injury. If you believe the engine is running too fast or too slow, take the equipment to the nearest Sears service center for repair and adjustment.

Important: Changing of engine governed speed will void engine warranty.

Flexible Pump Coupling

The flexible pump coupling has a "spider" which is a nylon insert located between the pump and engine shaft. Over a period of time, this insert will harden and deteriorate. Replace the spider insert and/or the coupling halves if you detect vibration or noise coming from the area between the engine and the pump. If the spider fails completely, you will experience a loss of power.



WARNING: Never hit the engine shaft in any manner, as a blow will cause permanent damage to the engine or the pump.

Follow the instructions carefully as the alignment of the couplings is critical.

- Disconnect the spark plug wire from the spark plug, and keep it away from the spark plug.
- Using a 1/2 inch wrench, remove three nuts and lock washers which secure the pump to the coupling shield. Two nuts are at the bottom corners and one is in the top center. See Figure 17. Remove the pump.
- Remove the nylon spider insert from the coupling and inspect for wear. Replace if necessary.
- Inspect the engine coupling half jaws for signs of wear. Replace if necessary.



Figure 17

- **To replace engine coupling half:** Rotate the engine by pulling starter handle until engine coupling half set screw is at bottom. Loosen set screw using 1/8 inch allen wrench. Slide coupling half off engine shaft. See Figure 17.
- Install new coupling half on engine shaft making sure to align key way in coupling half with key in the engine shaft.
- Slide coupler half along engine shaft until the end of the shaft is flush with the inner portion of the coupling half. (There must be space

between end of the engine support bracket and the coupling half.) Apply Loctite[™] to threads of set screw and torque to 78 inch-pounds.

- Inspect the pump coupling half jaws for signs of wear. Replace if necessary.
- To replace pump coupling half: Loosen set screw using 1/8 inch allen wrench. Slide coupling half off pump shaft.
- Install new coupling half on pump shaft making sure to align key way in coupling half with key in pump shaft. Rotate coupling half until set screw faces down. Do not tighten set screw now.
- Install new spider insert on to the engine coupling half.
- Align pump coupling half with nylon "spider" by rotating engine using starter handle.
- Slide coupling half into place while guiding three mounting bolts through holes in pump support bracket.

Note: The pump coupling half can be rotated by hand to aid in alignment. If the two parts are not aligned right, the unit will not operate property and damage could occur.

- Secure with nuts and washers removed earlier.
- Set .035 to .060 inch clearance between the nylon "spider" and the engine coupling half by sliding a matchbox cover between the nylon "spider" and the engine coupling half and moving pump coupling half as needed. See Figure 18.
- Apply Loctite™ to threads of set screw. Tighten set screw to torque 78 inch-lbs. This should secure the pump coupling half.
- Reattach spark plug wire to spark plug.



STORAGE

Prepare your log splitter for storage at the end of the season or if the log splitter will not be used for 30 days or more.



WARNING: Never store machine with fuel in the fuel tank inside of building where fumes may reach an open flame or spark, or where ignition sources are present such as hot water and space heaters, furnaces, clothes dryers, stoves, electric motors, etc.

NOTE: A yearly check-up by your local Sears service center is a good way to make certain your log splitter will provide maximum performance for the next season.

LOG SPLITTER

- Clean the log splitter thoroughly.
- Wipe unit with an oiled rag to prevent rust, especially wedge and beam.

ENGINE

IMPORTANT: It is important to prevent gum deposits from forming in essential fuel system parts such as carburetor, fuel filter, fuel hose, or tank during storage. Also, experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

- Drain the fuel tank.
- Start the engine and let it run until the fuel lines and carburetor are empty.
- Drain carburetor by pressing upward on bowl drain which is located below the carburetor.

- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
 - Use fresh fuel next season.

NOTE: Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage.

- Add stabilizer to gasoline in fuel tank or storage container.
- Always follow the mix ratio found on stabilizer container.
- Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor.
- Do not drain the gas tank and carburetor if using fuel stabilizer. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill the crankcase with fresh oil.
- If you have drained the fuel tank, protect the inside of the engine as follows.
- Remove spark plug, pour approximately 1/2 ounce (approximately one tablespoon) of engine oil into cylinder and crank slowly to distribute oil.
- Replace spark plug.

OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if it starts to rust. Rust and/or dirt in the gasoline will cause problems. Store unit in a clean, dry area. Do not store next to corrosive materials, such as fertilizer.

NOTE: If storing in an unventilated or metal storage shed, be certain to rustproof the equipment by coating with a light oil or silicone.

TROUBLE-SHOOTING

.

| Problem | Possible Cause | Corrective Action |
|--|--|---|
| Cylinder rod will not move | Broken drive shaft. Shipping plugs left in hydraulic hoses. | Return unit to Sears service center. Disconnect hydraulic hose, remove shipping plugs, and reconnect hose. |
| | 3. Set screws in coupling not adjusted properly. | 3. Refer to adjustment section of this manual and adjust the couplers |
| | 4. Loose shaft coupling. | 4. Correct engine/pump alignment. |
| | 5. Gear sections damaged. | 5. Return unit to Sears service center. |
| | 6. Damaged relief valve. | 6. Return unit to Sears service center. |
| | 7. Hydraulic lines blocked. | 7. Flush and clean hydraulic system. |
| | 8. Incorrect oil level. | 8. Check oil level. Refill if necessary. |
| | Damaged or blocked directional valve. | 9. Return unit to Sears service center |
| Cylinder shaft speed slow while | 1. Gear sections damaged. | 1. Return unit to Sears service center. |
| extending and retracting | 2. Excessive pump inlet vacuum. | 2. Make certain that the pump inlet |
| | | hoses are clear and unblocked. Use |
| | 3. Slow engine speed. | short, large diameter inlet hoses. 3. Return unit to Sears service center. |
| | 4. Damaged relief valve. | 4. Return unit to Sears service center. |
| | 5. Incorrect oil level. | 5. Check oil level. Refill if necessary. |
| | 6. Contaminated oil. | 6. Drain oil, clean reservoir, refill, make |
| | | certain oil return tube is below oil level. |
| | 7. Directional valve leaking internally. | 7. Return unit to Sears service center. |
| | 8. Internally damaged cylinder. | 8. Return unit to Sears service center. |
| Engine runs but wood will not split, or | 1. Small gear section damaged. | 1. Return unit to Sears service center. |
| splits too slowly | 2. Pump check valve leaking. | 2. Return unit to Sears service center. |
| | 3. Excessive vacuum in pump inlet. | 3. Make certain that the pump inlet hoses are clear and unblocked. Use short, large diameter inlet hoses. |
| | 4. Incorrect oil level. | 4. Check oil level. Refill if necessary. |
| | 5. Contaminated oil. | 5. Drain oil, clean reservoir, refill, make |
| | | certain oil return tube is below oil level. |
| | 6. Directional valve leaking internally. | 6. Return unit to Sears service center. |
| | 7. Internally damaged cylinder. | 7. Return unit to Sears service center. |
| | 8. Overloaded cylinder. | 8. Do not attempt to split wood against the grain. |
| Engine stalls during splitting wood | 1. Low horsepower/weak engine. | 1. Return unit to Sears service center. |
| | 2. Overloaded cylinder | 2. Do not attempt to split wood against the grain. If engine stalls repeatedly, |
| | | contact Sears service center. |
| Engine will not turn or stalls under low | 1. Engine/pump misaligned. | 1. Correct alignment. |
| load | 2. Frozen or seized pump. | Return unit to Sears service center. Return unit to Sears service center. |
| | 3. Weak engine. | 4. Flush and clean hydraulic system. |
| - | Hydraulic lines blocked. Blocked directional valve. | 5. Return unit to Sears service center |
| Leaking pump shaft seal | 1. Broken drive shaft. | 1. Return unit to Sears service center. |
| | 2. Engine/pump misaligned. | 2. Correct alignment. |
| | 3. Gear sections damaged. | 3. Return unit to Sears service center. |
| | | |
| | Poorly positioned shaft seal. Oil breather plugged. | 4. Return unit to Sears service center.5. Make certain reservoir is properly |

Trouble-Shooting Guide continued

| Problem | Possible Causes | Corrective Action | | | |
|-----------------------|--|--|--|--|--|
| Engine fails to start | 1. Dirty air cleaner. | 1. Service air cleaner following instructions on page 14 of this manual. | | | |
| | 2. Fuel tank empty, or stale fuel. 3. Choke not in ON position. 4. Blocked fuel line. 5. Spark plug wire disconnected. 6. Faulty spark plug. | 2. Fill tank with fresh fuel. 3. Move choke to ON. 4. Clean fuel line. 5. Connect spark plug wire to spark plug. 6. Service spark plug following | | | |
| Engine runs erratic. | 1. Unit running on choke. 2. Spark plug wire loose. | instructions on page 15. 1. Move choke lever to OFF position. 2. Connect and tighten spark plug wire. | | | |
| | Blocked fuel line or stale fuel. Dirty air cleaner. | Clean fuel line. Fill tank with fresh fuel. Service air cleaner following instructions on page 14. | | | |
| | 5. Carburetor out of adjustment | 5. Contact Sears service center. | | | |
| Engine overheats | Engine oil level low. Dirty air cleaner. | Fill crankcase with proper oil. Service air cleaner following instructions on page 14. | | | |
| | Carburetor out of adjustment. Air flow restricted. | Contact Sears service center. Stop engine, disconnect spark plug wire, move blower housing, and | | | |
| | | clean. | | | |
| Will not split logs | 1. Reservoir fluid level low. | 1. Refill with Dexron III automatic transmission fluid. | | | |
| Leaking cylinder | 1. Broken seals. 2. Scored cylinder | Return unit to Sears service center. Return unit to Sears service center. | | | |



For repairs beyond the minor adjustments listed above, please contact your nearest SEARS service center.

PARTS LIST

Craftsman 9 H.P. Log Splitter Model 247.794520



Craftsman 9 H.P. Log Splitter Model 247.794520

| KEY | PART | DESCRIPTION | KEY | PART | DESCRIPTION |
|-----|-----------|------------------------------|-----|-----------|-------------------------------------|
| NO. | NO. | | NO. | NO. | |
| 5 | 781-0323B | Wedge Assembly | 48 | 712-0123 | Hex Nut 5/16-24 |
| 6 | 712-0239 | Lock Nut 1/2-20 | 49 | 710-0409 | Hex Cap Screw 5/16-24 x 1.75 |
| 7 | 710-1018 | Hex Cap Screw 1/2-20 x 2.75 | 58 | 710-1253 | Hex Screw 5/16-24 x 5.25" |
| 8 | 781-0351 | Adjustable Gib | 59 | 781-0098 | Front Coupling Support Bracket |
| 9 | 781-0352A | Adjustable Gib Shim | 60 | 710-0237 | Hex Cap Screw 5/16-24 |
| 10 | 781-0350A | Fixed Gib | 61 | 719-0315 | Coupling Shield |
| 11 | 781-0537 | Back Bracket | 62 | 714-0114 | Square Key |
| 12 | 736-0921 | Lock Washer 1/2 | 63 | 717-0462 | Flexible Coupling |
| 13 | 781-0356 | Floating Gib Plate | 64 | 781-0097 | Rear Coupling Support Bracket |
| 14 | 710-0459A | Hex Cap Screw 3/8-24 x 1.5 | 65 | 737-0264 | Adapter |
| 15 | 712-3001 | Hex Jam Nut 3/8-24 | 66 | 718-0477 | Gear Pump (16 gpm) |
| 16 | 750-0750 | Spacer | 67 | 726-0174 | Hose Clamp |
| 17 | 736-0192 | Flat Washer,531 x.93 x.090 | 68 | 727-0451 | Suction Hose |
| 18 | 781-0525 | Dislodger Bracket | 69 | 710-0521 | Hex Cap Screw 3/8-16 x 3.0 |
| 19 | 710-0514 | Hex Screw 3/8-16 x 1.0" Gr.5 | 70 | 712-0798 | Hex Nut 3/8-16 |
| 20 | 681-0129 | Beam Assembly w/ Tray | 71 | 736-0169 | Lock Washer 3/8 |
| 21 | 714-0211 | Cotter Pin | 72 | 781-0680A | Tongue Tube |
| 22 | 718-0313 | Hydraulic Cylinder | 74 | 710-0411 | Hex Cap Screw 3/8-16 x 4.0 |
| 23 | 711-1135 | Clevis Pin | 75 | 781-0398 | Support Beam Assembly |
| 24 | 727-0471 | Hydraulic Tube | 77 | 710-0944 | Hex Cap Screw 3/8-16 x 4.25 |
| 25 | 727-0443 | Return Hose 3/4" ID x 44" Lg | 78 | 736-0262 | Flat Washer.385 ID x.870 OD |
| 26 | 781-0526 | Hose Guard | 79 | 713-0433 | Chain |
| 27 | 726-0132 | Hose Clamp 5/8" | 80 | 750-0497 | Spacer |
| 28 | 737-0153 | Return Elbow | 81 | 727-0311 | Hitch Coupler |
| 29 | 737-0192 | 90 Degree Solid Male Adapter | 82 | 712-0375 | Lock Nut 3/8-16 |
| 30 | 737-0235 | 3/4" Hose Adapter | 86 | 681-0006 | Adjustable Jack Stand |
| 31 | 718-0481 | Control Valve | 88 | 721-0168 | Bearing Seal Only |
| 32 | 737-0306 | Filter Housing | 89 | 741-0987 | Bearing Cone |
| 33 | 723-0405 | Oil Filter | 90 | 634-0186 | Wheel Asm Comp - Gray |
| 34 | 727-0502 | High Pressure Hydraulic Hose | | 634-0180 | Rim Asm - Gray |
| 35 | 781-0538 | Hose Guard | | 734-0872 | Tire 16 x 4.8 |
| 36 | 714-0470 | Cotter Pin 1/8" Dia | [| 734-0255 | Air Valve |
| 37 | 738-0805 | Hinge Pin 1/2 x 4.8" Lg. | 91 | 741-0988 | Bearing Cup |
| 38 | 726-0214 | Push Cap | 92 | 736-0351 | Flat Washer.76" ID x 1.5" OD |
| 39 | 732-0583 | Comp. Spring 4" Lg. | 93 | 712-0359 | Slotted Nut 3/4-16 |
| 40 | 736-0116 | Flat Washer .635 ID x.93 OD | 94 | 714-0162 | Cotter Pin 5/32" x 1-1/4" Lg. |
| 41 | 781-0690 | Locking Rod | 95 | 734-0873 | Hub Cap |
| 42 | 737-0236 | Pipe Plug | 96 | 681-0110 | Beam Support Assembly |
| 43 | 681-0138 | Fender Assembly | 97 | _ | Tecumseh Horiz. Shaft 9 h.p. Engine |
| 44 | 736-0159 | 5/16 Washer | | | Model HM90-156017 |
| 45 | 710-0157 | Hex Cap Screw 5/16-24 x.75 | 1 | | (not shown) |
| 46 | 681-0103A | Frame Assembly | 98 | 770-10032 | Owner's Manual |
| 47 | 736-0119 | Lock Washer 5/16 | | 1 | (not shown) |

NOTE: For **painted parts**, please refer to the list of color codes below. Please add the applicable color code, wherever needed, to the part number to order a replacement part. For instance, if a part, numbered 700-xxxx, is painted polo green, the part number to order would be 700-xxxx-0689.

| Polo Green: | | 0689 |
|--------------|---|------|
| Oyster Grey: | | 0662 |
| Powder Black | : | 0637 |



Craftsman 9 H.P. Horizontal Shaft Engine Model No. 143.999003 for Craftsman Log Splitter Model 247.794520

| Key No. | Part No. | Description | Qty. | Key No. | Part No. | Description | Qty. |
|------------|----------|--|------|------------|----------|---|------|
| 0 | RPM | Low 1700 | | 75 | 35319 | Oil Seal | 1 |
| 0 | RPM | High 3450 to 3750 | | 80 | 31845 | Governor Shaft | 1 |
| 1 | 35385 | Cylinder (Incl. 2, 20 & 72) | | 81 | 30590A | Washer | 1 |
| 2 | 27652 | Dowel Pin | | 82 | 35378 | Governor Gear Ass'y. (Incl. 81) | 1 |
| 4 | 32678 | Oil Drain Extension | | 83 | 30588A | Governor Spool | 1 |
| 5 | 30969 | Extension Cap | | 84 | 29193 | Retaining Ring | 1 |
| 15 | 30699C | Governor Rod (Incl. 15A & 15B) | 1 | 86 | 650833 | Screw, 1/4-20 x 1-3/16" | 7 |
| 15A | 30700 | Governor Yoke | 1 | 87 | 650832 | Screw, 1/4-20 x 1-11/16" | 1 |
| 15B | 650494 | Screw, 6-40 x 5/16" | 1 | 89 | 32589 | Flywheel Key | 1 |
| 16 | 33454 | Governor Lever | 1 | 90 | 611090 | Flywheel | 1 |
| 17 | 29916 | Governor Lever Clamp | 1 | 92 | 650880 | Lock Washer | 1 |
| 18 | 651028 | Screw, Torx T-15, 8-32 x 3/8* | 1 | 93 | 650881 | Flywheel Nut | 1 |
| 19 | 34663 | Speed Control Spring | 1 | 100 | 35135 | Solid State Ignition | 1 |
| 20 | 35319 | Oil Seal | 1 | 101 | 610118 | Spark Plug Cover | 1 |
| 25 | 36460 | Blower Housing Baffle | 1 | 102 | 651024 | Solid State Mounting Stud | ż |
| 26 | 650561 | Screw, 1/4-20 x 5/8" | 2 | 103 | 651007 | Screw, Torx T-15, 10-24 x 15/16" | 2 |
| 28 | 30322 | Lock Nut, 8-32 | 1 | 110 | 35187 | Ground Wire | 1 |
| 30 | 35372A | Crankshaft | 1 | 119 | 36448 | Cylinder Head Gasket | 1 |
| 35 | 29826 | Screw, 10-32 x 3/4* | 1 | 120 | 36449 | Cylinder Head | 1 |
| 36 | 29918 | Lock Washer | 1 | 125 | 27878A | Exhaust Valve (Std.) (Incl. 151) | 1 |
| 37 | 29216 | Lock Nut, 10-32 | 1 | 125 | 27880A | Exhaust Valve (1/32" OS) (Incl. 151) | 1 |
| 38 | 29642 | Retaining Ring | 1 | 126 | 34035 | Intake Valve (Std.) (Incl. 151) | 1 |
| 40 | 40011 | Piston, Pin & Ring Set (Std.) | 1 | 126 | 34035 | Intake Valve (1/32" OS) (Incl. | 1 |
| 40 | 40012 | Piston, Pin & Ring Set (.010" OS) | | 120 | 34030 | 151) | |
| 41 | 40009 | Piston & Pin Ass'y. (Std.) (Incl. 43) | 1 | 127 | 650691 | Washer | 9 |
| 41 | 40010 | Piston & Pin Ass'y. (.010* OS) | 1 | 128 | 650690 | Belleville Washer | 9 |
| | | (Incl. 43) | | 130 | 650694A | Screw, 5/16-18 x 2" | 9 |
| 42 | 40013 | Ring Set (Std.) | 1 | 130A | 651031 | Screw, 1/4-20 x 9/16" | 1 |
| 42 | 40014 | Ring Set (.010" OS) | 1 | 135 | 33636 | Resistor Spark Plug (RJ17LM) | 1 |
| 43 | 27888 | Piston Pin Retaining Ring | 2 | 139 | 33369 | Governor Gear Bracket | 1 |
| 45 | 36897 | Connecting Rod Ass'y. (Incl. 47 & | 1 | 140 | 650836 | Screw, 10-24 x 1/2" | 2 |
| | | 49) | | 149 | 27882 | Valve Spring Cap | 1 |
| 47 | 651033 | Connecting Rod Bolt | 2 | 149A | 35862 | Valve Spring Cap | 1 |
| 48 | 34034 | Valve Lifter | 2 | 150 | 27881 | Valve Spring | 2 |
| 49 | 36896 | Oil Dipper | | 151 | 32581 | Valve Spring Keeper | 2 |
| 50 | 35375 | Camshaft (MCR) | 1 | 169 | 27896A | Valve Cover Gasket | 2 |
| 60 | 33273A | Blower Housing Extension | | 170 | 28423 | Breather Body | 1 |
| 65 | 650128 | Screw, 10-24 x 1/2" | 1 | 171 | 28424 | Breather Element | 1 |
| 69 | 35262A | Cylinder Cover Gasket | | 172 | 28425 | Valve Cover | 1 |
| 70 | 35376 | Cylinder Cover (Incl. 71, 75 & 80) | | 173 | 36675A | Breather Tube | 1 |
| 71 | 35377 | Crankshaft Bushing | | 173A | 32446 | Breather Tube Grommet | 2 |
| 72 | 28582 | Oil Drain Plug | 1 | 174 | 650128 | Screw, 10-24 x 1/2" | 2 |

| Key No. | Part No. | Description | Qty. | Key No. | Part No. | Description | Qty. |
|------------|----------|--|------|------------|----------|---|------|
| 178 | 29752 | Nut & Lock Washer, 1/4-28 | 2 | 280 | 36799A | Heat Shield | 1 |
| 182 | 30088A | Screw, 1/4-28 x 1" | 2 | 281 | 33013 | Starter Bubble Cover | 1 |
| 184 | 33263 | Carburetor To Intake Pipe Gasket | 1 | 282 | 650760 | Screw, 8-32 x 3/8" | 1 |
| 185 | 34707 | Intake Pipe | 1 | 285 | 35985B | Starter Cup | 1 |
| 186 | 34667 | Governor Link | 1 | 287 | 29752 | Nut & Lock Washer, 1/4-28 | 4 |
| 200 | 34677 | Control Bracket (Incl. 19,203,204 | 1 | 290 | 30962 | Fuel Line | 1 |
| | | & 206) | | 292 | 26460 | Fuel Line Clamp | 2 |
| 203 | 31342 | Compression Spring | 1 | 298 | 650665 | Screw, 1/4-15 x 3/4" | 2 |
| 204 | 651029 | Screw, Torx T-10, 5-40 x 7/16* | 1 | 300 | 34186A | Fuel Tank (incl. 292 & 301) | 1 |
| 206 | 610973 | Terminal | 1 | 301 | 36246 | Fuel Cap | 1 |
| 207 | 33878 | Throttle Link | 1 | 305 | 35554 | Oil Fill Tube | 1 |
| 209 | 650821 | Screw, 10-32 x 1/2" | 2 | 307 | 35499 | "O" Ring | 1 |
| 215 | 35882 | Control Knob | 1 | 308 | 35540 | Fill Tube Clip | 1 |
| 223 | 650378 | Screw, Torx T-30, 5/16-18 x 1-1/8 | 2 | 310 | 36205 | Dipstick | 1 |
| 224 | 27915A | Intake Pipe Gasket | 1 | 325 | 29443 | Wire Clip | 1 |
| 238 | 28820 | Screw, 10-32 x 1/2" | 2 | 327 | 35392 | Starter Plug | 1 |
| 239 | 27272A | Air Cleaner Gasket | 1 | 339 | 35880 | Spacer | 2 |
| 240 | 37104 | Air Cleaner Body | 1 | 340 | 34259 | Fuel Tank Bracket | 1 |
| 242 | 33267 | Air Cleaner Bracket | 1 | 341 | 34258A | Fuel Tank Bracket | 1 |
| 245 | 33268 | Air Cleaner Filter | 1 | 342 | 650273 | Screw, 5/16-18 x 5/8* | 2 |
| 245A | 35881 | Air Cleaner Filter | .1 | 370G | 35274 | Oil Instruction Decal | 1 |
| 250 | 33269A | Air Cleaner Cover | 1 | 370J | 35703 | Throttle Decal | 1 |
| 251 | 650513 | Wing Nut, 1/4-20 | 1 | 380 | 640112 | Carburetor (Incl. 184) | 1 |
| 260 | 36250 | Blower Housing | 1 | 390 | 590746 | Rewind Starter | 1 |
| 261 | 650788 | Screw, 5/16-18 x 3/4" | 2 | | (NOTE: | This engine cound have been | |
| 262 | 29747B | Screw, Torx T-40, 5/16-24 x 21/ 32" | 2 | 400 | 36454 | built with 590704 starter.) Gasket Set (Incl. Items Marked | 1 |
| 264A | 30063 | Screw, Torx T-30, 1/4-20 x 1/2" | 1 | | | PK in Notes) | |
| 265 | 33272B | Cylinder Head Cover | 1 | | | s 27272A (1),27896A (2), 27915A | ŀ |
| 275 | 34185B | Muffler | 1 | | | 1), 29673 (1), 33263 (1), 34698A (1), 35262 (1), 36448 (1) | |
| 276 | 31588 | Locking Plate | 1 | 416 | | Spark Arrestor Kit (Optional) | 1 |
| 277 | 650729 | Screw, 5/16-18 x 3-3/16" | 1 | 900 | 0 | Rep. Short Block 756321, order | |
| 277A | 651036 | Screw, 5/16-18 x 3-31/32* | 1 | | ľ | from 71-999 | |
| 278 | 36908 | Spacer | 1 | 900 | 0 | Replacement Engine None | 0 |

Craftsman 9 H.P. Horizontal Shaft Engine Model No. 143.999003 for Craftsman Log Splitter Model 247.794520

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| Key No. | Part No. | Description | Qty. |
|------------|----------|--|------|
| 0 | 640112 | Carburetor (Incl. 184 of Engine Parts List) | 1 |
| 1 | 631776A | Throttle Shaft & Lever Assembly | 1 |
| 2 | 631970 | Throttle Return Spring | 1 |
| 4 | 631184 | Dust Seal Washer | 1 |
| 5 | 631183 | Dust Seal (Throttle) | 1 |
| 6 | 640109 | Throttle Shutter | 1 |
| 10 | 632740 | Choke Shaft & Lever Assembly | 1 |
| 11 | 632043 | Choke Return Spring | 1 |
| 12 | 631184 | Dust Seal Washer | 1 |
| 13 | 631183 | Dust Seal (Choke) | 1 |
| 14 | 631753 | Choke Shutter | 1 |
| 15 | 630735 | Choke Positioning Spring | 1 |
| 16 | 632164 | Fuel Fitting | 1 |
| 17 | 651025 | Throttle Crack Screw/Idle Speed Screw | 1 |
| 18 | 630766 | Tension Spring | 1 |
| 20 | 640027 | Idle Restrictor Screw | 1 |
| 20A | 640053 | Idle Restrictor Screw Cap | 1 |
| 25 | 631867 | Float Bowl | 1 |
| 27 | 631024 | Float Shaft | 1 |
| 28 | 632019 | Float | 1 |
| 29 | 631028 | Float Bowl "O" Ring | 1 |
| 30 | 631021 | Inlet Needle, Seat & Clip (Incl. 31) | 1 |
| 31 | 631022 | Spring Clip | 1 |
| 36 | 640113 | Main Nozzle Tube | 1 |
| 37 | 632547 | "O" Ring, Main Nozzle Tube | 2 |
| 40 | 640114 | High Speed Bowl Nut | 1 |
| 44 | 27110 | Bowl Nut Washer | 1 |
| 47 | 630748 | Welch Plug, Idle Mixture Well | 1 |
| 48 | 631027 | Welch Plug, Atmospheric Vent | 1 |

Craftsman 9 H.P. Horizontal Shaft Engine Model No. 143.999003 for Craftsman Log Splitter Model 247.794520



| Key No. | Part No. | Description | Qty. |
|------------|----------|---------------------------------|------|
| | 590704 | Recoil Starter | |
| 1 | 590599A | Spring Pin (Incl. 4) | 1' |
| 2 | 590600 | Washer | 1 |
| з | 590696 | Retainer | 1 |
| 4 | 590601 | Washer | 1 |
| 5 | 590697 | Brake Spring | 1 |
| 6 | 590698 | Starter Dog | 2. |
| 7 | 590699 | Dog Spring | 2 |
| 8 | 590700 | Pulley & Rewind Spring Ass'y. | 1 |
| 11 | 590705 | Starter Housing Ass'y. | 1 |
| 12 | 590535 | Starter Rope (98" X 9/64" dia.) | 1 |
| 13 | 590701 | Starter Handle | 1 |

| Key No. | Part No. | Description | Qty. |
|------------|----------|--|------|
| · - · · | 590746 | Recoil Starter | |
| 1 | 590599A | Spring Pin (Incl. 4) | 1 |
| 2 | 590600 | Washer | 1 |
| 3 | 590679 | Retainer | 1 |
| 4 | 590601 | Washer | 1 |
| 5 | 590678 | Brake Spring | 1 |
| 6 | 590680 | Starter Dog | 2 |
| 7 | 590412 | Dog Spring | 2 |
| 8 | 590681 | Pulley & Rewind Spring Assembly | 1 |
| 11 | 590747 | Starter Housing Assembly | 1 |
| 12 | 590535 | Starter Rope (Length 98" x 9/64" dia.) | 1 |
| 13 | 590701 | Starter Handle | 1 |

For in-home major brand repair service:

Call 24 hours a day, 7 days a week **1-800-4-MY-HOME** (1-800-469-4663)

Para pedir servicio de reparación a domicilio - 1-800-676-5811

In Canada for all your service and parts needs call **1-800-665-4455** Au Canada pour tout le service ou les pièces 1-800-665-4455

> For the repair or replacement parts you need: Call 7 am - 7 pm, 7 days a week 1-800-366-PART (1-800-366-7278)

Para ordenar piezas con entrega a domicilio - 1-800-659-7084

For the location of a Sears Parts and Repair Center in your area: Call 24 hours a day, 7 days a week 1-800-488-1222

For information on purchasing a Sears Maintenance Agreement or to inquire about an existing Agreement: Call 9 am - 5 pm, Monday - Saturday 1-800-827-6655



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