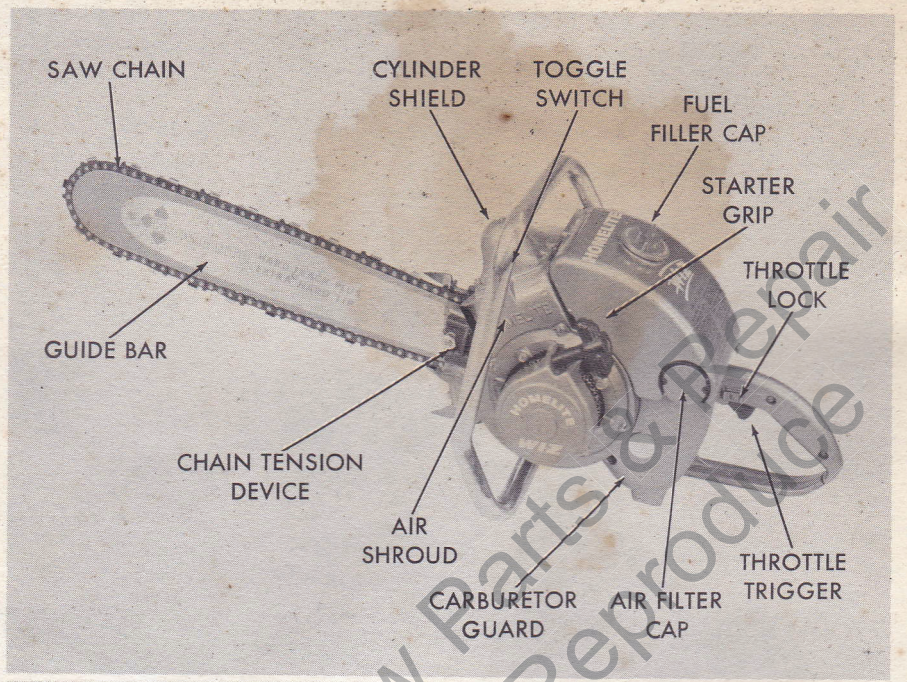
OPERATOR'S MANUAL

HOMELITE

WIZ

CHAIN SAW



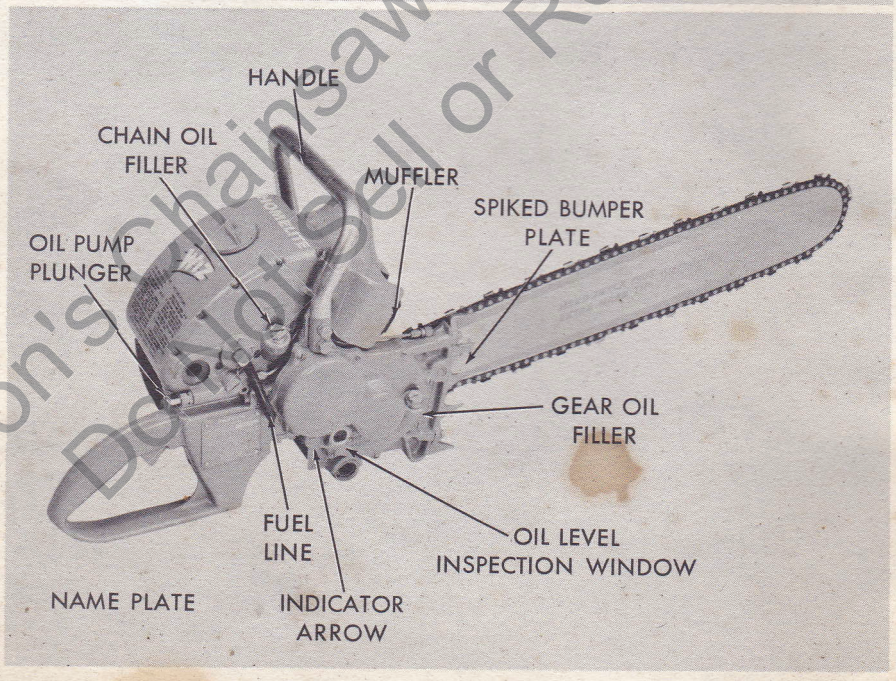


Figure 1—Homelite WIZ Chain Saw

Section I

OPERATION

1. PREPARING SAW FOR USE

a. Unpacking (See Figure 1)

The engine carton contains a can of gear oil for filling the gear case, a combination tool for assembling the guide bar and chain on the engine, and an engine warranty card. Fill out the engine warranty card and mail it *immediately*. The serial number of the engine is stamped on the name plate. (See Figure 1, *bottom* view.) As soon as we receive the warranty card at HOMELITE, we register the serial number of the saw in your name, and the warranty goes into effect for your protection.

b. Assembling the Unit (See Figure 2)

(1) Remove the guide bar and the chain from their cartons. The grease-like coating on the new chain is a rust preventative, not a lubricant. We, accordingly, recommend soaking the chain in oil before use.

(2) Remove the mounting stud nuts and lockwashers and take the chain tension device and the *outer* guide bar plate off the studs. (See Figure 2.) LEAVE THE INNER GUIDE BAR PLATE ON THE STUDS. Now mount the guide bar on the studs, and put the *outer* guide bar plate and the tension device back on the studs . . . hold with the fingers and slide bar back and forth until the pin of the chain tension device drops into the hole in the guide bar. Then

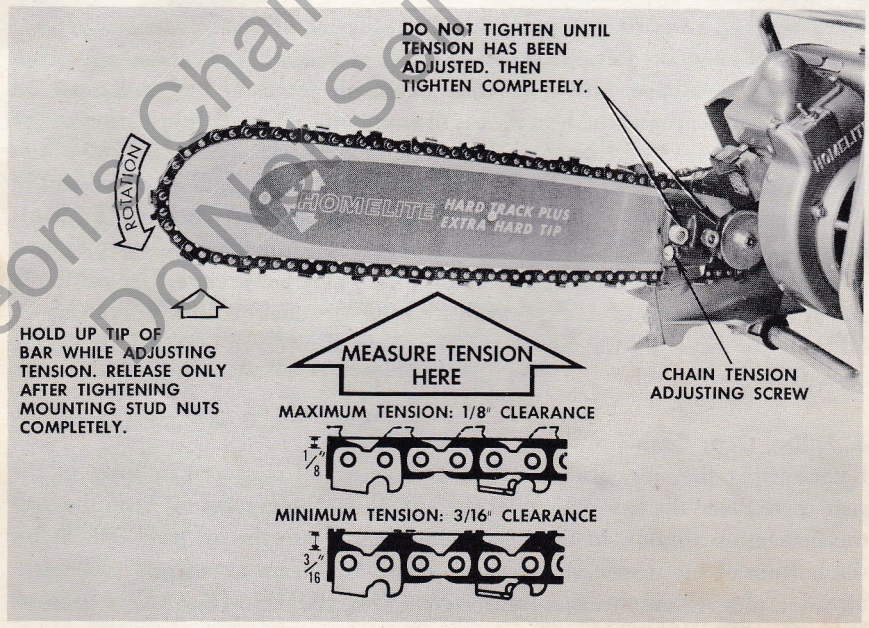


Figure 2 — Assembling Guide Bar and Chain

assemble the lockwashers and nuts on the studs, but *tighten only enough* to *keep the pin in the hole.* Turning the adjusting screw of the chain tension device causes this pin to move the guide bar; turn screw *counterclockwise* to move bar toward sprocket for chain assembly.

(3) Be sure the chain and the sprocket are of matching pitch. The chain must be assembled with its teeth facing in the direction of rotation. (See Figure 2.) Slip the chain over the drive sprocket and feed the chain into the chain groove in the guide bar.

c. Adjusting Chain Tension

(1) Hold up the tip of the guide bar (or bow guide) and keep it up until the tension has been set and the stud nuts tightened completely. Taking up the play between the studs and the bar-mounting slot in this manner prevents the bar from shifting during cutting and keeps tension as you set it. Improper tension causes excessive wear.

(2) Turn the tension adjusting screw to take up most of the chain slack—adjust to maximum tension at which the chain can still be rotated easily around the bar by hand. As a further check, note the amount which the chain hangs down from the bar at bottom, center. This amount should be between ⅛″ and 3/16″. Lock the tension device at proper setting by tightening the stud nuts.

(3) Always stop engine before checking chain tension. New chains always stretch slightly during the first half hour of operation. Use oil freely, especially during the break-in period on new chain. Check chain tension frequently and readjust whenever necessary.

d. Filling Chain Oil Reservoir

This saw is equipped with a separate chain oil reservoir and a manual oil pump. This has proved the best means of supplying adequate lubrication to the chain, regardless of cutting conditions. The oil filler cap is near the fuel outlet connection on the tank. Fill the chain oil reservoir with SAE-30 engine oil in the summer, and SAE-10 oil in the winter. In temperatures below 0°F., use a mixture of four parts SAE-10 oil to 1 part kerosene. Operation of the oil pump plunger forces oil from the reservoir into the guide bar groove. Use oil freely and at regular intervals. Always lubricate while the chain is slowly rotating. To oil properly while cutting, always let the chain slow down first, otherwise the oil will be thrown off.

e. Filling Gear Case

Before using the saw, always see that the gear oil is at proper level in the gear case. Place the saw on a level surface, then observe the oil level through the inspection window in the gear case cover. When the oil level falls below the bottom of the inspection window, REFILL TO ARROW LEVEL ONLY. The gear oil filler plug is on the gear case cover. Use HOMELITE SAE-90 gear oil (Part No. 55291-B).

f. Mixing Fuel

A Homelite safety can (Part No. AA-71472) provides a convenient way to mix and carry fuel. The filler cap of the 2½ gallon can serves as an oil measuring cup.

(1) Always measure out the exact proportions required and mix the oil and gasoline thoroughly before pouring the mixture into the fuel tank. Always use clean mixing equipment and clean, fresh gasoline.

(2) BREAKING IN THE SAW: Start operating with a mixture of ¾ pint HOMELITE CHAIN SAW OIL to each gallon of gasoline. If Homelite oil is not available use a break-in mixture of 1 pint good grade SAE-30 engine oil to each gallon of gasoline. Make only light cuts with the saw—do not lug the engine until you have used about one gallon of this break-in mixture in the engine. After this period, use the regular fuel mixture given in the fuel mixing table (below.)

(3) FUEL MIXING TABLE

Proportions For Regular Fuel Mixture

	FOR BEST RESULTS	IF HOMELITE OIL IS NOT USED
1 gal. gasoline:	½ pint Homelite Oil	¾ pt. of ordinary SAE 30 oil
2 gal. gasoline:	1 pint Homelite Oil	1½ pt. of ordinary SAE 30 oil
3 gal. gasoline:	1½ pints Homelite Oil	2¼ pt. of ordinary SAE 30 oil
4 gal. gasoline:	2 pints Homelite Oil	3 pt. ordinary SAE 30 oil

(4) FLUSH-OUT FUEL CONTAINER OCCASIONALLY: Moisture and sediment accumulated in the fuel container can clog the fuel filters and carburetor. Avoid contamination by flushing fuel can, every so often, with solvent or clean gasoline. (Not fuel mix.)

2. STARTING AND STOPPING

a. Select Clear Area For Starting

Be sure the chain is clear of all obstructions because it will rotate when the engine starts at full throttle.

b. Check Chain Oiler — Lubricate Bar and Chain

See that oil runs into the bar groove when the oil pump plunger is operated. Use lots of oil during the entire break-in period.

c. Set Controls for "Cold" Starting

Flip toggle switch "ON" . . . Flip choke lever down . . . Depress throttle trigger and lock throttle open by pulling throttle lock on pistol grip. (See Figure 1 for location of all controls.)

d. Crank Engine

Hold the saw firmly on the ground. Pull the starter cord SLOWLY, a short distance until you feel the drive balls engage. THEN CRANK THE ENGINE

SMARTLY. A short, quick pull gives the best results; neither pull cord way out, nor let it snap back.

e. When Engine Fires or Starts

The engine should either fire or start after one to five spins, depending on temperature. As soon as it fires, flip choke lever to half-open position. Continue cranking half-choked engine until it starts, then move choke to open position, gradually, as engine warms up. Depress throttle trigger to release the throttle lock.

WARNING

Never run saw at full throttle except to cut wood. Without a cutting load the engine will race at full throttle. Racing causes excessive wear of guide bar and chain.

f. Push Toggle Switch "OFF" To Stop Engine

g. Starting a Hot Engine

Normally, a warm engine can be started with the throttle at idle position, and usually requires no choking.

h. Off-Season Storage

The engine should not be stored with fuel in the tank for more than a month. To prevent formation of gum and varnish deposits, drain the fuel tank as much as possible, then start the engine and let it run dry. To prevent rusting of the drained engine, it is also a good idea to remove the spark plug and pour a tablespoonful of engine oil into the engine, then crank a few times to spread the oil over the internal surfaces.

3. OPERATING SAW

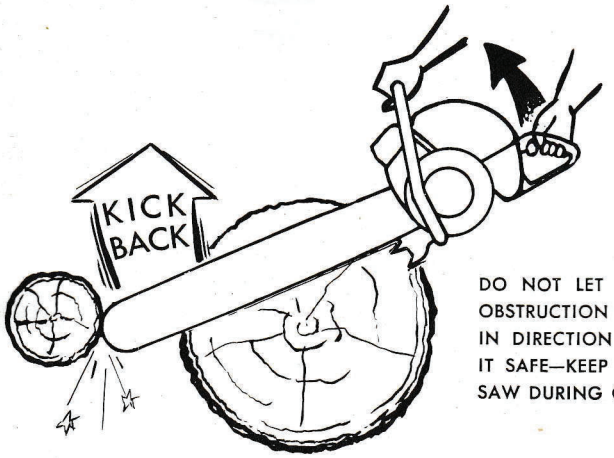
a. Safety Precautions

(1) BE CAUTIOUS. Always wear a safety helmet in the woods. Wear trim-fitting clothing. Always work in pairs, so that help will be available if needed.

(2) HANDLE FUEL SAFELY. Use approved fuel containers. When refueling find a clear or bare spot of ground before pouring. Move at least ten feet away from refueling spot, wipe saw down before starting the engine.

(3) ALWAYS KEEP BOTH HANDS FIRMLY ON SAW; one on the handle bar, the other on the pistol grip. Stand with your weight on both feet for positive control at all times. Even if the saw kicks back unexpectedly (See Figure 3) because the blade (a) hits a branch or other obstruction, (b) gets caught in a cut, or (c) is inserted incorrectly into a previous cut, you will not be in danger.

(4) STOP ENGINE BETWEEN CUTS. Play it safe — never carry a running saw from tree to tree. Always carry the saw with the blade to the rear, so the chain will not become snagged in the underbrush. Always stop the engine before working on the saw.



DO NOT LET END OF BLADE HIT ANY OBSTRUCTION OR SAW MAY KICK BACK IN DIRECTION OF LARGE ARROW. PLAY IT SAFE—KEEP BOTH HANDS FIRMLY ON SAW DURING OPERATION.

Figure 3—Safe Cutting Instructions

(5) BRUSH OUT SUFFICIENTLY. Always clear all undergrowth and debris from the working site, as well as from the path of safe retreat, before you fall a tree. Remove all dead material from the immediate cutting area to minimize fire hazards.

(6) KEEP CLEAR OF THE WORK. Always stand on the uphill side when bucking a log. When limbing or pruning do not stand directly under the work. Watch for and eliminate hazards such as trapped saplings or logs which might spring, roll, or shift suddenly when the cut is completed.

(7) KEEP ALL EQUIPMENT IN GOOD OPERATING CONDITION. Poor equipment invites accidents. Keep chain sharp and properly tensioned. Working with dull chain is tiresome, makes you less aware of woods hazards.

b. General

If you have never used a chain saw before, practice on small logs before attempting difficult falling or bucking cuts. Remember to lubricate the chain and bar regularly and frequently during cutting. Cutting can be done at any part of the guide bar. Using the bottom edge, however, results in less wear than when using the top or nose of the bar to cut.

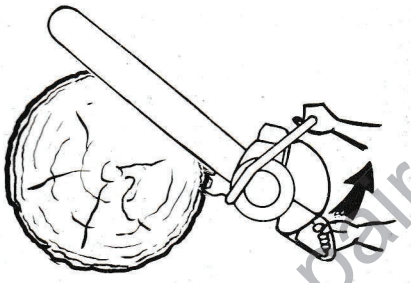
c. Straight Blade

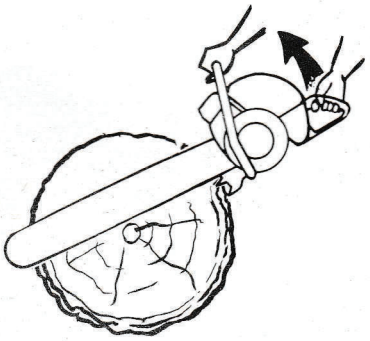
Pivot action, the technique used with a straight blade, is fully explained in Figure 4.

(1) FALLING A TREE

(a) Analyze the cutting factors — wind direction, lean of the tree, whether there is more weight on one side than the other — these should tell you whether the tree can be made to fall in the desired direction. Then cut a notch about 1/4 to 1/3 through on the side you wish the tree to fall. (See Figure 5.) When the notch is finished, start the falling cut on the opposite side of the tree, at least two inches above the horizontal cut of the notch. Engage the

PLACE THE SPIKES OF THE SAW AGAINST THE WOOD. OPEN ENGINE THROTTLE. WHEN CHAIN REACHES FULL SPEED PIVOT SAW ON ITS SPIKES BY PULLING ON PISTOL GRIP UNTIL THE CHAIN ENGAGES WOOD.





KEEP PULLING ON PISTOL GRIP TO PIVOT BLADE THROUGH THE WOOD. IF SAW JAMS IN CUT, RELEASE THROTTLE, PULL SAW FREE, AND REENGAGE IN CUT.

STOP PIVOTING BEFORE TIP OF BLADE HITS GROUND—OR WHEN YOU CAN NO LONGER PULL ON GRIP AND CUT WOOD. KEEP CHAIN RUNNING IN CUT, BUT PULL SPIKES FROM WOOD. PUSH DOWN ENGINE END TO REACH NEW PIVOT POINT. REENGAGE SPIKES AND CONTINUE TO CUT USING PIVOT ACTION.

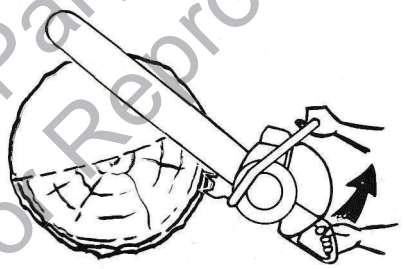


Figure 4 — Pivot Action With Straight Blade

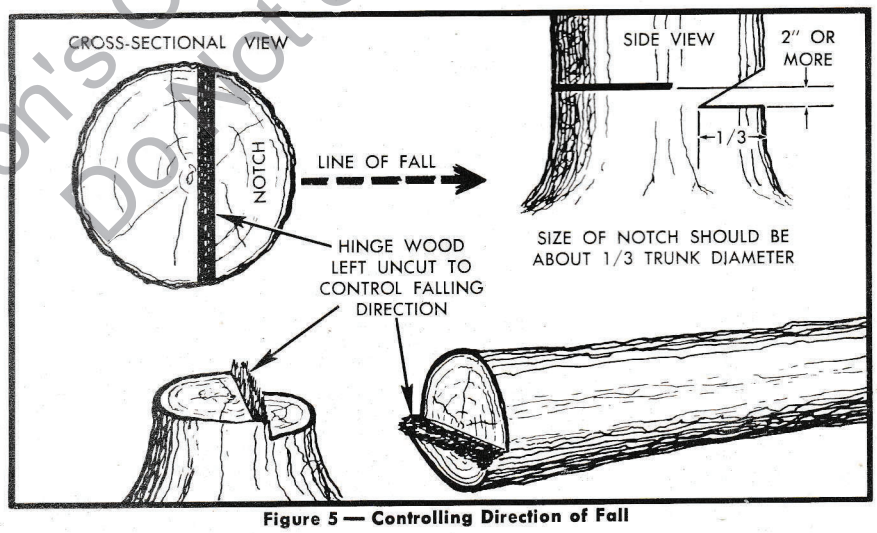


Figure 5 — Controlling Direction of Fall

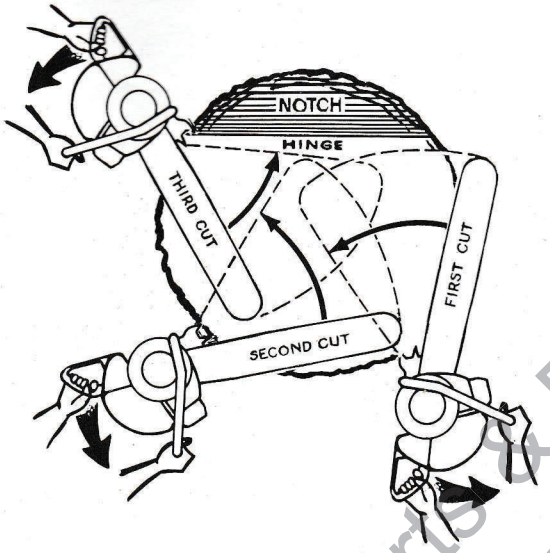


Figure 6 — Felling Trees Larger Than Blade Length

spiked bumper near one corner of the notch so that pivoting will make the blade come parallel to the notch. DO NOT CUT THROUGH . . . Always leave a section of wood parallel to the notch as a hinge. (See Figure 5.) As the tree is weakened, widening of the cut and movement of the top branches will indicate when it is about to fall. As the tree topples, pull the saw free and retreat to safety.

(b) When the tree is thicker than the blade is long, a series of cuts must be made to fall it. It is important that these cuts be made in the order shown in Figure 6, with the blade moving toward the notch on the final cut, completing the hinge properly. On a large tree, insert soft wedges to hold the cut open, pull saw free just before the tree is ready to fall, then drive the wedges in to force the tree over.

(2) BUCKING AND LIMBING

When it is necessary to cut with the top or tip of the blade, brace the engine against your hip or thigh, because the saw may kick backward if the chain binds. Logs flat on the ground should be bucked from the top; but when a log is supported only on the ends, you should buck only one third through the top, then finish by bucking upward from the bottom. Experience will teach you that cutting a suspended log or branch all the way through from one side may result in either pinching or splitting. Whenever you are unsure whether the cut will open or close on the blade, use soft wedges to keep the cut open.

d. Use of Clearing and Bow Attachments

(1) DESCRIPTION: For special cutting jobs, it is often desirable to replace the conventional straight blade guide bar with a Plunge-Cut Bow Attachment or a Clearing Attachment to save time and effort. The design of these attach-

ments makes possible certain cuts which would close and pinch a straight blade. The Bow is especially suited for cutting pulpwood and cordwood, while the Clearing Attachment, primarily used for clearing small trees, heavy brush, and saplings, also serves well as a general purpose tool.

(2) USE OF BOTTOM SECTION: Pivot action is used, the same as with a straight blade. When the wood is so large that the plunging spur of the Clearing Attachment interferes with cutting, remove the spur.

(3) PLUNGE-CUTTING WITH SPUR: Using the front section of the guide and the spur for plunge-cutting, cuts up to sixteen inches with the Bow Attachment, and eight inches with the Clearing Attachment can be made. Place the plunging spur against the work, then gun the engine and push the chain straight through the wood. (Use a slight pivot action if desired.) To cut logs on the ground, push the spur into the dirt next to the log. The curved guide design will enable you to pivot completely through the log without letting the chain hit the ground.

e. Use of Brushcutter Attachment

The Brushcutter Attachment for this saw quickly clears small saplings, brush and grass from fields and pastures, fence lines, roadsides and power line rights of way. Easily attached to the chain saw engine, the Brushcutter clears a ten foot strip in one swath. The five foot arm makes it easy to get under overhanging branches—keeps the cutter blade out of the operators' way. Refer to the booklet supplied with the Attachment, to assemble, operate, and maintain your Brushcutter.

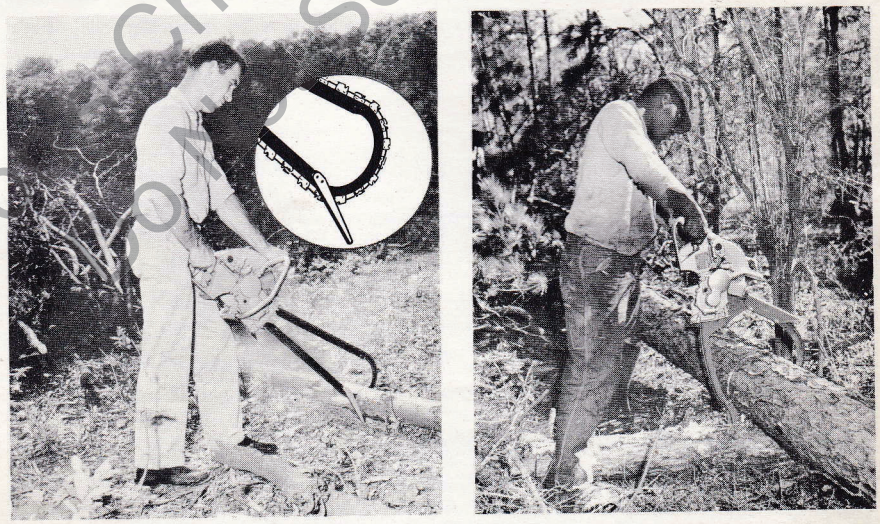


Figure 7 — Plunge-Cutting With Bow and Clearing Attachments

Section II
MAINTENANCE AND ADJUSTMENT

4. MAINTENANCE SCHEDULE

a. Daily Maintenance

(1) Clean chain, bar, and sprocket; inspect for wear and damage. Keep chain sharp, properly tensioned, and lubricated. (See paragraph 5, b.)
(2) Keep saw clean. Wipe the outside of the saw as clean as possible. Check for loose screws, nuts and bolts; tighten before parts are lost or trouble results.
(3) Check air filter daily, or as often as necessary to maintain engine power.

b. Weekly and Occasional Maintenance

(1) Remove and clean spark plug. Check condition of porcelain and electrodes. Regap electrodes to .025″ whenever necessary, or install new spark plug. (See paragraph 6, c.)
(2) Check filter in fuel tank at least once or twice a month, sooner if engine runs lean. Change filter if it feels hard to the touch. (See paragraph 6, d.)
(3) Clean sawdust, pitch, and leaves from cylinder cooling fins whenever necessary. (See paragraph 6, b.)
(4) Occasionally brush or flush outside of carburetor clean. Do not use high pressure air hose to clean carburetor.
(5) Run saw only with muffler and with clean air and fuel filters in place. (See paragraphs 6, a and 6, b.)
(6) Flush out fuel tank and fuel mixing equipment occasionally, to remove accumulated moisture and sediment.

5. CHAIN, BAR AND SPROCKET MAINTENANCE

a. Sprocket

The chain drive sprocket should be inspected from time to time. Sprocket and chain must be of equal pitch. (For instance, ½″ pitch sprocket must be used with ½″ pitch chain.)
(1) Because wear has the effect of changing the pitch of the sprocket, it is recommended that the sprocket be replaced whenever a new chain is installed, unless the old sprocket is in excellent condition.
(2) The life of a sprocket can be substantially increased by removing it before one side is completely worn, and re-installing it in reverse position on the sprocket shaft.

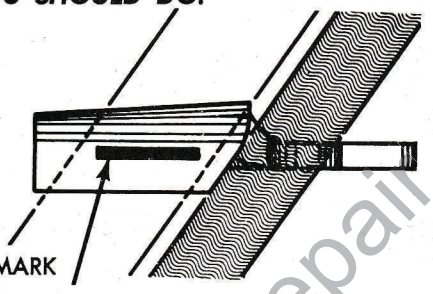
b. Chain

Because only slight pressure is required to make it cut wood, a sharp chain keeps wear and shock on the entire saw to an absolute minimum. You should,

HERE'S WHAT YOU SHOULD DO:

1. Hold File Holder Level . . .
Holder should rest lightly on top of tooth to keep 1/5 of the file's diameter above the cutter for 60° edge.

2. Follow Guide Lines on File Holder . . .



HERE'S WHAT YOU SHOULD GET:

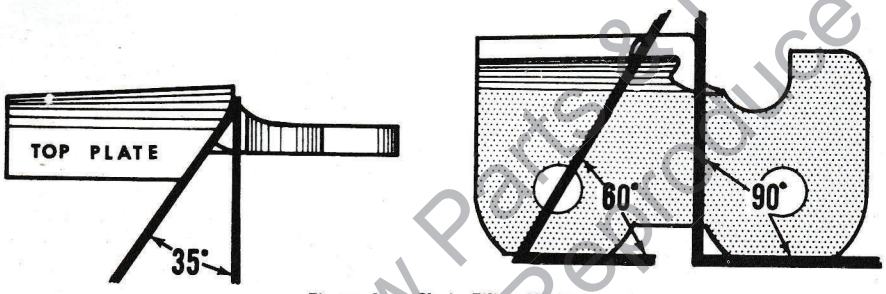


Figure 8 — Chain Filing Hints

therefore, stop to sharpen your chain as soon as it becomes noticeably hard to cut. Always keep the chain properly lubricated and tensioned.

(1) SHARPENING CHAIN (USE FILE HOLDER FOR UNIFORMITY) Use of a file holder with the correct size round file for your chain will help you file accurately. Uniform sharpening of cutters is essential for fast cutting. Each tooth should have a top plate angle of 35°, a side angle of 90° and the cutting edge, itself, should have a 60° bevel. These angles are shown in figure 8.

(a) *The 35° top plate angle will be obtained automatically if you follow the guide lines on the file holder.* File carefully . . . sharper angles cause quick dulling of the side plate; not enough angle requires too much feed pressure; unequal angles cause chain to curve or drift to one side.

(b) HOLD THE FILE LEVEL: The 90° side plate angle, which permits smooth feeding into the cut, and the 60° edge bevel are obtained by holding the file holder at a 35° angle (specified above) and keeping it approximately level. The holder keeps the file at proper height when held as specified.

(c) After filing, check the chain and refile any teeth which you filed incorrectly. Correct any condition of:

Forward hook . . . . . makes chain grab and jerk
Backward slope . . . . . chain feeds unwillingly
Thin cutting edge . . . . breaks off and tooth won't cut
Blunt edge . . . . . no better than dull chain

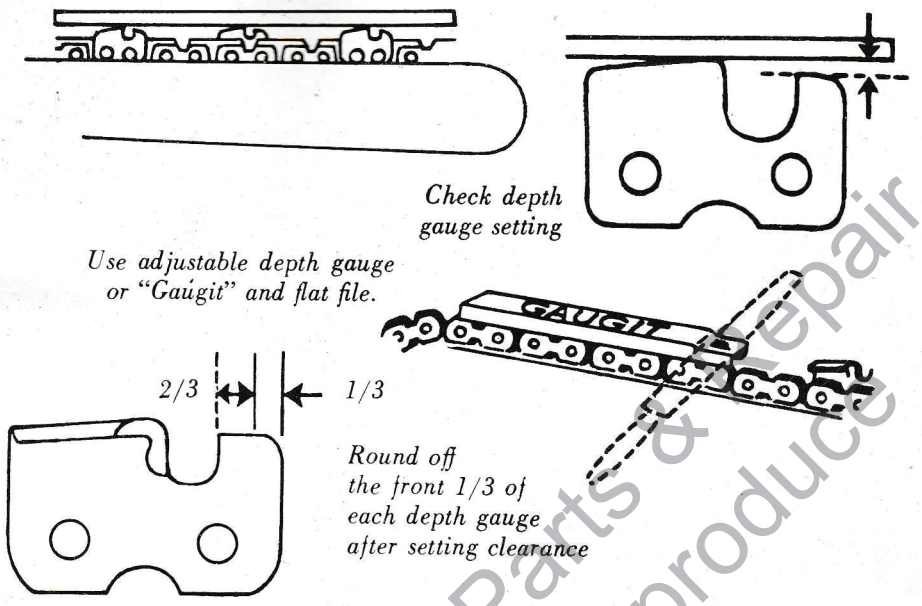


Figure 9 — Filing Depth Gauges

(2) SET DEPTH GAUGE CLEARANCE (See Figure 9)

(a) The depth gauges (also called "rakers" or "stops") control the size chip the chain teeth can cut. If the gauges are too high, the teeth cannot get enough bite into the wood and require too much feed pressure for capacity cutting; if too low, the chain will grab and jerk.

(b) The chain manufacturer sets the depth gauge clearance of each chain for average conditions of cutting. The amount of clearance depends on the pitch of the chain. Recommended settings for the chain you use can be found in the "Filing Instruction" pamphlet, prepared by the manufacturer and supplied with every new chain. Depth gauge settings depend on type of wood and accuracy of tooth sharpening angles.

(c) After filing gauges, be sure to round off the front parts of the gauges uniformly as shown in figure 9. This facilitates smooth entry into the cut.

c. Guide Bar Maintenance

(1) Occasionally reverse the position of the guide bar top-for-bottom on the saw. This will distribute the wear on both sides of the bar.

(2) Check the bar rails for uneven wear. If one rail is higher than the other, restore rails to an even height by grinding. However, if both rails are worn so low that the chain drags bottom in the groove, either replace the bar or repair by grinding the grooves deeper. Chain bottom clearance should be a minimum of 1/16″ all the way around the bar.

(3) After grinding, remove all burrs from the guide bar, and clean it thoroughly to remove abrasives.

(4) If the guide bar groove has been pinched so that the chain drags, open the groove. If the bar has been bent, and has a permanent set, have it straightened. Do not ruin your chain on a damaged bar.

6. ENGINE MAINTENANCE

a. Air Filter

(1) NEVER OPERATE THIS SAW WITHOUT AN AIR FILTER. The air filter prevents dirt and grit from entering the engine. A filter which does this job effectively will clog up in use. The air filter must be checked daily and cleaned whenever the engine loses power. Under severe dusty conditions, such as when cutting cedar, several changes a day may be necessary. Under average conditions, the large capacity filter in this saw may go for a week or more without clogging. A clogged air filter causes the saw to run rich (with normal carburetor adjustment) because the engine is being starved for air. This, in turn, results in excessive carbon, loss of power and inability of the engine to accelerate properly.

(2) TO CLEAN AIR FILTER. Remove air filter cap (Figure 1) held by two screws. Pull filter element from fuel tank. Brush off the loose sawdust, then slosh the element in gasoline (not fuel mix). The cleaned filter should be dried completely before use. It is a good idea to keep a clean spare filter that can be installed when necessary.

b. Muffler and Cylinder

(1) NEVER OPERATE THIS SAW WITHOUT A MUFFLER. A certain amount of back-pressure supplied by the muffler is necessary for efficient operation of this engine. Operation without a muffler may cause lean operation at idle position, and may also be a fire hazard.

(2) Examine muffler element weekly. If clogged, burned out, or deteriorated, replace. Operating chain saw with a clogged muffler reduces power.

(3) The cylinder exhaust ports can be inspected for carbon, provided the muffler is removed. Removing the muffler exposes the exhaust ports completely for cleaning.

(4) When exhaust ports become badly clogged, turn engine crankshaft so piston completely covers exhaust ports; then use a soft instrument such as a wooden stick to prevent chipping the ports while removing carbon carefully. Do not use a screwdriver or hard instrument to scrape carbon.

c. Spark Plug and Ignition

(1) Spark plugs are made in wide ranges to suit different engines. This saw uses the Champion J 6 J (Homelite Part No. 40190-S) spark plug.

(2) To remove the spark plug, remove the cylinder shield, held by two 8-32

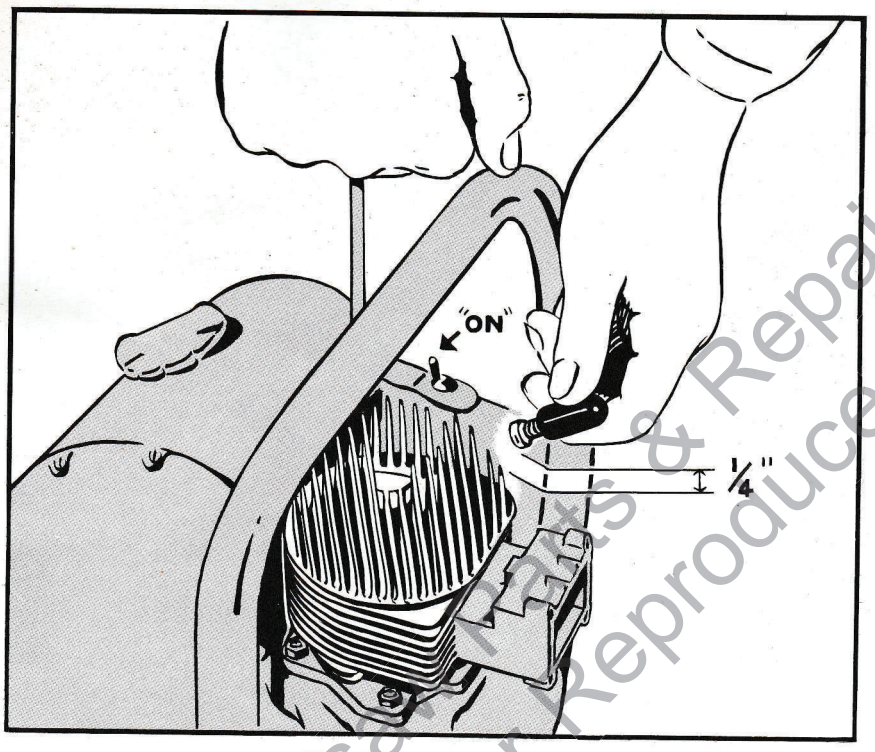


Figure 10 — Testing for Spark

screws, twist the spark plug cover counterclockwise and pull it off the spark plug terminal nut. Remove the spark plug and gasket from the cylinder.

(3) Clean both the porcelain and the electrodes and adjust the electrode gap to .025". If the electrodes are badly burned or porcelain is cracked, replace with a new Champion J 6 J (HOMELITE No. 40190-S)

(4) If the spark plug is wet, it indicates excess fuel in the cylinder, If the spark plug is oily, there is either too much oil in the fuel, or the engine is running rich for some reason. (The first thing to suspect in this case is a clogged air filter.)

(5) While the spark plug is removed from the cylinder, it is easy to test ignition spark. (See Figure 10.)

(a) Be sure the toggle switch is in "ON" position.

(b) Push a ¼" diameter screw into the spark plug cover to contact the metal spring connector on the end of the high-tension lead.

(c) Now — grasp "SPARKY" between your thumb and forefinger — KEEP FINGERS AWAY FROM THE SCREW OR YOU WILL GET A SHOCK— hold the head of the screw ¼" from any convenient metal part of the engine. (Not over spark plug hole.) Crank the engine rapidly. If a strong spark jumps

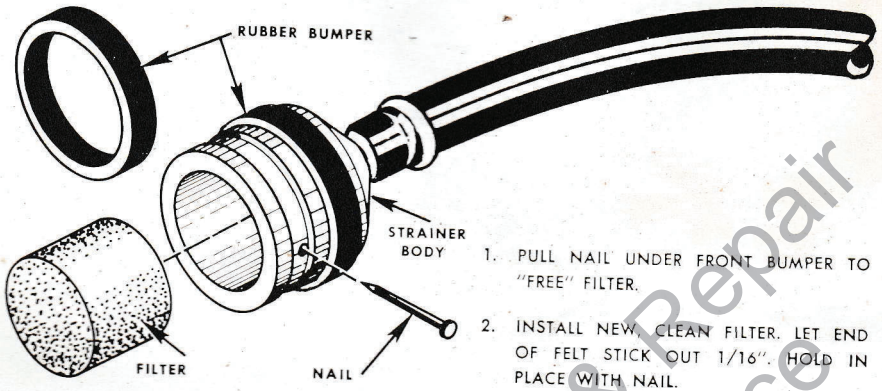


Figure 11 — Changing Fuel Filter

the ¼" gap between the head of the screw and the engine, the ignition system is working properly. If the test shows weak spark, intermittent spark, or no spark, your Homelite Branch Office or Servicing Dealer is equipped to check the complete ignition system for you.

(6) Reinstall spark plug, with gasket, in cylinder and tighten completely, since an air leak will cause the engine to run very lean and hot. Push the connector back onto the terminal with a slight twist to the left. Put cylinder shield back on engine.

d. Felt Fuel Filter and Pick-Up Tube

(1) NEVER RUN THIS CHAIN SAW WITHOUT A FUEL FILTER IN THE TANK. This filter is absolutely necessary to keep moisture and foreign matter from getting into the carburetor and engine. It works efficiently until its storage capacity is used up, whereupon the filter clogs and will not pass even fuel. When this happens, the engine will suddenly begin to run lean without any previous warning.

(2) To check condition of fuel filter, fish the pick-up assembly out of the fuel tank filler hole. Remove the filter from the strainer body (See Figure 11.) and compress filter between the fingers. If it feels hard to the touch, it is loaded up and should be changed.

(3) FLEXIBLE FUEL PICK-UP TUBE: Deterioration of this tube may cause *lean* operation whenever the saw is placed in a cutting position where the cracked or porous part of the tube will be above the fuel level. If the leak is below the fuel level, air cannot be sucked through the break into the system, and normal operation will result *unless* the weakened tube is collapsing under suction. In this case, the fuel-starved engine may either die out, in certain cutting positions, or may refuse to run.

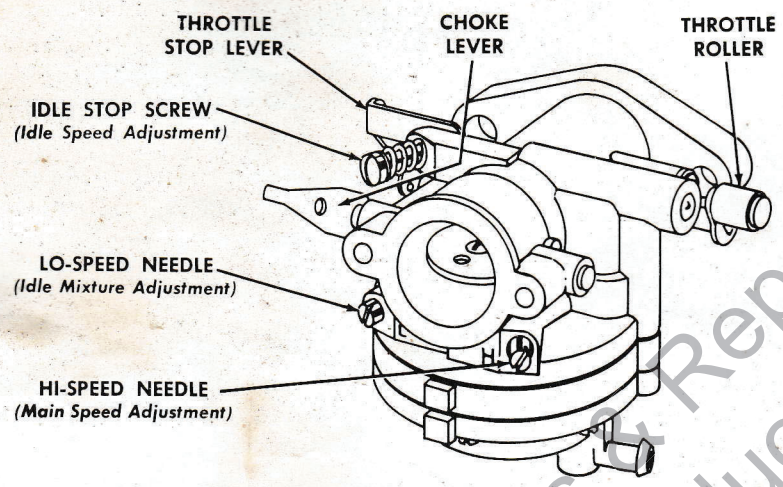


Figure 12 — Carburetor Adjustments

(a) To remove pick-up tube assembly for inspection, first place tank so fuel outlet is uppermost, then remove the four screws which hold the outlet fitting and gasket to the tank; lift outlet fitting, gasket, flexible tube and fuel strainer assembly from tank.

(b) Change the flexible tube if it is porous, cracked or weakened.

e. Fuel Cap

The fuel cap assembly includes a two-way pressure-relief valve of "Hycar" material. This assembly normally need not be checked, except when trouble-shooting for the cause of lean operation. If the carburetor is not getting fuel, try operating with fuel cap removed for a few seconds — if improvement is the result, install a new relief valve.

f. Carburetor Adjustment (See Figure 12)

(1) Adjust carburetor only after checking air filter, fuel filter, muffler, and relief valve in fuel cap. Carburetor adjustment cannot satisfactorily overcome restrictions of fuel or air occurring elsewhere in the system.

(2) Always begin carburetor adjustment by making the following approximate settings:

Adjustment	Control and Approximate Setting
Idle Speed Adjustment	IDLE STOP SCREW — turn in until screw just touches stop lever, then go ¾ turn more.
Idle Mixture Adjustment	IDLE MIXTURE (LO-SPEED) ADJUSTMENT NEEDLE—g-e-n-t-l-y turn in until screw bears against orifice. Then back screw out ¾ turn.
Main Mixture Adjustment	MAIN ADJUSTMENT (HI-SPEED) NEEDLE — g-e-n-t-l-y turn in until screw bears against orifice. Then back out ¾ turn.

(3) FINE ADJUSTMENT OF CARBURETOR.

(a) After making approximate settings, start engine and let it warm up. Open choke and release throttle to let engine idle. If engine stops, turn the IDLE STOP SCREW in ⅛ turn.

(b) Now set for smooth acceleration: Depress throttle. If this causes engine to falter, open IDLE MIXTURE ADJUSTMENT NEEDLE, ⅛ turn at a time, until best acceleration is obtained. Do not open any further than necessary for smooth acceleration. NOTE: Any change of IDLE MIXTURE may require re-adjustment of IDLE SPEED SCREW.

(c) Now adjust for maximum power: This adjustment must be made with the engine "under load". Cut wood and pull up on the handle until you are applying a full load (or stalling chain in cut). Set MAIN ADJUSTMENT NEEDLE so engine neither slows down, nor smokes excessively, but runs at highest speed obtainable. Stall chain only enough to adjust carburetor.

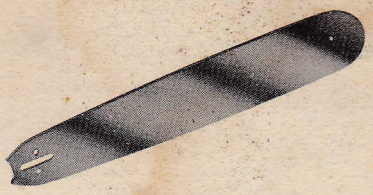
NOTE: Some carburetors have a filter plug and screen installed under a large brass plug screw on top of the carburetor body. This filter may require cleaning or replacing from time to time, and should be checked whenever lean operation is encountered.

7. TROUBLE SHOOTING

Trouble	*Cause*	*Remedy*
Won't start	No fuel	Fill tank with clean fuel mixture.
	Switch "OFF"	Flip switch "ON".
	No spark	Test. (See paragraph 6c.)
	Fouled spark plug	Clean or replace. Use Homelite #40190-S (Champion J 6 J.)
Lack of power	Dull chain	Sharpen. See paragraph 5b. Adjust chain tension; check chain lubrication.
	Dirty air filter	Clean or replace filter.
	Carburetor out of adjustment	First be sure air filter is clean. then adjust carburetor. Read paragraph 6.
Engine races	Lean-running engine	Check relief valve in fuel cap and fuel filters in tank and carburetor. Then make carburetor adjustment. See paragraph 6.

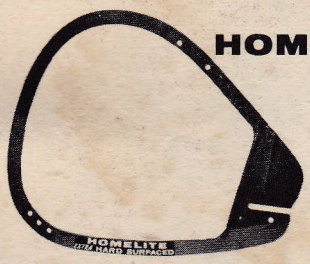
Always give the model and serial number of your saw when ordering parts . . . Have your Homelite dealer inspect your equipment from time to time. For the name of the Homelite dealer nearest you, see the "yellow pages" in your local telephone book.

HOMELITE GUIDE BAR
Hard Track plus Extra Hard Tip



Longest wearing saw bar ever developed. Electronically tempered Hard Track reduces rail wear . . . Homalloy-welded EXTRA HARD TIP provides extra protection where heat and load build-up are greatest. For your protection, an individually stamped serial number registers bar against defective material or workmanship for full 60-day period.

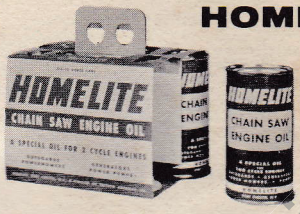
HOMELITE PLUNGE CUT BOW GUIDE
Extra Hard Surface



New 16" size means higher production, less stooping, less fatigue. Homalloy-welded EXTRA Hard Surface around entire chain track provides all-around protection against heat and friction. Most dependable bow ever offered . . . backed by full 60-day warranty.

Ask your Dealer for these HOMELITE Quality Products

HOMELITE CHAIN SAW OIL



Special high-viscosity index, 2-cycle engine oil . . . mildly detergent for cleaner engine operation. Developed for and thoroughly field-tested in Homelite Chain Saws. Affords maximum protection with least deposit. In quart cans and gallon (4 qt.) cases. Also 12 oz. (¾ pint) cans available singly or in handy six-packs.

HOMELITE GEAR OIL

For gear saw transmissions. SAE-90, special formula gear oil gives greatest clutch protection and maximum bearing and gear lubrication. For proper all-weather performance. Available in pint screw-top cans.

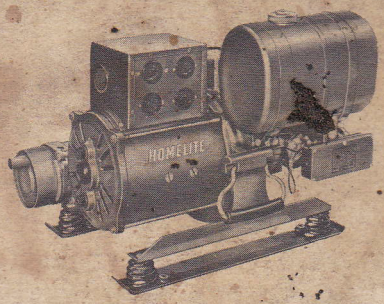
HOMELITE FELT FUEL FILTER PLUG

For all Homelite Chain Saw fuel pick-up assemblies. Filters water, dirt and solids from fuel. Inexpensive replacement. Change felt plug when it feels hard to the touch and maintain free flow of filtered fuel. Sold singly, or in sleeves of ten.

HOMELITE FUEL CONTAINER

Homelite's 2½ gallon safety fuel-mixing can has safety air vent, fuel strainer and oil-measuring cup. Features swivel-spout with safety non-spill pouring feature . . . pours only when cross bars of spout are pressed against sides of filler hole. Other models and sizes also available.

HOMELITE CARRYABLE PRODUCTS

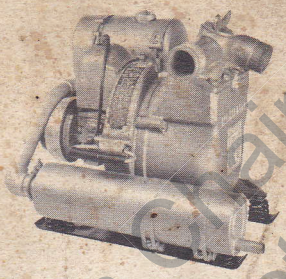


GENERATORS

Lightweight Homelite generators can be carried anywhere to provide electric power for cabins, campsites, power tools, floodlights, and for homes, farms and businesses during power-failure emergencies. Sizes range from 1500 to 5000 watts in all standard voltages.

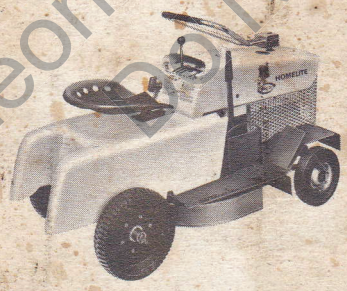
CHAIN SAWS

Whether you're a sportsman, farmer or professional logger, there's a Homelite chain saw that will meet your needs exactly. You have your choice of direct or gear drive, straight or bow blades, brush cutting, clearing or debarking attachments.



PUMPS

For water supply, irrigation, fire protection, or any general-pumping job, there is no better buy than a carryable Homelite gasoline-engine or electric-motor-driven self-priming pump. Capacities from 5500 to 15,000 g.p.h. Diaphragm type pump also available.



RIDING MOWER

Mowing even the largest lawns is quick and easy with the 26" Homelite Mower Car, a riding rotary lawn mower. Big 6 H.P. engine provides power to mow thickest weeds or pull heaviest attachments. Complete line of accessories for year 'round use are available.

HOMELITE

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