



LIMITED WARRANTY FOR HAND HELD POWER EQUIPMENT

LESCO, Inc.'s limited warranty promises to you, the original retail purchaser, that the unit of LESCO hand held power equipment you purchased (the "Product") will be free from defects in material and workmanship for a period of one (1) year from the date of retail purchase (the "Warranty period"). LESCO agrees to repair or replace, at LESCO's option, any defective Product free of charge during the Warranty Period. Upon completion of your purchase, the Serial Number of the Product will be registered with LESCO, Inc. This will initiate and validate your limited warranty. Please keep your purchase receipt and present it to an authorized LESCO servicing facility for warranty service. Parts replaced or repaired under this limited warranty are warranted only to the end of the Warranty Period. All defective parts replaced under this Limited Warranty become the property of LESCO, Inc. For warranty service, you must, at your own expense, deliver the Product to, and pick it up from, an authorized LESCO servicing facility. To locate your nearest authorized LESCO servicing facility, call LESCO, Inc. toll free at 1-800-321-5325.

This limited warranty is given by LESCO to the original retail purchaser only, and is not transferable to subsequent owners. This warranty does not cover damage to the Product resulting from any cause other than defects in material or workmanship. This warranty specifically does not cover damage caused by:

1. Lack of lubrication or engine failure due to the use of oils other than LESCO-approved oils
2. The use of gasohol containing methyl (wood) alcohol or gasoline containing less than 89 octane. Only use gasoline which contains 89 octane or higher or gasohol which contains a maximum 10% ethyl (grain) alcohol or 15% MTBE (methyl tertiary-butyl ether) (The prescribed mixing ratio of gasoline to oil is listed on the LESCO oil label.)
3. Defects, malfunctions or failures resulting from abuse, misuse, modifications, alterations, improper servicing or maintenance, improper storage, use of unauthorized attachments, including, without limitation, failure to provide or perform required maintenance services as described in the Operator's Manual.
4. Tampering with engine speed governors or running engines above specified and recommended engine speeds.
5. Dirt, salt water corrosion, rust, varnish and moisture.
6. Operation of the Product with improperly serviced, damaged or removed air filter.
7. Failure to follow the set-up, pre-delivery service and adjustments outlined in the Operator's Manual.
8. Parts which are not warranted (This limited warranty does not cover parts which are normal wear or maintenance items, including, without limitation, spark plugs, filters, lubricants, engine tune-up parts, spark arrestor screen, cutting line and starter cords.)
9. Engine damage caused by the use of ether or any starting fluids.
10. Damage caused by the pressure of steam cleaning the Product.
11. Repairs or alterations made to the Product by an unauthorized party.

THIS LIMITED WARRANTY IS IN PLACE OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES. ANY IMPLIED WARRANTY, SUCH AS FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, IS EXCLUDED. REPAIR OR REPLACEMENT UNDER THIS LIMITED WARRANTY IS EXPRESSLY AGREED TO BE THE EXCLUSIVE REMEDY. LESCO, INC. WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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

HOW TO ORDER PARTS

Contact your LESCO Salesperson, OR phone us (use the numbers below), OR write us (use the address below). We will need the following information:

1. Your account number if available.
2. Your name and address and the address where you want the parts to be shipped.
3. The Model/Serial No. of the equipment.
4. The LESCO Part No. and the quantity desired (Please do not use reference numbers.)

NOTE: Inspect all shipments on receipt for damage or missing parts. File a claim with the carrier before accepting a damaged shipment.

We reserve the right to change designs, specifications and equipment at any time without notice and without incurring any obligations.

LESCO, Inc., 20005 Lake Road, Rocky River, Ohio 44116-1545
Toll Free (800) 321-5325 • In the Cleveland Area (440) 333-9250



3. DIAGNOSIS

Warranty services or repairs to the emission control system and availability of ISM original equipment parts shall be provided at an authorized LESCO service facility. The owner shall not be charged for diagnostic labor which leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at an authorized LESCO service facility and provided that such defective part is not the result of abuse, neglect or improper maintenance of the engine as described in the Operator's Manual.

4. CONSEQUENTIAL DAMAGES

ISM shall be liable for damages to other engine components caused by a failure under warranty of any warranted part.

D. WHAT IS NOT COVERED

1. ISM shall not be liable for failure of warranted emission control system parts or other parts caused by a failure under warranty of any warranted part due to any add-on part to the engine's emission control system which has not been approved by ISM. And, ISM disclaims any liability to cover failures of the emission control system when unauthorized add-on or modified parts are or have been added to the system.
2. ISM shall not be liable for failure of warranted emission control system parts or other parts caused by a failure under warranty of any warranted part due to the use of diesel or unleaded gasoline (less than 90 Octane) fuel; or any other fuel, which is not as recommended in the Operator's Manual and not commercially available in California, and use of such other fuel will invalidate this warranty.
3. ISM shall not be liable for failure of warranted emission control system parts or damages to other engine components caused by a failure under warranty when such defective part is the result of abuse, neglect or improper maintenance of the engine as described in the Operator's Manual.

E. HOW TO FILE A CLAIM

All claims for emission control warranty service including parts and labor can be filed with LESCO. It is not necessary for the engine owner to file a separate claim with ISM.

F. WHERE TO GET WARRANTY SERVICE

Repair or replacement of any California emission control warranted parts will be performed at no charge to the owner at an authorized LESCO servicing facility. To locate your nearest authorized LESCO servicing facility, call LESCO, Inc. toll free at 1-800-321-5325.

G. MAINTENANCE, REPLACEMENT AND REPAIR OF EMISSION CONTROL SYSTEM AND RELATED PARTS

Any ISM approved replacement part may be used in the performance of any warranty provided without charge to the owner if the part is still under the California emission control system warranty. Any replacement part that is equivalent in performance and durability may be used in non-warranty maintenance or repairs, and shall not reduce the warranty obligations of ISM.

H. EMISSION CONTROL SYSTEM WARRANTY PARTS LIST

The following parts are covered by this warranty if the maintenance procedures according to the instructions in the Operator's Manual are carried out:

- Carburetor
- Ignition system (ignition module)
- Spark plug
- Air filter element
- Insulator (intake manifold)
- Fasteners (for emission related parts)

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

I. MAINTENANCE STATEMENT

The engine owner is responsible for the performance of the required maintenance especially of those parts listed above, according to the instruction in the Operator's Manual.

California Emission Control Warranty Statement

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and Ishikawajima-Shibaura Machinery Co., Ltd. (ISM) are pleased to explain the emission control system warranty on your utility or lawn and garden equipment engine. In California, new utility and lawn and garden equipment engines must be designed, built and equipped to meet the State's stringent anti-smog standards. ISM must warrant the emission control system on your (utility or lawn and garden) equipment engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your (utility or lawn and garden) equipment engine.

Your emission control system include parts such as the carburetor and the ignition system.

Where a warrantable condition exists, LESCO will repair your utility or lawn and garden equipment engine at no cost to you including diagnosis, parts and labor (hereinafter such commitment is phrased "by LESCO").

MANUFACTURER'S (ISM) WARRANTY COVERAGE

The utility, lawn and garden equipment engines are warranted for two years. If any emission-related part on your engine is defective, the part will be repaired or replaced by ISM .

OWNER'S WARRANTY RESPONSIBILITIES

As the utility or lawn and garden equipment engine owner, you are responsible for the performance of the required maintenance listed in your Operator's Manual. ISM recommends that you retain all receipts covering maintenance on your engine, but ISM cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the said equipment engine owner, you should be aware, however, that ISM may deny you warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your engine to ISM or LESCO as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed thirty (30) days.

If you have any questions regarding your warranty rights and responsibilities, you should contact a LESCO Customer Service Representative at 1-800-321-5325.

WARRANTY COMMENCEMENT DATE

The warranty period commences on the date the engine powered utility, or lawn, or garden equipment is delivered to the first retail purchaser; or from the date the equipment is first rented, loaned or leased prior to a sale to the first purchaser.

LENGTH OF COVERAGE

ISM warrants the initial owner and each subsequent purchaser that the engine emission control system is free from defects in materials and workmanship which cause the failure of a warranted California emission control system part for a period of two years as described in "A" above.

WHAT IS COVERED

REPAIR OR REPLACEMENT OF PARTS

Repair or replacement of any California emission control warranted part will be performed at no charge to the owner at an authorized LESCO servicing facility for warranty service. To locate your nearest authorized LESCO servicing facility, call LESCO, Inc. toll free at 1-800-321-5325.

WARRANTY PERIOD

Any warranted part which is not scheduled for replacement as required maintenance in the written instructions of the Operator's Manual shall be warranted for the warranty period of two (2) years. If any such part fails during the period of coverage, it shall be repaired or replaced by an authorized LESCO service facility certified to accommodate such emission repairs, and by certain arrangements, ISM will be ultimately responsible for the expense of parts and labor. And, any such part repaired or replaced under the warranty shall be warranted for the remaining warranty period.

Any warranted part which is scheduled only for regular inspection as required in the written instructions of the Operator's Manual shall be warranted for a period of two (2) years. Any written instruction in the Operator's Manual which indicates "repair or replace as necessary" shall not reduce the period of warranty coverage.

Any such part repaired or replaced under warranty by an authorized LESCO service facility certified to accommodate such emission repairs, ISM will ultimately be responsible for the expense of parts and labor. And, any such part repaired or replaced under the warranty shall be warranted for the remaining warranty period.

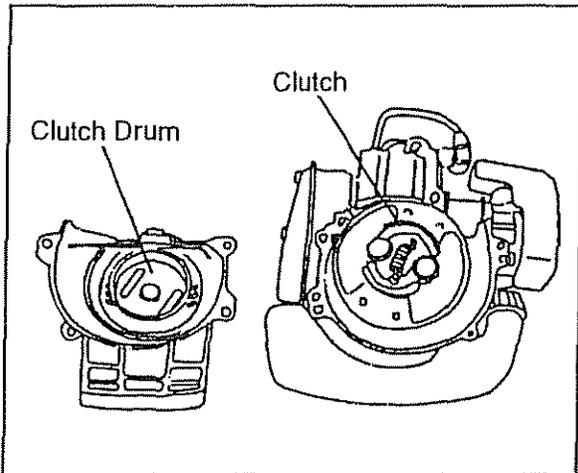
TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
No Fuel at the Carburetor	Fuel Filter Dirty Fuel Line Clogged Carburetor	Replace Clean See your LESCO Representative
No Fuel at the Cylinder	Carburetor	See your LESCO Representative
Muffler Wet with Fuel	Fuel Mixture is too Rich	Open Choke Clean/Replace Air Filter Adjust Carburetor See your LESCO Representative
No Spark at the Plug End of Wire	Ignition Switch Off Electrical Problem	Turn Switch On See your LESCO Representative
No Spark at the Spark Plug	Spark Gap Incorrect Covered with Carbon Fouled with Fuel Spark Plug Defective	Re-gap 0.022in.(0.55mm) Clean or Replace Clean or Replace Replace
Engine Does Not Crank or Turn Over	Internal Engine Problem	See your LESCO Representative
Engine Dies or Accelerates Poorly	Air Filter Dirty Fuel Filter Dirty Fuel Vent Plugged Spark Plug Carburetor Cooling System Plugged Exhaust Port Fouled Spark Arrestor Screen Plugged	Clean or Replace Replace Clean Fuel Vent Clean and Adjust or Replace Adjust Clean Clean Clean
No Rotation of Blade	Incorrect Mounting Twining of String or Grass Around Blade Axis Wear of Clutch Shoe or Drum	Remount Clean Replace
Grass Not Being Cut	Blade Not Mounted Properly	Remount Blade Properly
Excessive Vibration	Loosened Nut Securing the Blade Incorrect Mounting Bent or Damaged Blade Blade Out of Balance Loosened Bolt And Nut	Tighten Remount Replace Blade Replace Blade Tighten

MAINTENANCE

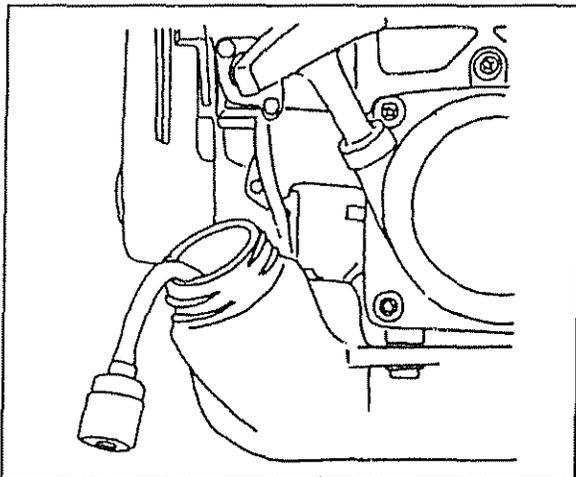
3. Inspect the gasket, and replace it if necessary.
4. Re-install the gasket and the muffler.
5. Replace the engine cover.

CLEANING THE CLUTCH AND CLUTCH DRUM.



1. Loosen the four screws and remove the fan housing.
2. Clean the dirty clutch and clutch drum.
3. Always replace a damaged clutch and clutch drum.

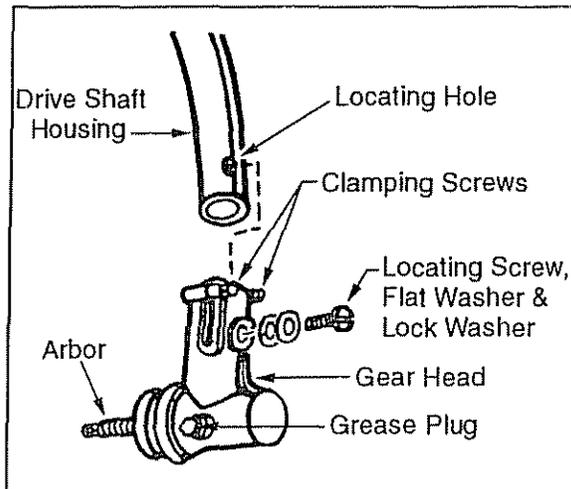
FUEL SYSTEM.



1. Change the fuel filter and pick up body every year.
2. Before storing your machine for a long period, drain and clean the fuel tank and run the engine until the carburetor is dry.

3. The fuel tank and the container in which the fuel mix is stored should be cleaned from time to time.

J. LUBRICATING THE GEAR HEAD.



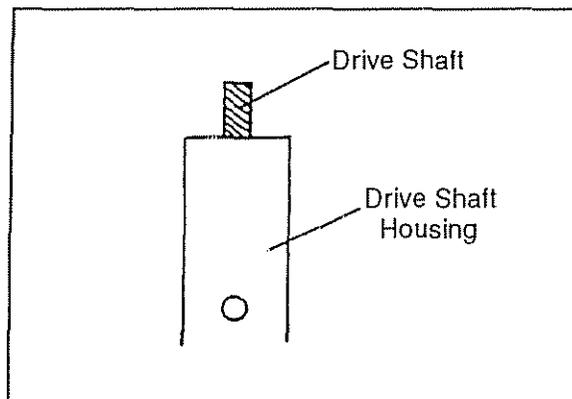
1. Remove the grease plug.
2. Check the level and add grease, if necessary, using a pressure pump. Leave about 5-10 g (1/4 oz.) for any expansion of grease.

NOTE:

Use a good quality lithium multipurpose grease. DO NOT overfill the gear head.

3. Tighten the grease plug firmly.

K. LUBRICATING THE DRIVE SHAFT.



1. Pull the drive shaft out of the drive shaft housing.
2. Use a good quality lithium multipurpose grease to coat any dry areas of the drive shaft. Do not apply too much grease. Never pump grease into the drive shaft housing.

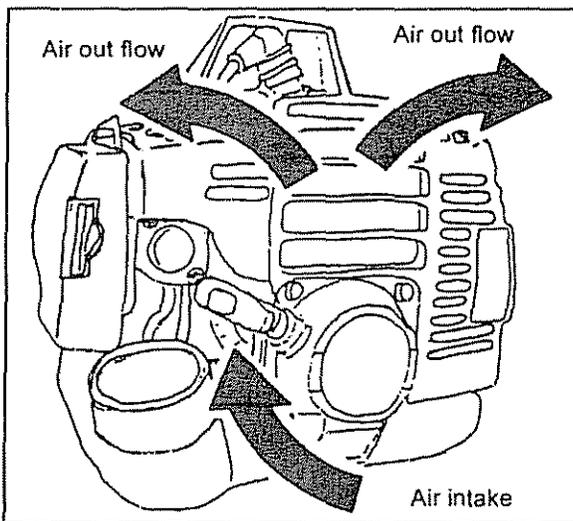
MAINTENANCE

E. COOLING SYSTEM MAINTENANCE.

The cooling system relies on cooling air entering the engine through the bottom engine grille located between the fuel tank and starter. The cooling fan pushes this air through the cylinder fin area and out the rear grille openings in the engine cover.

IMPORTANT

To maintain proper engine operating temperatures, cooling air must pass freely through the cylinder fin area. This flow of air carries combustion heat away from the engine.



Overheating and engine seizure can occur when:

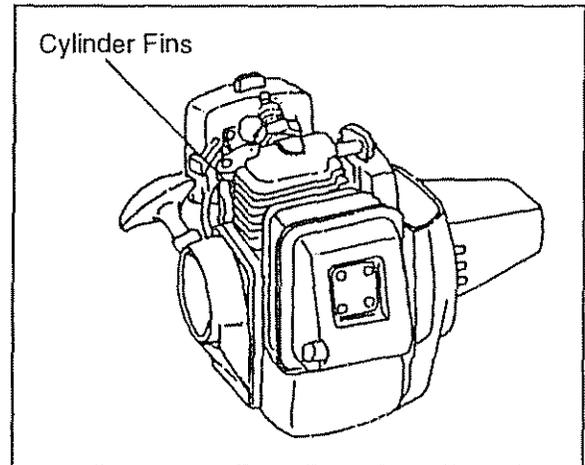
1. Air intakes are blocked, preventing cooling air from reaching the cylinder.
2. Dust and grass build up on the outside of the cylinder. This buildup insulates the engine and prevents the heat from leaving.

Removal of cooling passage blockages and cleaning of cylinder fins is considered "Normal Maintenance". Any resultant failure attributed to lack of maintenance is not warranted.

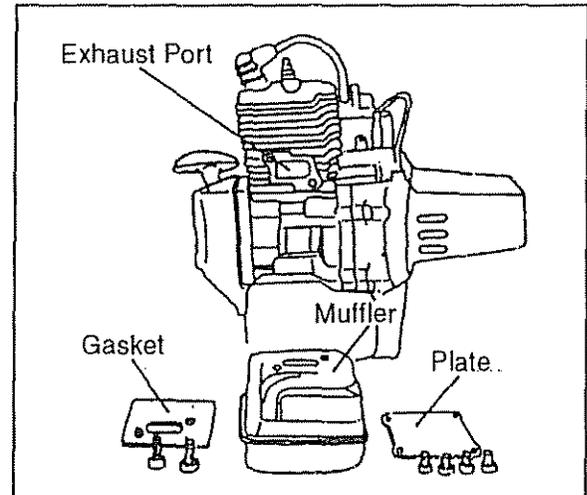
F. CLEANING THE CYLINDER FINS.

(Clean before use and check periodically)

1. Remove any dust and dirt from between the fins.
2. If greater access is needed to thoroughly clean the fins, remove the engine cover as illustrated.



G. CLEANING THE EXHAUST PORT.



1. Remove the muffler and gasket.
2. Place the piston at top dead center. Clean any deposits from the muffler and the cylinder exhaust port with a nonmetallic scraper.

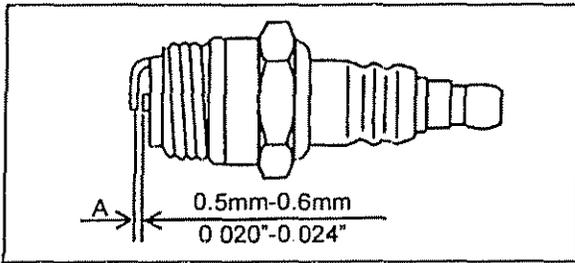
This procedure requires specialized engine service techniques and the proper tools. Contact the authorized LESCO representative where you bought your edger or your nearest LESCO Service Center.

IMPORTANT

Do not use a metal tool to scrape carbon from the exhaust port. Be careful not to scratch the cylinder or piston when cleaning the cylinder exhaust port.

MAINTENANCE

C. CHECKING THE SPARK PLUG.



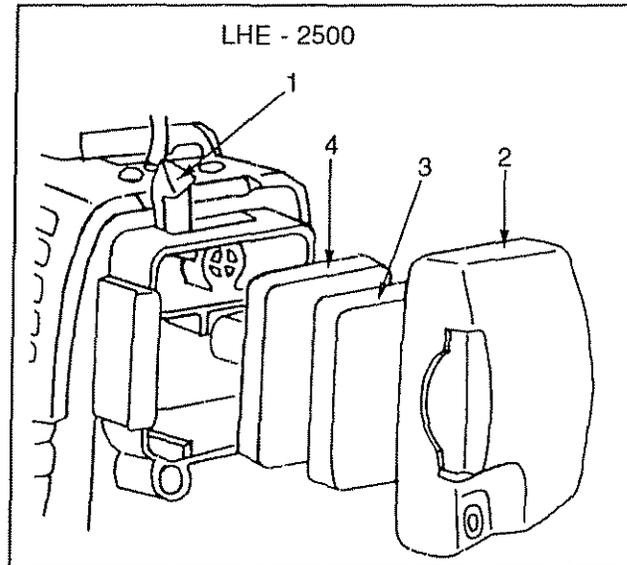
The wrong fuel mix (too much engine oil in the gasoline), a dirty air filter or unfavorable running conditions (mostly at low throttle) affect the condition of the spark plug. These factors cause deposits to form on the insulator nose which may result in faulty operation.

1. If the engine doesn't seem to have any power, is difficult to start or runs poorly at idling speed, first check the spark plug.
2. Remove the spark plug and see "Operation - 3. If the Engine Doesn't Start" on page 12.
3. Clean the dirty spark plug.
4. Check the electrode gap.
It should be 0.020in. - 0.024in. (0.5mm - 0.6mm)
Re-gap if necessary.
5. Use only a suppressed spark plug of the approved type:
ND W22MPR-U (LESCO No. 058125)
Correct the problems which caused the fouling of the spark plug:
Incorrect carburetor setting, too much oil in the fuel mix, dirty air filter, unfavorable running conditions, e.g. operating at partial load.

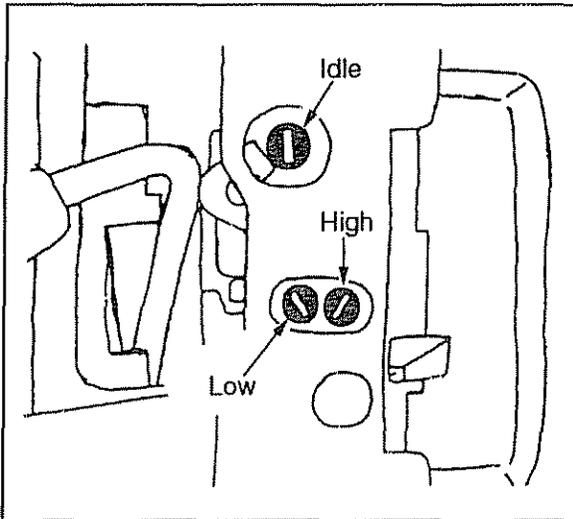
D. CLEANING THE AIR FILTER.

A dirty air filter reduces engine power, increases fuel consumption and makes starting more difficult.

If there is a noticeable loss of engine power:



1. Turn the choke lever (Ref. 1) to "CLOSE".
2. Remove the air filter cover (Ref. 2).
3. Remove the foam element (Ref. 3) and the felt element (Ref. 4).
4. Wash the elements in warm, soapy water and then dry.
5. Always replace a damaged foam element.
6. Fit the foam element in the filter cover.
7. Fit the felt element in the filter housing.
8. Fit the filter cover and engage it in position.



13. Adjusting the High Speed:

NOTE:

The engine must be at normal operating temperature when performing this adjustment.

Turn the high speed adjusting screw (Ref. High) counterclockwise 1-1/4 turns.

14. While running the engine at full throttle, turn the high speed adjusting screw (Ref. High) slowly clockwise until the engine runs smoothly without four stroking and the engine speed begins to drop.

IMPORTANT

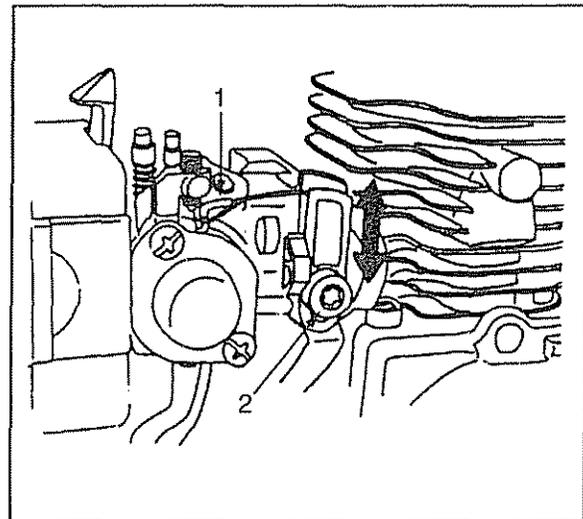
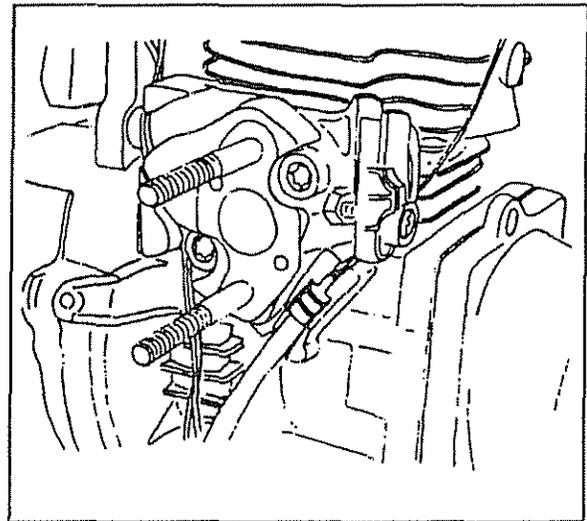
Do not run the engine on full throttle longer than 6 seconds to avoid damage to the engine during carburetor adjustment.

15. Turn the high speed adjusting screw (Ref. High) counterclockwise 1/8 turn to obtain optimum fuel for full power under load conditions. After the high speed adjustment has been completed, should the engine hesitate during acceleration from idle to full throttle, turn the high speed adjusting screw (Ref. High) an additional 1/16 to 1/8 turn in the counterclockwise direction.

NOTE:

The high engine speed should be 10,000 to 11,000 RPM.

B. THROTTLE WIRE ADJUSTMENT:



1. Maintain a wire end-play of about 1/16 inch (1-2mm) with the adjuster and fix it with the tightening bolt (Ref. 2).

**WARNING**

To reduce the risk of injury from loss of control, maintain the wire end-play at about 1/16 inch (1-2mm). If the wire end-play is not maintained, engine speed may be enough for the clutch to engage and turn the blade.

MAINTENANCE

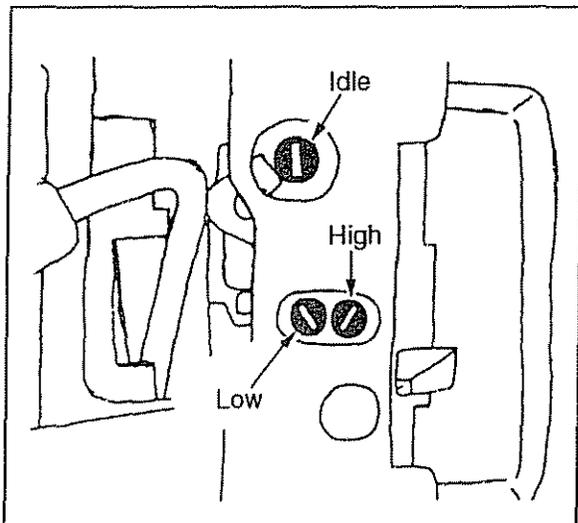
CARBURETOR ADJUSTMENT.

The carburetor is preset at the factory. This is the optimum setting under the barometric pressure and climatic conditions at the factory and is suitable for most operating sites.

It ensures that your machine will run smoothly, be fuel efficient, operate reliably and produce low emissions.

If the engine runs unsatisfactorily at high altitudes or at sea level, slight readjustment of the carburetor may be necessary:

1. Check the air filter and clean it if necessary.
2. Check the spark arresting screen (if fitted) and clean it if necessary.
3. Mount the blade.



4. Start the engine and look at the blade. If the blade rotates, adjust the idling speed. Turn the idle speed adjusting screw (Ref. Idle) counterclockwise until the blade stops rotating and then turn the screw clockwise about one half turn from that position.
5. Warm up the engine and then shut it off.

NOTE:

The idle speed adjusting screw controls the throttle opening at idle position and controls idle speed.

The low speed adjusting screw controls the volume of fuel/oil mixture at low engine speed. It also controls the supplementary fuel required to obtain smooth progression from idling to high speed.

The high speed adjusting screw controls the volume of fuel/oil mixture at full throttle.

IMPORTANT

The adjusting screws have sharp points. To avoid carburetor damage, do not use excessive force.

6. Turn the high (Ref. High) and low (Ref. Low) speed adjusting screws clockwise until seated lightly in the carburetor body.
7. Turn the low speed adjusting screw (Ref. Low) counterclockwise 1 turn.
8. Start the engine.

NOTE:

The idle speed adjusting screw (Ref. Idle) may have to be readjusted to keep the engine from stalling.

9. Adjusting the Low Speed:

Slowly turn the low speed adjusting screw (Ref. Low) clockwise and note the position when the engine speed begins to drop from lack of fuel.

10. Slowly turn the low speed adjusting screw (Ref. Low) counterclockwise and note the position when the engine speed begins to drop from too much fuel.

11. Set the low speed adjusting screw midway between these two points.

12. Adjusting the Idle Speed:

NOTE:

It is usually necessary to change the setting of the idle speed adjusting screw (Ref. Idle) after every correction to the low speed adjusting screw (Ref. Low).

Turn the idle speed adjusting screw (Ref. Idle) clockwise until a speed of 2,800-3,000 RPM is achieved and the engine idles without stalling.

MAINTENANCE SCHEDULE

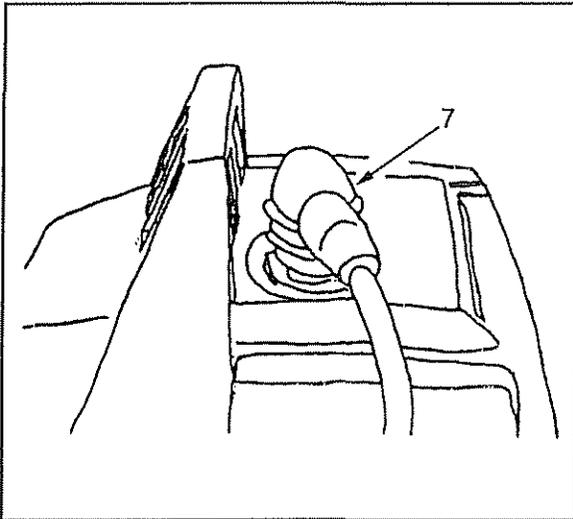
MAINTENANCE SCHEDULE							
PART	MAINTENANCE	BEFORE USE	MONTHLY	YEARLY	IF FAULTY	IF DAMAGED	SEE PAGE
Complete Machine	Visual Inspection (Condition, Leaks)	X					18
	Clean	X					
Throttle Control	Check Operation	X					11
Air Filter	Clean	X					17
	Replace		X			X	
Fuel Filter	Check					X	19
	Replace		X			X	
Spark Plug	Check/Adjust				X		17
	Replace			X	X	X	
Carburetor	Adjust			X	X		15-16
Cooling System	Clean	X					18
Muffler	Check		X				18
	Clean				X		
Fuel Leakage	Check	X					9
	Repair					X	
Fuel Lines	Check		X				20
	Replace					X	
Clutch and Clutch Drum	Check/Clean			X			19
	Replace					X	
All Accessible Screws and Nuts (Not Adjusting Screws)	Retighten	X					
Blade	Visual Inspection	X					8
	Replace					X	
	Check Tightness of Blade	X					
Gear Head Lubrication	Check		X				19
	Fill Full			X			
Drive Shaft Lubrication	Check		X				19
	Replenish			X			

NOTE:

Time intervals shown are a maximum. Actual use and your experience will determine the frequency of required maintenance.

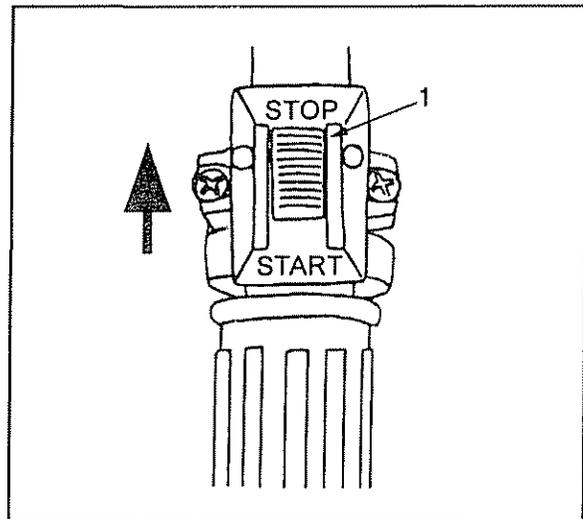
3. If the Engine Doesn't Start.

- a. If you did not move the choke lever to the **"FULL OPEN"** position quickly enough after the engine began to fire, the combustion chamber has flooded.



- b. Remove the spark plug wire (Ref. 7).
- c. Unscrew and dry off the spark plug.
- d. Set the ignition switch to **"STOP"**.
- e. Open the throttle fully .
- f. Pull the starter rope several times to clear the combustion chamber .
- g. Refit the spark plug and connect the spark plug wire.
- h. Set the ignition switch to **"START"**.
- i. Set the choke lever to **"FULL OPEN"**.
- j. Now start the engine.

C. STOPPING:



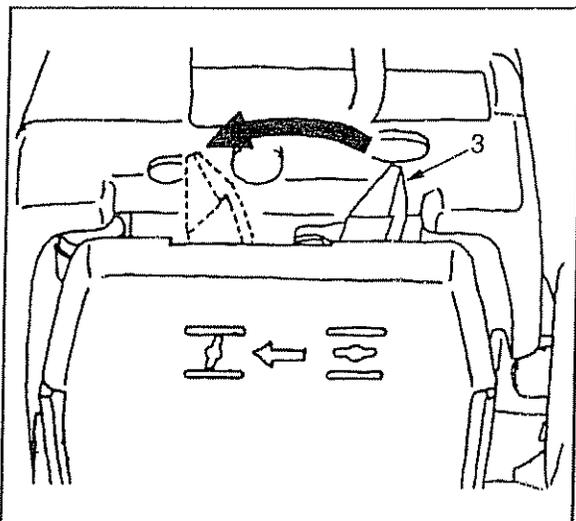
1. Return the throttle to the **"IDLE"** position and let the engine run for 2 or 3 minutes until it has cooled down.
2. Slide the ignition switch to the **"STOP"** position.



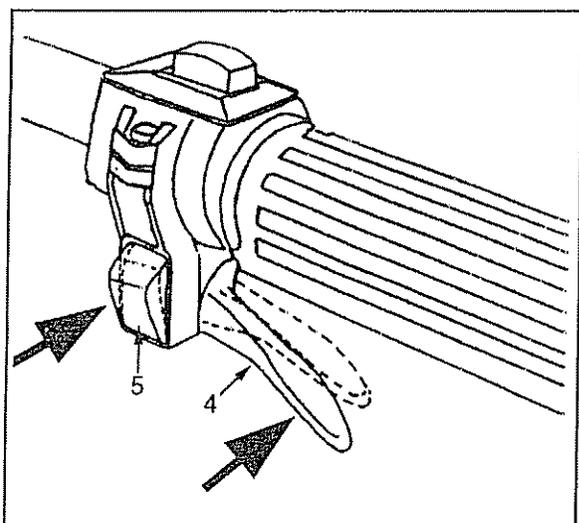
WARNING

Reread the Safety Precautions relating to "Operation" on Page 4.

OPERATION



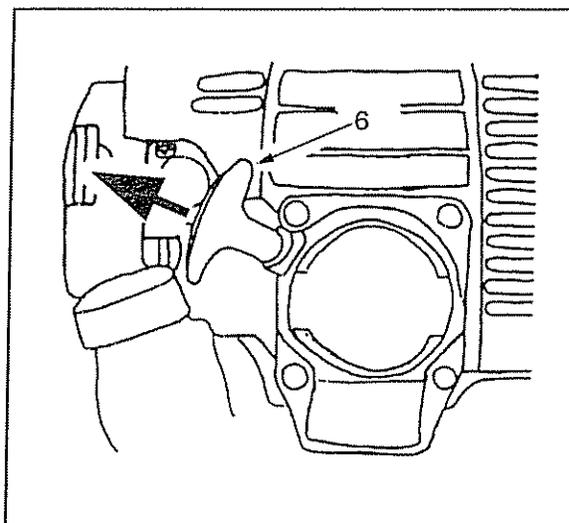
c. Close the choke (Ref. 3) completely.



d. Grasp the throttle trigger (Ref. 4) fully, then release it slowly while pushing the lock button (Ref. 5). This sets the throttle trigger at half-throttle.

e. Put the unit on the ground:
It must rest securely on the engine support and blade guard. Check that the blade is not touching the ground or any other obstacles.

f. Make sure you have a firm footing:
Hold the unit with your left hand and press it down firmly. Do not stand or kneel on the drive shaft.



g. Pull the starter grip:
When pulling the starting rope (Ref. 6), use short pulls, 1/2 to 2/3 of the rope length. Do not let the starter grip snap back - guide it slowly into the housing so that the starter rope can rewind properly .

h. Grasp the trigger immediately after the engine is started. This releases the lock button and automatically sets the engine to idle.

2. When the Engine is Warm.

Restarting the engine after it has been stopped.

- Slide the ignition switch to the "START" position.
- Push the priming pump several times.
- Set the choke lever to the "FULL OPEN" position.
- Pull the starter grip.

NOTE:

If the engine does not start after four pulls, use the cold start procedure.

OPERATION

A. OPERATING TIPS:

DANGER

During operation, frequently check the blade tightness and condition. A loose blade may cause the blade to bend, vibrate, break or come off the edger. This may cause serious or fatal injury. Replace bent, warped, damaged or dull blades immediately. Refer to "Installing and Adjusting the Blade" for proper procedures.

1. Water the area prior to edging to soften the ground and reduce dust.
2. Plan the direction of travel so that the edger will always be positioned on your right side and so that you walk on a hard, smooth surface when ever possible.
3. Adjust the blade depth to approximately 1/2 inch below the surface of the soil and so that the edger is in a comfortable position for the operator.
4. Accelerate the engine to full throttle and ease the blade down into the cut.

CAUTION

Be careful not to hit the concrete. Use extra caution around walls, foundations and fences. The chance of ricochet is increased when working in these areas.

5. The edger wheel should be the only part of the edger in contact with the concrete. Rubbing the blade guard bottom clamp on the concrete will cause excessive wear on this part.

B. STARTING:

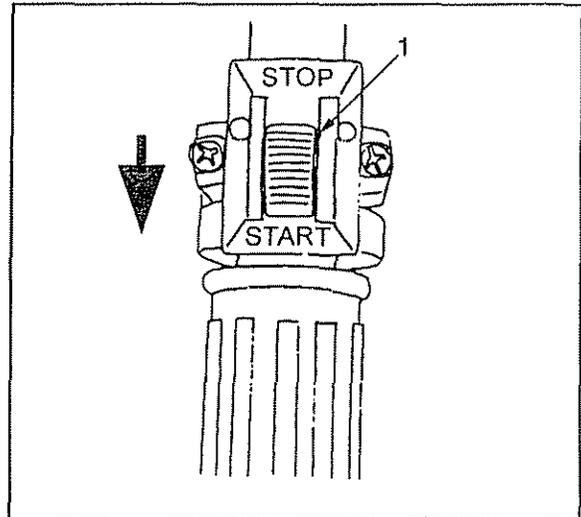
WARNING

Reread the Safety Precautions relating to "Starting" on Page 3.

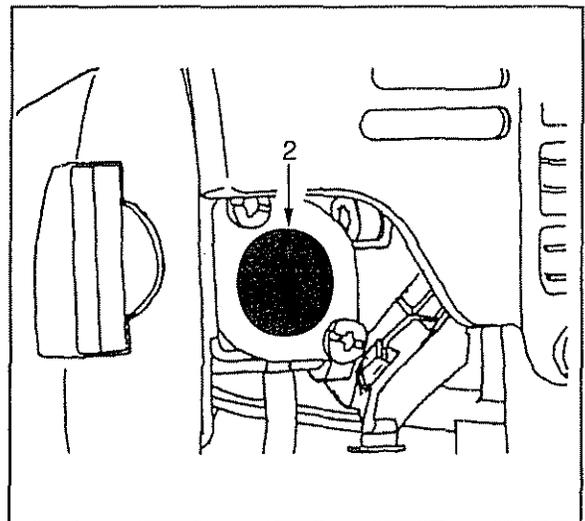
WARNING

When the engine starts, the blade may rotate even with the throttle trigger in the low-speed position possibly causing injury.

1. When the Engine is Cold.



- a. Slide the ignition switch (Ref. 1) to the "START" position.



- b. Push the priming pump (Ref. 2) several times.

FUELING INSTRUCTIONS



WARNING

Reread the Safety Precautions relating to "Handling Fuel" on Page 3.

The LESCO edger uses an oil-gasoline mixture as fuel. The engine is certified to operate on unleaded gasoline.

Use regular name-brand unleaded gasoline with a minimum octane number of 89. If the octane number of the regular grade gasoline in your area is lower use premium unleaded fuel. Fuel with a lower octane number may result in preignition (causing "pinging") which is accompanied by an increase in engine temperature. This, in turn, increases the risk of piston seizure and damage to the engine.

The chemical composition of the fuel is also important. Some fuel additives not only detrimentally affect elastomers (carburetor diaphragms, oil seals, fuel lines etc.), but magnesium castings as well. This could cause running problems or even damage the engine. For this reason it is essential that you use only name-brand fuels!

IMPORTANT:

Do not use any gasoline containing alcohol. Serious engine or fuel system damage will occur.

Use only quality two-stroke, air-cooled engine oil with the classification TC. The mix ratio is 25-30:1.

We recommend LESCO brand 2-Stroke Engine Oil (LESCO No. 060640) since it is specially tested for use in all LESCO two-stroke engines. The mix ratio is 50:1

IMPORTANT:

Do not use BIA or TCW (two-stroke water cooled) mix oils!

Directions for Mixing: (See Chart for Amounts)

1. Put one-half of the gasoline in a safety approved container.
2. Add the proper amount of two-stroke oil and mix thoroughly.
3. Add the remainder of the gasoline and mix thoroughly.

Take care when handling gasoline. Avoid direct contact with the skin and avoid inhaling fuel vapor.

The gasoline container should be kept tightly closed in order to prevent any moisture getting into the mixture.

Only mix sufficient fuel for a few days work, not to exceed 30 days of storage. Store in a safety approved fuel container only.

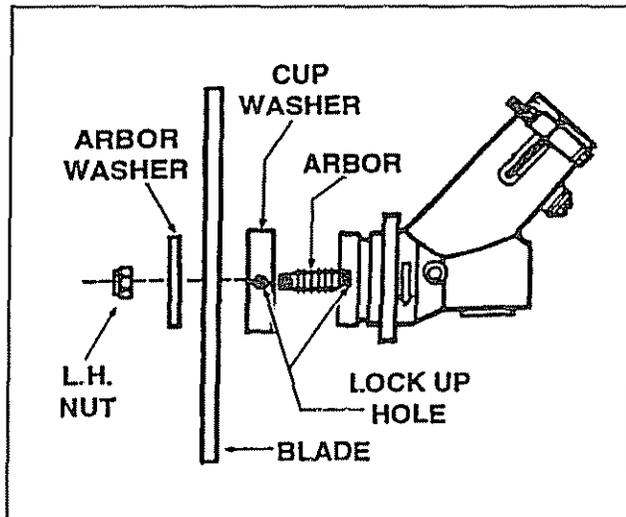
Fuel Mixes:

Gasoline	Oil (50:1) (LESCO 2-Stroke Engine Oil)	Oil (25-30:1) (Other Name- Brand TC Oils)
Liters (U.S. gal.)	Liters (U.S. fl. oz.)	Liters (U.S. fl. oz.)
1 (1)	0.02 (2.6)	0.04-0.033 (5.12-4.27)
10 (2.5)	0.2 (6.4)	0.4-0.33 (12.8-10.66)
20 (5)	0.4 (12.8)	0.8-0.67 (25.6-21.33)

Dispose of empty two-stroke oil containers at authorized disposal locations only.

INSTALLING AND ADJUSTING THE BLADE

A. INSTALLING THE BLADE ONTO THE GEAR HEAD (LEFT HAND THREADS):



1. Assemble the cup washer, blade, arbor washer and L.H. nut in sequence as shown.
2. Slide the cup washer onto the arbor. The splines in the cup washer will fit onto the splines on the arbor.
3. Rotate the cup washer until the hole in the cup washer is aligned with the slot in the lower head.
4. Insert an allen wrench or similar tool through the hole in the cup washer and slot in the lower head. This will hold the arbor from turning.
5. Mount the blade, the arbor washer and the L.H. nut on the arbor and securely tighten the nut. (Left hand threads.)

B. ADJUSTING THE BLADE:

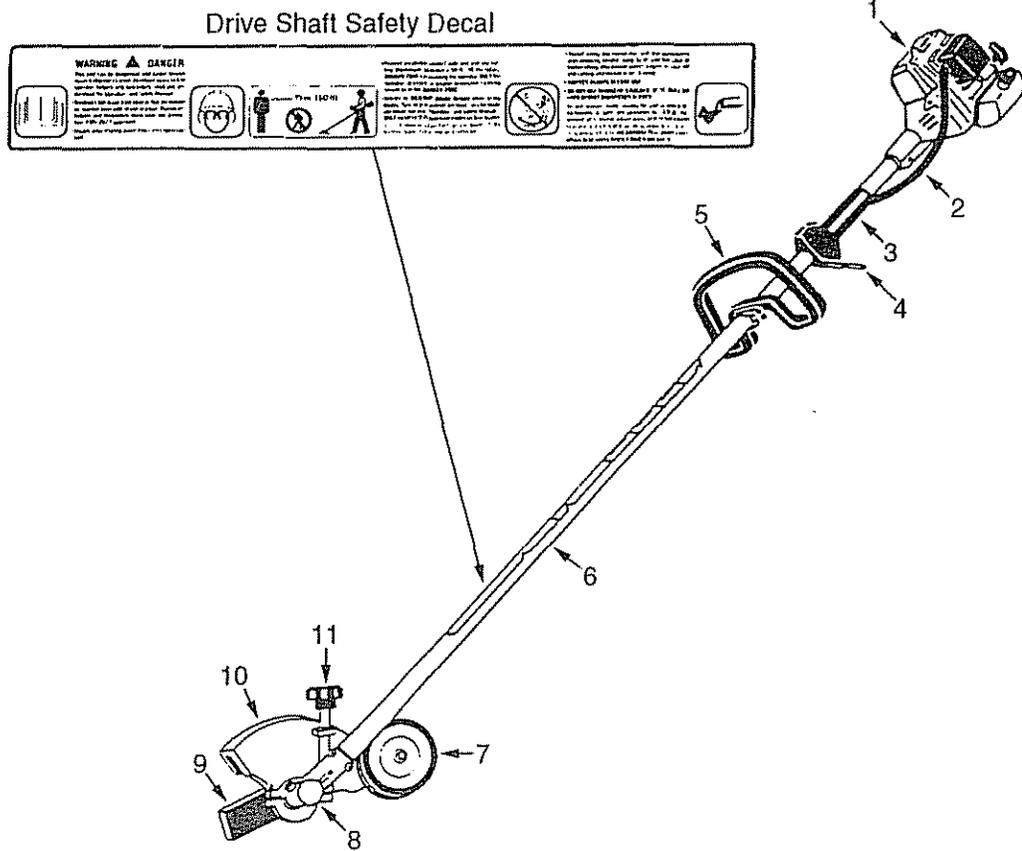


DANGER

Never adjust the blade or allow yourself to come in contact with the blade while the engine is running.

1. Turn off the engine and make sure the blade has come to a complete stop.
2. Loosen the adjustment knob. Rotate the blade guard toward the operator to reduce the depth of the cut or away from the operator to increase the depth of cut.
3. Tighten the adjusting knob enough to securely clamp the blade guard in position.

PARTS DESCRIPTION



REF NO.	DESCRIPTION
1	Engine
2	Throttle Wire
3	Grip
4	Throttle Lever
5	Tear Drop Handle
6	Drive Shaft Housing

REF NO.	DESCRIPTION
7	Wheel
8	Gear Head
9	8" Strait Cut Blade
10	Blade Guard
11	Adjustment Knob

SPECIFICATIONS

Model		LHE - 2500 Loop Handle	
Length	(mm)	1783	
	(in.)	70.1	
Width	(mm)	260	
	(in.)	10.2	
Height	(mm)	264	
	(in.)	10.4	
Weight	(kg)	5.1	
	(lb.)	11.2	
Type of Engine		Air-cooled, two-stroke, single cylinder gasoline engine.	
Bore	(mm)	33	
	(in.)	1.3	
Stroke	(mm)	30	
	(in.)	1.18	
Displacement	(cc)	25.6	
	(cu. in.)	1.56	
Engine Power	(kw/rpm)	0.90/7500	
Carburetor		All position diaphragm carburetor with priming pump.	
Exhaust System		Spark arrester muffler.	
Ignition System		Flywheel magneto. (Electronic)	
Spark Plug		ND W22MPR-U (LESCO No. 058125)	
Fuel		Mixed (gasoline and oil).	
Fuel/Oil Ratio		50:1 Using LESCO 2-Stroke Engine Oil. (LESCO No. 050633) 25-30:1 Using Other Brands of TC Oil.	
Fuel Tank Capacity	(lit.)	0.55	
	(U.S. fl. oz.)	18.6	

DECAL INFORMATION

WARNING

LOCATE THE SAFETY DECALS ON YOUR EDGER. MAKE SURE THE DECALS ARE LEGIBLE AND THAT YOU UNDERSTAND AND FOLLOW THE INSTRUCTIONS ON THEM.

BLADE GUARD DECAL:



SHAFT DECALS:



This edger can be dangerous and cause serious injury if improperly used. To reduce injury risk to operator, helpers and bystanders, read and understand the Operator's Manual.



Blindness can occur from objects that are thrown or ricochet even with a shield in place. Operators, helpers and by-standers must wear ANSI Z87.1 approved eye protection.

Always wear hearing protection when operating an edger.

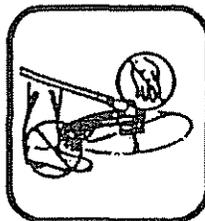


Prevent accidental contact with the edger and the blade. Maintain a 50 ft. (15m) radius, **DANGER ZONE** surrounding the operator. **ONLY** the operator, dressed in proper protective clothing should be in the **DANGER ZONE**.

SHAFT DECALS: (Continued)



Beware of **KICKOUT (blade thrust)** when using blades. Special precautions are necessary for blade operation, see your Operator's Manual. Install **ONLY** LESCO approved blades on LHE model edgers equipped with a proper blade guard, cup washer, arbor washer, blade nut loop handle and shoulder harness.



The blade does not stop immediately after releasing the throttle. Keep hands and feet clear of the blade unless the engine is shut off and the blade is not moving.

INSPECT BLADES BEFORE USE.

DO NOT USE BENT, WARPED, DAMAGED, DULL, OR IMPROPERLY SHARPENED BLADES.

Do not remove guards or decals, modify the unit or install unapproved attachments or parts. Approved attachments and replacement Operator's Manuals are available from your LESCO representative or by writing: LESCO, INCORPORATED, 20005 LAKE ROAD, BOX 16915, ROCKY RIVER, OHIO 44116.

SAFETY PRECAUTIONS

OPERATION:

1. Work carefully.
2. To reduce the risk of injury from thrown objects or blade contact, never operate the edger without a properly mounted blade guard.
3. Operate the edger under good visibility and daylight conditions only.
4. Always hold the edger firmly with both hands. Wrap your fingers tightly around the handles, keeping the handles cradled between your thumb and forefinger. Keep your hands in this position, to have your edger under control at all times.
5. Make sure your edger handles and grips are in good condition and free of moisture, pitch, oil or grease.
6. Never attempt to operate the edger with one hand. You might lose control of the edger resulting in serious or fatal injury.
7. To reduce the risk of bodily injury resulting from loss of control and contact with the blade, use of a shoulder harness is recommended.
8. Before edging, inspect the area for stones, glass, pieces of metal, trash or other solid objects. The blade could throw objects of this kind.
9. This edger is to be used normally at ground level with the blade perpendicular to the ground. Using the edger above ground level or with the blade parallel to the ground may increase the risk of injury, since the blade is more fully exposed and the edger may be more difficult to control. Never use your edger as a hedge trimmer.
10. When using the edger, avoid cutting close to fences, sides of buildings, tree trunks, stones or other such objects that could cause the edger to kick out or could cause damage to the blade.
11. Do not use the starting throttle lock when you are edging as you do not have control of the engine speed. For the proper use of the throttle lock, see "Starting" in the Operation Section.
12. If the blade or blade guard becomes clogged or stuck, always turn off the engine and make sure the blade has stopped, before cleaning. Grass, weeds, etc. should be cleaned from the blade guard at regular intervals.
13. During cutting, check the tightness and the condition of the blade at regular intervals. Remember, the blade nut has left hand threads. If the behavior of the blade changes, stop the engine immediately, and check the nut securing the blade for tightness and the blade for damage.
14. A loose blade may cause the blade to bend, vibrate, break or come off the edger, which may result in serious or fatal injury. Make sure that the blade is properly tightened. Use a wrench of sufficient length to obtain the proper torque. If the blade loosens after being properly tightened, stop work immediately. The blade nut may be worn or damaged and should be replaced. Never use unauthorized parts to secure the blade. If the blade continues to loosen, see your LESCO representative. Never use an edger with a loose blade.
15. Replace bent, warped, damaged or dull blades immediately. Such tools may vibrate at high speed and cause serious or fatal injury.
16. To reduce the risk of personal injury from loss of control, do not use an incorrect idle adjustment. At correct idle speed, the blade should not move. For instructions on adjusting the idle speed, see "Carburetor Adjustment" in the Maintenance Section.
17. Never touch a rotating blade with your hand or any part of your body. It continues to rotate for a short period after the throttle trigger is released.
18. Always turn off the engine and make sure the blade has stopped before putting the edger down.

SAFETY PRECAUTIONS

PREPARATION FOR THE USE OF THE EDGER:

1. Never modify the edger in any way. Only attachments supplied by LESCO or expressly approved by LESCO for use with the specific LESCO edger models are authorized. Although certain unauthorized attachments are usable with the LESCO edger, their use may, in fact, be extremely dangerous.
2. When transporting your edger in a vehicle, properly secure it to prevent turnover, fuel spillage and damage to the edger.
3. The use of a shoulder harness is recommended when using a rigid blade.
4. Adjust the shoulder harness and hand grips to suit your size before starting work.
2. Always check your edger for proper condition and operation before starting, particularly the throttle trigger, throttle trigger interlock, stop switch, blade, blade guard and harness.
3. The throttle trigger must move freely and always spring back to the idle position. The blade must be properly tightened and in safe operating condition. Inspect for loose parts (nuts, screws, etc.).

HANDLING FUEL: The LESCO edger uses an oil-gasoline mixture for fuel.

1. Gasoline is an extremely flammable fuel. If spilled and ignited by a spark or other ignition source, it can cause fire, serious burn injury and property damage. Use extreme caution when handling gasoline or an oil-gasoline fuel mixture.
2. Do not smoke or bring any fire or flame near the fuel.
3. Fuel your edger outdoors or in a well-ventilated area.
4. Select bare ground for fueling and move at least 10 feet (3 m) from the fueling spot before starting the engine.
5. Gasoline vapor pressure may build up inside the gas tank of a two cycle engine depending on the fuel used, the weather conditions, and the venting system of the tank. In order to reduce the risk of personal injury from escaping gas vapor and fumes, remove the fuel filler cap on your edger carefully so as to allow any pressure buildup in the tank to release slowly.

6. Never remove the fuel filler cap while the engine is running.
7. Unit vibrations can cause an improperly tightened fuel cap to loosen or come off permitting fuel to spill. In order to reduce the risk of fuel spillage and fire, tighten the fuel cap by hand with as much force as possible.
8. Wipe off any spilled fuel before starting your edger.
9. Check for fuel leakage while refueling and during operation. If fuel or oil leakage is found, do not start or run the engine until the leak is fixed and spilled fuel has been wiped away.
10. If fuel spills on your clothing, change your clothing immediately.

CARBON MONOXIDE HAZARDS:

1. If you operate the edger in an area that is confined, or even partially enclosed, the air you breathe could contain a dangerous amount of exhaust gas. To keep exhaust gas from building up, provide adequate ventilation.
2. The exhaust gas contains carbon monoxide, a poisonous, colorless and odorless gas. Breathing the exhaust gas can cause loss of consciousness and may lead to death.

STARTING: Your edger is a one-person machine.

1. Start and operate your edger without assistance. When starting, place the edger on firm ground or a solid surface in an open area. Maintain good balance and secure footing.
2. To reduce the risk of injury from loss of control, be absolutely sure that the blade is clear of you and all other obstructions and objects, including the ground when starting, because when the engine starts, the engine speed will be fast enough for the clutch to engage and turn the blade.
3. When you pull the starter grip, do not wrap the starter rope around your hand. Do not allow the grip to snap back, but guide the starter rope to rewind properly. Failure to follow this procedure may result in injury to your hand or fingers and may damage the starter mechanism.

SAFETY PRECAUTIONS

GENERAL:

1. It is important that you read, fully understand and observe the following safety precautions and warnings. Read the Operator's Manual and the safety instructions periodically.
2. Do not lend or rent out your edger without the Operator's Manual. Be sure that anyone using your edger understands the information contained in this Operator's Manual.
3. Careless or improper use of this edger may cause serious or even fatal injury.
4. The use of the edger can be hazardous. If the rotating blade comes in contact with your body, it will cut you. When it comes in contact with solid foreign objects such as rocks or bits of metal, it may fling them directly or by ricochet in the direction of bystanders or the operator.
5. LESCO does not recommend the use of rigid blades when cutting in stony areas. Thrown objects or damaged blades may result in serious or fatal injury to the operator or bystanders.

PHYSICAL CONDITION: You must be in good physical condition and mental health and not under the influence of any substance (drugs, alcohol, etc.) which might impair vision, dexterity or judgment. Do not operate the edger when you are fatigued.

1. Be alert - if you get tired while operating your edger, take a break. Fatigue may result in loss of control. Working with the edger can be strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating the edger.
2. Prolonged use of the edger (or other machines) exposing the operator to vibrations may produce whitefinger disease (Raynaud's phenomenon) or carpal tunnel syndrome. These conditions reduce the hand's ability to feel and regulate temperature, produce numbness and burning sensations and may cause nerve and circulation damage and tissue necrosis. Antivibration systems do not guarantee that you will not sustain whitefinger disease or carpal tunnel syndrome. Therefore, continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

PROTECTIVE CLOTHING: Edger operation can cause serious injury to eyes, ears and body. The blade guard provided with your edger may not protect the operator from all foreign objects (gravel, glass, wire, etc.) thrown by the rotating blade. Thrown objects may also ricochet and strike the operator.

1. Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loose-fitting jackets, scarfs, neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become caught on branches, brush or moving parts of the unit. Wear long pants made of heavy material to protect your legs. **DO NOT WEAR SHORTS.**
2. To reduce the risk of injury to your eyes, never operate the edger unless wearing goggles or properly fitted safety glasses with adequate top and side protection complying with ANSI Z 87.1.
3. To reduce the risk of injury to your face LESCO recommends that you also wear a face shield or face screen over your goggles or safety glasses.
4. Edger noise may damage your hearing. Wear sound barriers (ear plugs or ear muffers) to protect your hearing. Continual and regular users should have their hearing checked regularly.
5. Protect your hands with gloves when handling the edger. Heavy-duty, nonslip gloves improve your grip and protect your hands.
6. Good footing is most important in edger work. Wear sturdy boots with nonslip soles. Steel-toed safety boots are recommended.
7. Wear an approved safety hard hat to reduce the risk of injury to your head.

PROTECTING OTHERS:

1. Minors should never be allowed to use the edger.
2. Spectators, children, fellow workers and animals must be warned to stay back 50 feet (15m) while the edger is in use. Stop the engine and the blade immediately if you are approached.
3. People working in the area near you should wear the same protective equipment as the operator.

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FOREWORD

This Operator's Manual contains safety precautions and operating procedures for the LESCO edger. You must read and understand this Operator's Manual and especially the Safety Precautions for proper and safe operation.

LESCO's philosophy is to continually improve all of its products. As a result, engineering changes and improvements are made from time to time. If the operating characteristics or the appearance of your edger differ from those described in this Operator's Manual, please contact your LESCO representative for information and assistance. Contact your LESCO representative if you do not understand any of the instructions in this manual.

Although hazard control and accident prevention are partially dependent upon the design and configuration of the edger, these factors are also dependent upon the awareness, concern, prudence and proper training of the personnel involved in the operation, transport, maintenance and storage of the edger.

 This symbol accompanied by the words **DANGER, WARNING** or **CAUTION** calls attention to an act or a condition which can lead to serious personal injury or even death.

IMPORTANT:
This enclosed message provides information necessary for the protection of the unit.

NOTE:
This enclosed message provides tips for use, care and maintenance of the unit.

 **WARNING** 

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

LHE - 2500

Edger

Operator's Manual