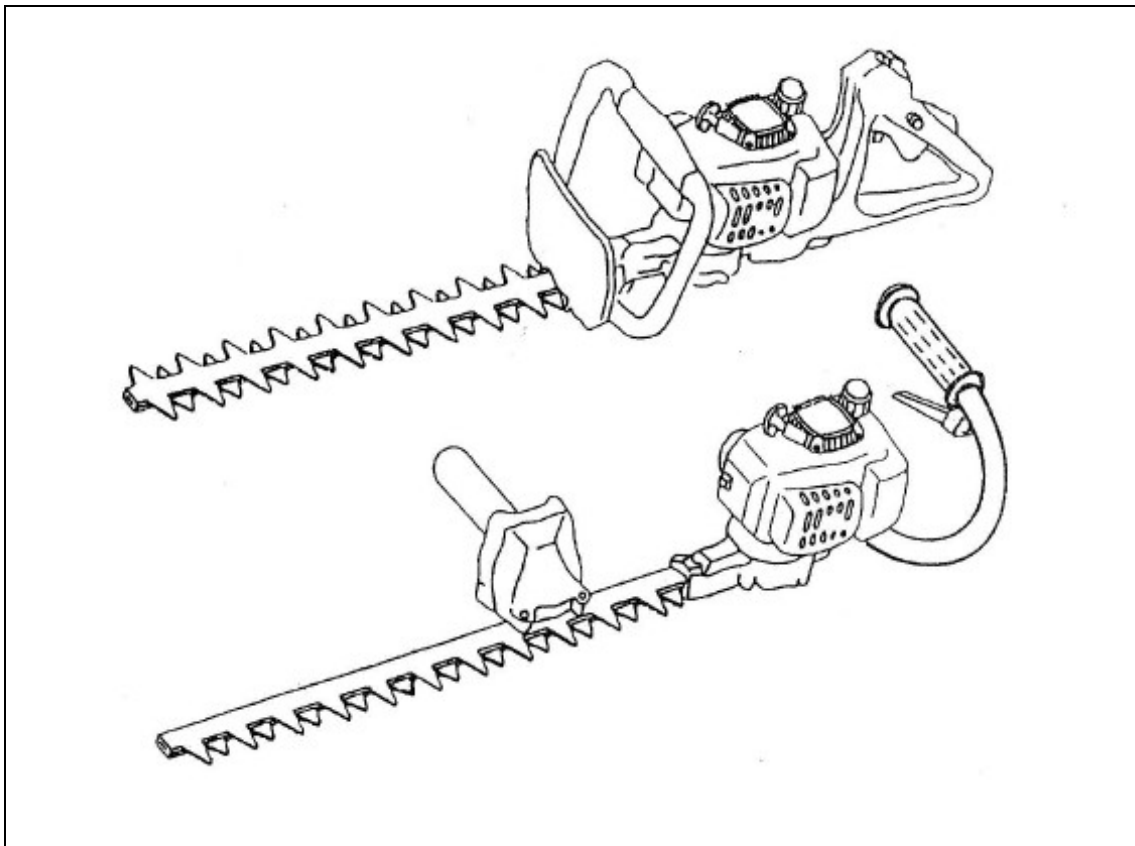


NAKAYAMA®

GARDEN TOOLS EXPERT

INSTRUCTION MANUAL PH2300



WARNING:

To reduce the RISK of injury, user must read and understand
The instruction manual before using the Hedge Trimmer.

Manufacturer reserves the right to change specifications
Without notice.

Specifications may differ from country to country.

Do only hand over the Hedge Trimmer together with this manual.

Thank you very much for selecting the MOWERLAND Hedge Trimmer. We are pleased to be able to offer you the MOWERLAND Hedge Trimmer which is the result of a long development program and many years of knowledge and experience.

The Hedge Trimmer models HT230B combines the advantages of state-of-the-art technology with ergonomic design, they are light weight. Handy, compact and represent professional equipment for a great variety of applications.

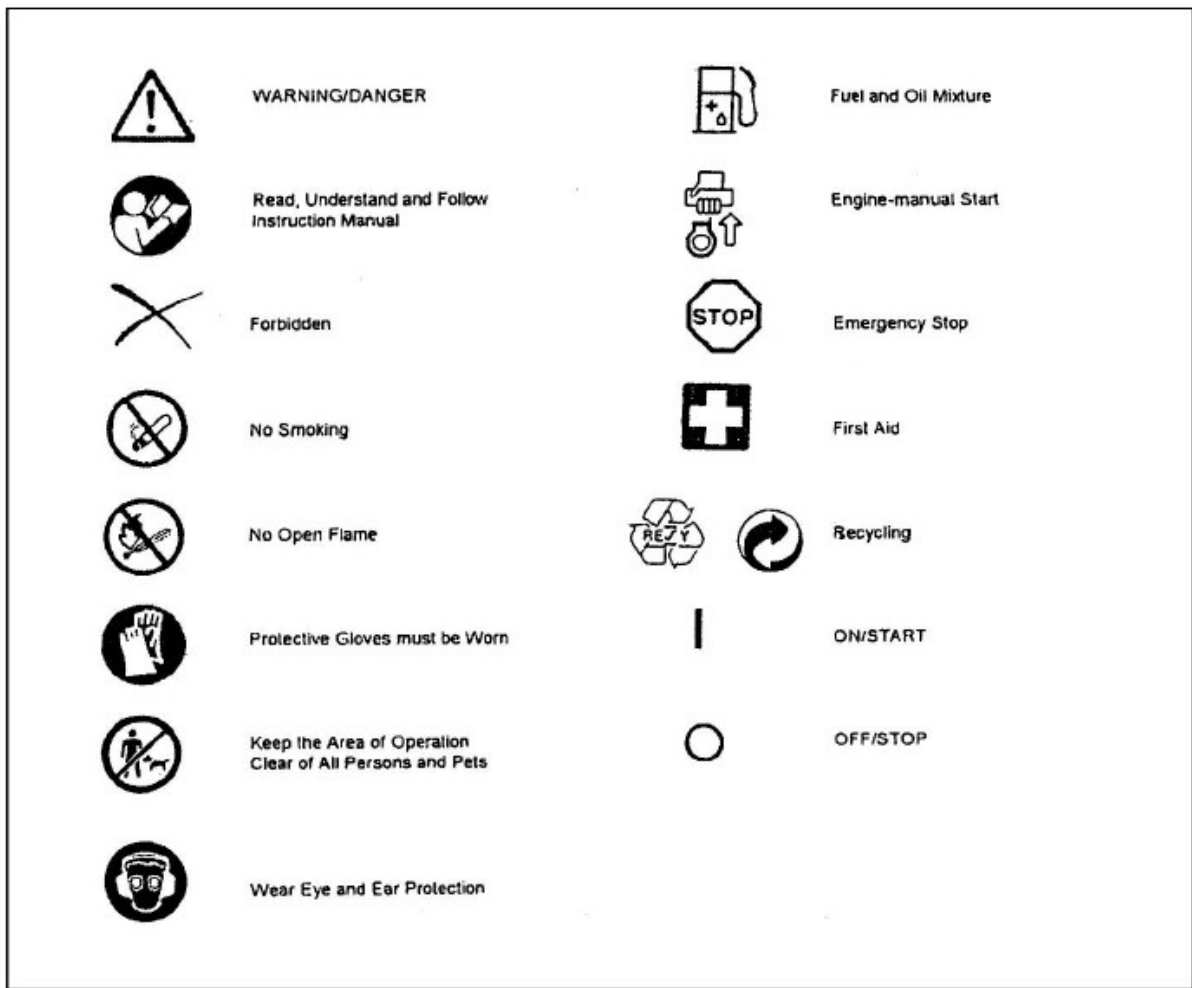
For your safety and best tool performance, be sure to read, understand and follow all the safety and operating procedures listed in the instruction manual before operation.



SYMBOLS

It is very important to understand the following symbols when reading this instructions manual.

Table of Contents	Page
Symbols.....	2
Safety instructions.....	3-6
Specification.....	6
Name of major parts.....	7
Fuel/Refueling.....	8-9
Precautions before stating.....	9-10
Starting the machine.....	10
Stopping the machine.....	10
Operation of the machine.....	11
Maintenance instructions.....	12-14
Storage.....	15
Maintenance schedule.....	15
Fault location.....	15



SAFETY INSTRUCTIONS

General Instructions

-This machine can cause serious injuries if used incorrectly.

To ensure correct operation, users have it read this instruction manual to make themselves familiar with the handling of the Hedge Trimmer. Users insufficiently informed will risk danger to themselves as well as others due to improper handling.(1)

-It is recommended only to loan the Hedge Trimmer to people who have proven over the instruction manual

-First-time users should ask the dealer for basic instructions to familiarise themselves with the handling of an engine powered Hedge Trimmer.

-Children and young persons aged under 18 years must not be allowed to operate the Hedge Trimmer. Persons over the age of 16 years may however use the device for the purpose of being trained only while under the supervision of a qualified trainer.

-Use the Hedge Trimmer with the utmost care and attention.

-Operate the Hedge Trimmer only if you are in good physical condition .Perform all work calmly and carefully. The user has to accept

liability for others.

-Never use the Hedge Trimmer after consumption of alcohol or drugs, or if feeling tired or ill (2)

Intended use of the machine

-The Hedge Trimmer is only designed for the purpose of trimming bushes and hedges, and must not be used for any other purpose. Do not abuse the Trimmer.

Personal protective equipment

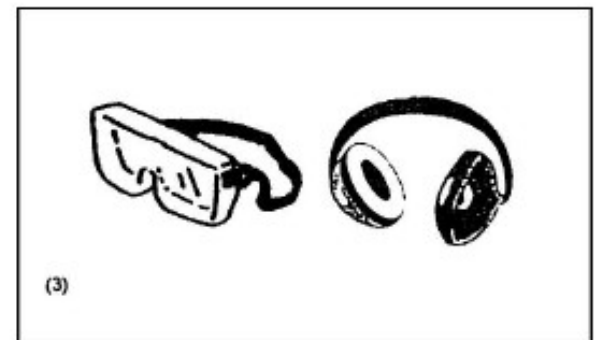
-The blade cover must be fitted when transporting the machine.

-The clothing worn should be functional and appropriate, i.e. it should be tight-fitting but not cause hindrance. Do not wear jewelry or loose clothing which could become entangled with bushes or shrubs, or the machine.

-In order to avoid eye, hand or foot injuries as well as to protect your hearing the following protective and protective clothing must be used during operation of the

Hedge Trimmer.

- Always wear safety goggles for eye protection that meets ANSI Z87.1.
- Wear adequate noise protection equipment to avoid hearing impairment, ear muffs, ear plugs, etc. (3)
- Wear proper clothing to protect legs and other exposed parts of your body. (4)
- Gloves made of thick leather are part of the prescribed equipment and must always be worn during operation of the Hedge Trimmer. (4)
- When using the Hedge Trimmer, always wear sturdy shoes with a non-slip sole. This protects against injuries and ensures a good footing. (4)



Starting up the Hedge Trimmer

-Please make sure that there are children or other people within a working range of 50 feet or 15 meters (5). Also pay attention to any animals the working vicinity.

-Before operating, always check that the Hedge Trimmer is safe for operation:

Check the security of the throttle lever The throttle lever should be checked for smooth and easy action Check for proper functioning of the throttle lever lock. Check for clean and dry handles and test the function of the STOP switch Keep handles free of oil and fuel

Start the Hedge Trimmer only in accordance with the instruction.

Do not use any other methods for starting the engine (6)!

-Use the Hedge Trimmer only for applications specified

-Start the Hedge Trimmer engine only after entire assembly is done Operation of the Hedge Trimmer is permitted only after all the appropriate accessories are attached!

-Before starting, make sure that the cutter blade will not contact any objects such as branches stones etc.

-The engine is to be stopped immediately if there are any engine problems.

-When working with the Hedge Trimmer. Keep both hands On handles always wrap your fingers tightly around the handle, keeping the control handle cradled between your thumb and forefinger. Keep your hand in this position to have your machine under control at all times. Make sure your control handles is in good condition free of moisture, pitch, oil or grease.

Always ensure a safe, well-balances footing

-Only use outdoors.

-Operate the Hedge Trimmer in such a manner as to avoid inaction of the exhaust gases. Never run the engine in enclosed rooms(risk of suffocation and gas poisoning). Carbon monoxide is an odorless gas. Always ensure there is adequate ventilation.

-Stop the engine when resting and when leaving the Hedge Trimmer unattended. Place it in a safe location to prevent danger to others. Setting fire to combustible materials or damage to the machine.

-Never lay down the not Hedge Trimmer onto dry grass or onto any combustible materials.

-Never operate the engine with a faulty expanse muffler.

-Stop the engine during transport (7)

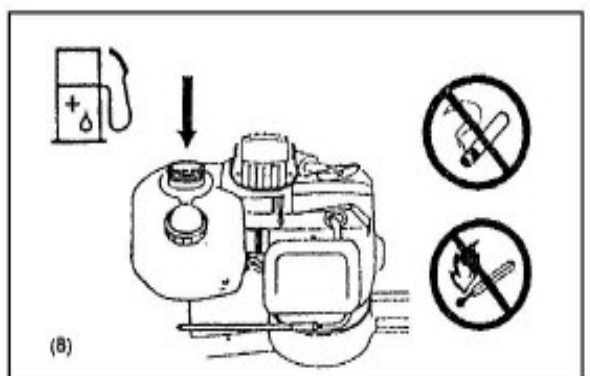
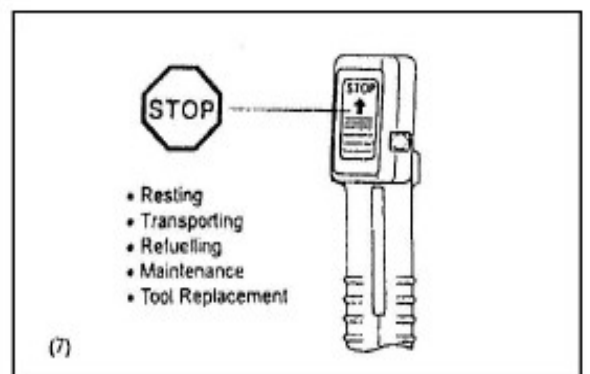
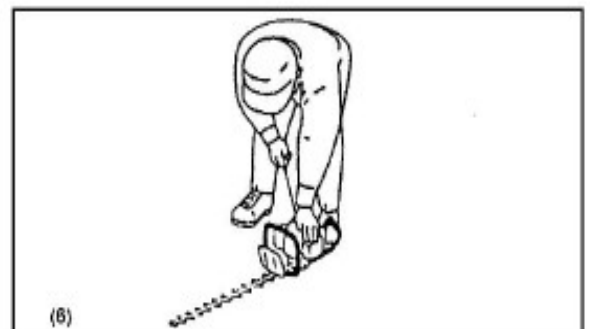
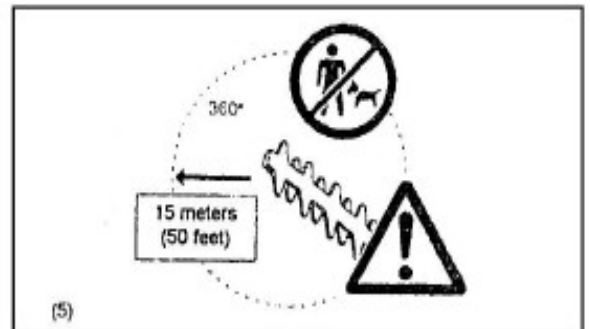
-Secure the tool properly before transporting in vehicle to avoid fuel leakage.

-When transporting the Hedge Trimmer ensure that the fuel tank is completely empty to avoid fuel leakage.

Refueling

-To reduce the risk of the fire and burn injury: handle fuel with care. It is highly flammable.

-Stop the engine before refueling(7), keep well away from open flame(8) and do not smoke.



- Do not attempt to refuel a hot running engine.
- Avoid skin contact with petroleum products. Do not inhale fuel vapor. Always wear protection gloves during refueling. Change and clean protection clothing at regular intervals.
- Take care not to spill either fuel or oil always wipe unit dry before starting engine. Allow wet cloths to dry before disposing in proper covered container to prevent spontaneous combustion.
- Avoid any fuel contact with your clothing. Change your clothing immediately if fuel has been spilled on it (danger hazard).
- Inspect the fuel cap at regular intervals making sure that it stays securely fastened,
- Carefully tighten the locking screw of the fuel tank. Move at least 10m (30 meters) away from the refueling point before starting engine,
- Never refuel in closed rooms. Fuel vapors accumulate at ground level (risk of explosions).
- Only transport and store fuel in approved containers. Make sure stored fuel is not accessible to children.
- When mixing gasoline with two-stroke engine oil, use gasoline which contains no ethanol or methanol (types of alcohol). This will help to prevent damage to fuel lines and other engine parts.
- Make sure the unit is properly assembled and in good operating condition.

Method of operation

- Use Hedge Trimmer only in good light and visibility. During cold seasons beware of slippery or wet areas, ice and snow (risk of slipping). Always ensure a safe footing.
- Do not overreach or stand on unstable support. Keep good footing and balance at all times.
- Keep both feet on the ground.
- Never stand on a ladder and the Hedge Trimmer.
- Never climb up into trees perform cutting operation with the Hedge Trimmer.

-DANGER-CUT HAZARD-KEEP HANDS AWAY FROM BLADES.

Don't feed twigs or other material to be cut into the blade with your hands or reach over the moving blade to pick up clippings. Never grasp the exposed cutting blades or cutting edges when picking up or holding the tool. CAUTION-Blade may coast after its turned off.

-KEEP HANDS AND ALL PARTS OF BODY AWAY from blade. The edges are sharp and can cause injury even when the tool is 'OFF',

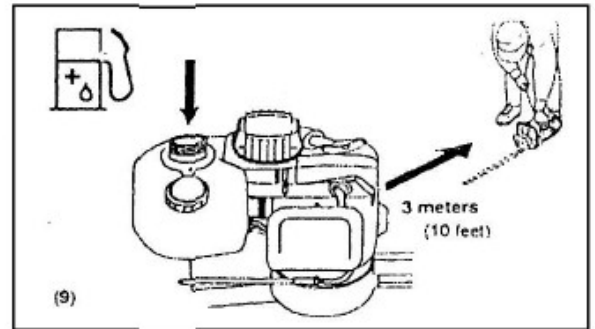
-BEFORE TRIMMER, inspect areas for wires, cords, glass or other foreign objects which could come in contact with the blade.

-Keep both hands on the hands cutting blades of Hedge Trimmer. Never grasp exposed cutting blades of Hedge Trimmer.

-Make sure engine is stopped and blades have stopped moving before

clearing jammed material

- Be aware of any and all electric lines and electric fences. Check all areas



for electrical lines before cutting.

-To reduce the risk of stumbling and loss of control, do not walk backward while operating the machine.

Maintenance instructions

-Always stop the engine before cleaning or servicing the unit or replacing parts.

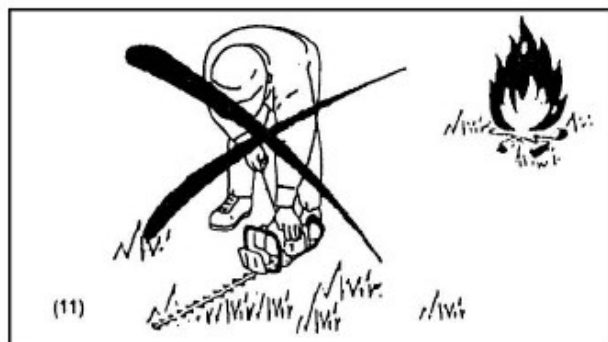
-**MAINTAIN TOOL WITH CARE.** Keep cutting edges sharp and clean for best and safest performance. Follow instructions for luration and proper maintenance.

-Be kind of the environment. Operate the Hedge Trimmer with as little noise and pollution as possible. In particular check the correct adjustment of the carburetor.

-Clean the Hedge Trimmer at regular intervals and check that all screws and nuts are securely tightened.

-Never service or store the Hedge Trimmer in the vicinity of open flames, sparks, etc. (11).

-Always store the Hedge Trimmer in a well-ventilated locked room and with an emptied fuel tank out of reach of children.



Observe and follow all relevant accident prevention instructions issued by the trade association's safety board and by insurance companies. Do not perform any modification to the Hedge Trimmer as this will risk your safety.

The performance of maintenance or repair work by the user is limited to those activities as described in this instruction manual. All other work is to be done by Shanzhang authorized or Factory Service Centers.

Use only genuine spare parts and accessories supplied by MOWERLAND authorized or factory service centers.

Use of non-approved accessories and tools means increased risk of accidents and injuries. MOWERLAND will not accept any liability for accidents or damage caused by the use of any non-approved accessories.

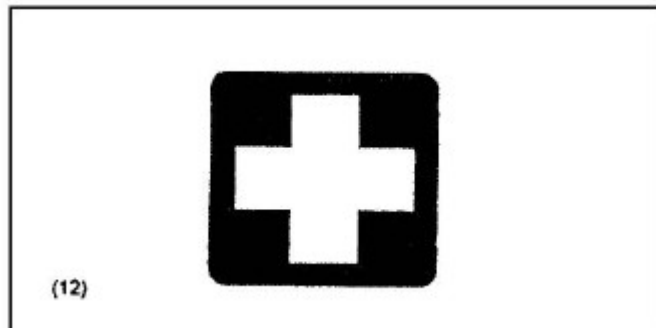
First aid

In case of an accident make sure that a well-stocked first-aid kit according to DIN 13164, is available in the vicinity of the cutting operations.

Immediately replace any item taken from the first aid kit.

Packaging

The MOWERLAND Hedge Trimmer is delivered in a protective cardboard box to prevent shipping damage. Cardboard is a basic raw material and is therefore consequently reusable or suitable for recycling (waste paper recycling).

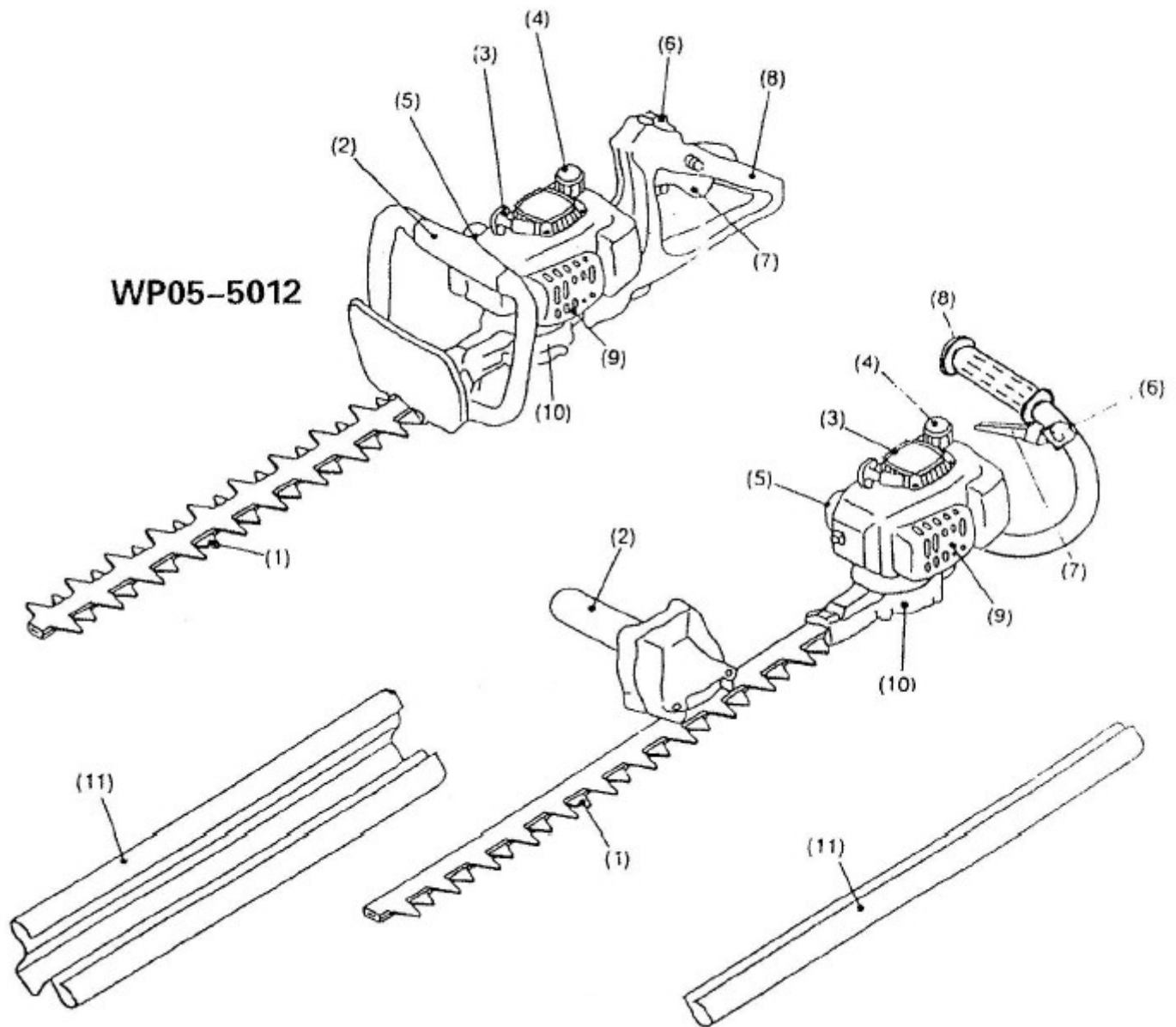


SPECIFICATION

Model		HT230A/HT230B
Dimensions(LXWXH)	mm	1050X246X225
Mass (with blade cover)	kg	6.3/6.4
Volume (fuel tank)	cm ³	600
Engine displacement	cm ³	22.5
Cutting length	mm	580/430
Maximum engine performance	kw	0.7
Maximum blade speed	m/s	1.88
Idling speed	1/min	2800
Clutch engagement speed	1/min	4300
Ignition system	type	Solid ignition system
Electrode gap	mm	0.6-0.7
Mixture ratio (fuel: 2-stroke oil)		25:1
Gear ratio		14:58

1) The data takes equally into account idling and racing speed operating modes.

NAME OF MAJOR PARTS



	NAME OF MAJOR PARTS		NAME OF MAJOR PARTS
1	Blade	7	Throttle lever
2	Front handle	8	Rear handle
3	Recoil starter	9	Muffler
4	Furl tank cap	10	Gearbox

5	Carburetor	11	Blade cover
6	STOP Switch (ON-OFF)		

FUELS/REFULLING

Fuel and oil mixture

Inspect the fuel tank and with clean, fresh fuel of the proper mixture to assure the longer life of the tool. Use the following mixed gas

Gasoline: applicable genuine two-stroke engine oil = 25:1

Gasoline: other manufacturer's two-stroke engine oil = 25:1 recommended

FOR CALIFORNIA REGULATION:

THIS EQUIPMENT IS CERTIFIED TO OPERATE ON GASOLINE+ TWO- STROKE ENGINE OIL

IMPORTANT:

Failure to follow proper fuel mix instructions may cause damage to the engine.

--The engine of the Hedge Trimmer is a high-efficiency two-stroke engine.

It is run with a mixture of fuel and two-stroke engine oil. The engine is designed for unleaded regular fuel with a min. octane value of 91 ROZ.

In case no such fuel is available. You are use fuel with a higher octane value. This will not damage the engine, but may cause poor operating behavior.

A similar situation will arise from the use of leaded fuel.

To obtain optimum engine operation and to protect your health and the environment, only unleaded fuel should be used.

--For lubricating the engine use two-stroke engine oil (quality grade TC-3). This is added to the fuel.

The engine has been designed for use with applicable two-stroke engine oil and a mixture ratio of 25:1 only to protect the environment in addition, a long service life and a reliable operation with a muumu emission of exhaust gasses is guaranteed. It is absolutely essential to observe a mixture ratio of 25:1 (applicable 2-stroke engine oil). Otherwise the reliable function of the Hedge Trimmer cannot the guaranteed.

--The correct mixture ratio:

Mix 25 parts gasoline with 1 part applicable 2-stroke engine oil (see table on the right).

NOTE: For preparing the fuel-oil mixtures first mix the entire, oil quantity with half o the fuel required. In an approved can which meets of exceed all local code standards then add the remaining fuel.

Thoroughly shake the mixture before filling it into the Hedge Trimmer's tank.

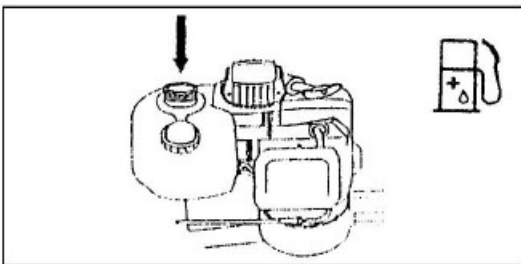
It is not wise to add more engine oil than specified to ensure safe operation. It will only

result in a higher production of combustion residues which will pollute the environment and clog the exhaust channel in the cylinder as well as the muffler. In addition, the fuel consumption will rise and performance will decrease.

Handling petroleum products

Utmost care required when handling fuel. Fuel may contain substances similar to solvents. Refuel either in well ventilated area or outdoors. Do not inhale fuel vapors, avoid contact of fuel or oil with your skin.

Mineral oil, fuel, etc. product degrease your skin. If skin comes in contact with these substances repeatedly or an extended period of time, various skin diseases may result. In addition, allergic reactions are known to occur. Eyes can be irritated by contact with oil, fuel etc. oil fuel, etc,. Comes into your eyes immediately wash them with clear water. If your eyes are still irritated, see a doctor immediately!



Gasoline	25:1
1 GAL 2 GAL	2.6 OZ 6.4 OZ

Refueling

Always stop the engine and allow it to cool before refueling.

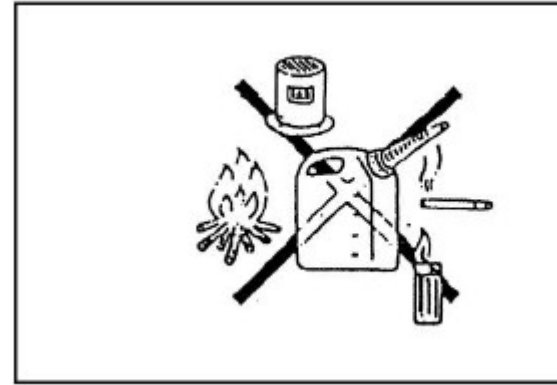
-Thoroughly clean the around the fuel filler cap to prevent dirt from getting into the fuel tank.

-Unscrew the fuel filler cap and fill the tank with fuel/

-Tightly screw on the fuel filler cap.

-Clean the fuel filler cap and tank after refueling!

Wipe up any fuel



PRECAUTIONS BEFORE STARTING

-Please make sure that there are no children or other people within a working range of 15 meters or 50 feet; also pay attention to any animals in the working vicinity.

-Before use always check that the Hedge Trimmer is safe for operation. Check the cutting device id not damaged, the control lever for easy action and check for proper function of the STOP switch.

Rotation of the cutting device during idling speed is not allowed.

Check with your dealer for adjustment if in doubt. Check for clean and dry handles and test function of the STOP switch.

-Start the hedge trimmer engine only after the entre assembly is done. Operation of the engine is only permitted after all the appropriate accessories are attached. Otherwise there is a risk of injury.

-Before starting, make sure that the cutting device has no contact with objects such as branches, stones, etc.

-Before trimmer, inspect area for wires, cords, glass, or other foreign objects which could come in contact with the blade.

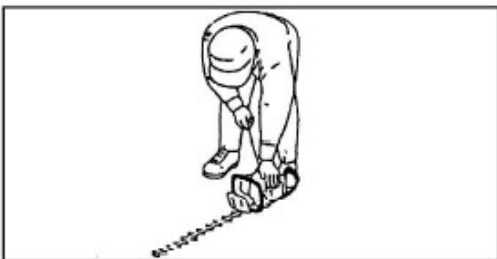
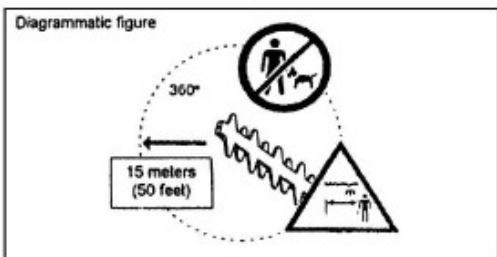
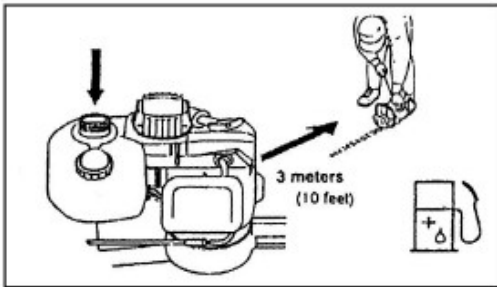
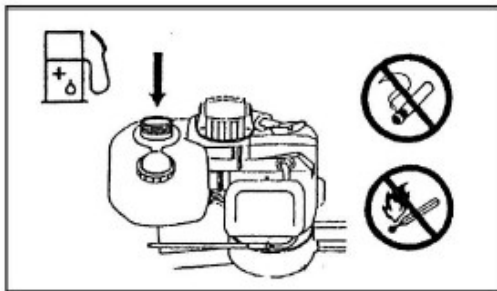
Electrical shock. Be aware of any and all electrical lines and electrical fence. Check all areas for electrical lines before cutting.

Storage of fuel

- Fuel cannot be stored for an unlimited period of time.
- Purchase only the quantity required for a 4 week operation period.
- Use approved fuel storage containers only

WARNING!

Gasoline is an extremely flammable fuel. Use extreme caution when handling gasoline or fuel mix. Do not smoke or bring any fire or flame near the fuel.



ground or any other object. Cold starting (when the engine is cold or it has been stopped for more than 5 minutes or when fuel is added to the engine.

1. Push the STOP switch (1) to "1" position.
2. Squeeze first the lock lever A and then the throttle lever B(fig.1)
3. Keeping the throttle lever B depressed, then press the throttle lock C inward (fig.2)
4. Keeping throttle lock C depressed, release the throttle lever B. this will lock the throttle lever B in position.(fig 3)
5. Give a gentle push on the primly so you will not lose control while cranking the engine could pull you off balance or swing the cutting blade into an obstruction or our body.
6. Move the choke lever (3) to position open.
7. Hold the unit down firmly do you will not lose control while cranking the engine. If not held down properly. The engine could pull you off balance or swing the cutting blade into an obstruction or your body.
8. Slowly pull the starter grip unit resistance is left and continue with smart pull until initial ignition are heard.
9. Depress the choker lever (3) to the position dose and pull the starter rope again until the engine starts.
10. As soon as the engine starts, immediately tap and releases the throttle, thus releasing the half-throttle rock so that the engine can run in idle.
11. Run the engine for approximately one minute at a moderate speed before applying full speed.

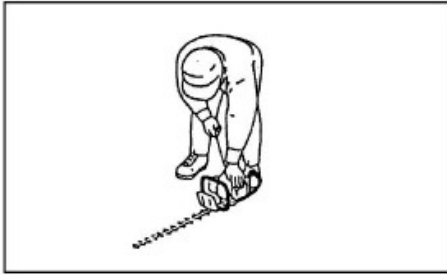
Hot starting :(Restarting immediately after the engine has stopped). When restarting a hot engine, first try the above procedure:1,7,8. if the engine does not start, repeat above steps 1-11.

STARTING THE MACHINE

Move at least 3 meters away from the place of refueling. Place the Hedge Trimmer on a clean area of ground make sure that the cutting tool does not come into contact with the

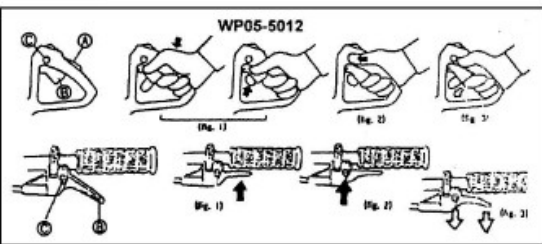
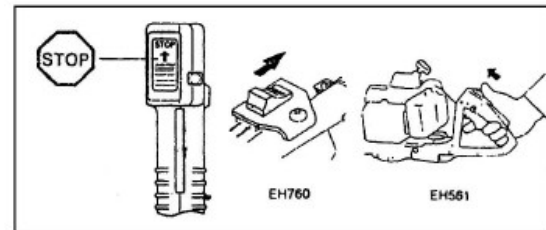
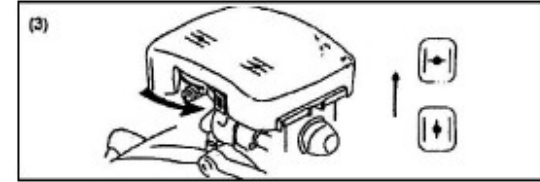
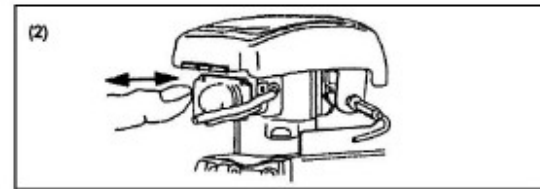
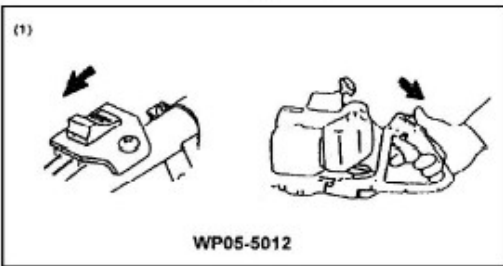
Note: Do not pull the starter rope to its full extent and do not allow the starter grip to be

retracted without control, ensure that it is retracted slowly.



STOPPING THE MACHINE

1. Release the throttle lever completely.
2. Push the I-O switch (on/off) to "O" position, the engine rotation will become low and the engine will stop.



OPERATION OF THE MACHINE

- Be sure to carefully read and follow safety instructions.
- Keep hands away from blades. Never grasp the exposed cutting blade or cutting edges, when picking up or holding the tool
- Never touch the cutting device when starting the engine and during operation.
- Operate the Hedge Trimmer in such a manner as to avoid inhalation of the exhaust gases. Never run the engine in enclosed rooms(risk of gas poisoning). Carbon monoxide is an odorless gas.
- All protective installations and guards supplied with the machine must be used during operation.
- Never operate the engine with a faulty exhaust muffler or it is missing.
- Use the Hedge Trimmer only in good light and visibility.

Always ensure a safe footing.

-Never climb up the trees with the Hedge Trimmer to perform cutting operation.

-Never work on unstable surfaces.

-Remove sand, stone, nails, wire, etc, found within the working area foreign objects may damage the cutting blades.

-Before commencing cutting, the cutting blades must have reached full working speed.

-Always hold the Hedge Trimmer firmly with both hands on the handles only.

-The right hand grips the front handle of model EH760.

This is the way to safety operate the machine.

-Use a firm grip with thumbs and fingers encircling the handles.

-When you release the throttle, it takes a few moments before the cutting blades stop.

-The Hedge Trimmer must not be used for cutting with fast idle. The cutting speed cannot be adjusted with the throttle control in fast idle position,

-When cutting a hedge, the machine should be held so that the blades form a 15-30 angle with the cutting line.

-It the Hedge Trimmer is used with circular movement against! The edge of the hedge, the twigs will be thrown direct the ground.

-At vertical cutting, the Hedge Trimmer is used with circular pendulation, swinging up and down close to the hedge.

-Pay special attention when cutting hedges which are laid out a long a wire-fence and have grown through the fence.

The blade must not contact the fence; otherwise the blades may be destroyed.

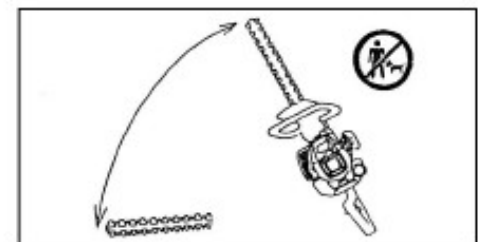
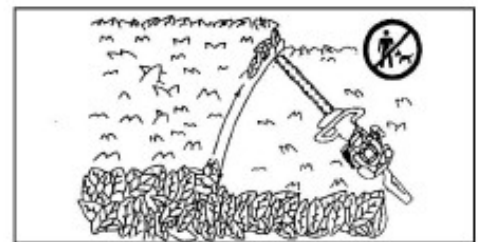
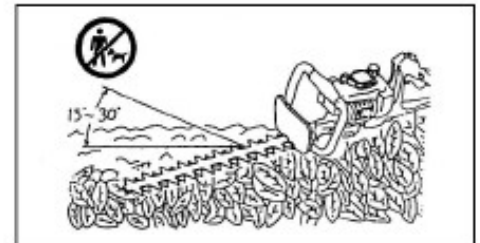
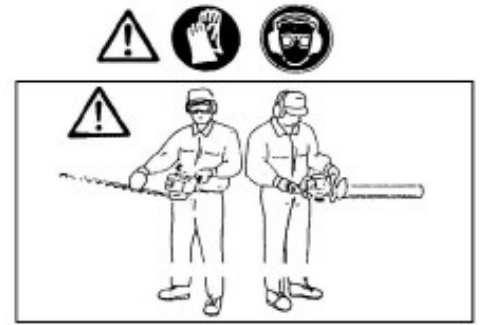
-Do not use the Hedge Trimmer continuously for a long time. It is normal to take a break of 10 to 20 minutes after every 50 minutes operation.

-Should the cutting blades hit stones or other hard objects, Immediately switch off the engine and inspect the cutting blades for damage. Replace damaged blades before re-commencing work.

-The engine must be switch off immediately in case of any engine problems.

-Operate the Hedge Trimmer as little noise and contamination as possible. In particular check the correct setting of the carburetor and the fuel/oil ratio.

Do not attempt to remove jammed cut material when blades are running. Put unit down, turn it off, and remove necessary cuttings.



MAINTENANCE INSTRUCTIONS

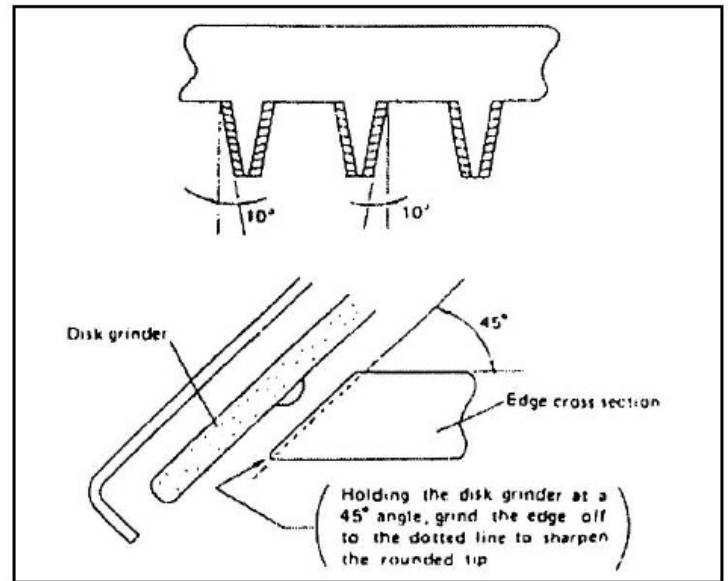
- Turn off the engine and remove the spark plug connector when replacing or sharpening cutting tools also when cleaning the cutter or cutting device or carrying out any maintenance.
- Never straighten or weld a damaged cutting blade.
- Inspect the cutting blades with the engine switched off at short, regular intervals for damage. (Detection of hairline cracks by means of tapping-noise test.) Beware the teeth are sharp.
- Clean the Hedge Trimmer at regular intervals and check that all screws and nuts are well tightened.
- Never service or store the Hedge Trimmer in the vicinity of naked flames to avoid fires.
- Always wear leather gloves when handling or sharpening the blades as they are sharp.



Blade sharpening

If the edges rounded and do not cut well any more, grind off only the shaded portions. Do not grind the contact surfaces (sliding surfaces) of the top and bottom edges.

- Before grinding, be sure to secure the blade firmly and switch off the engine and remove the spark plug cap.
- Wear gloves, protective glasses, etc.
- An edge ground too much at a time or ground many times will lose its hardened layer. It becomes rounded and dull very quickly in use.



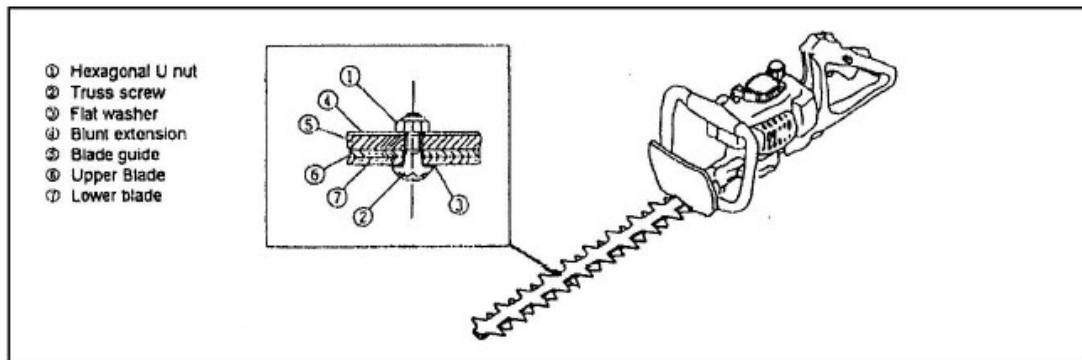
Blade adjustment

The blades will wear with long use. When you find that trimming is not as good as when the blades were new, adjust them as follows.

1. Turn nut ① loose.
2. Screw ② in with the driver highly till it stops turning, and then screw it back one quarter to a half turn.
3. Turn nut ① tight, holding screw ② at the same with a driver.
4. Lubricate the blades after adjustments above with light oil.
5. Start the engine and operate the engine throttle on and off for a minute.
6. Stop the engine and touch the blades with your hand. If they are warm enough for you to keep your hand on, then you have made the proper adjustment. If they are too hot for you to keep touching, give screw ② a little more turn back and repeat 5 to see if they are properly adjusted.

NOTE: Never fail to stop the engine before making the adjustment.

The blades have a slot around screw ②. In case you find dust in the end of any of the slots, clean it.

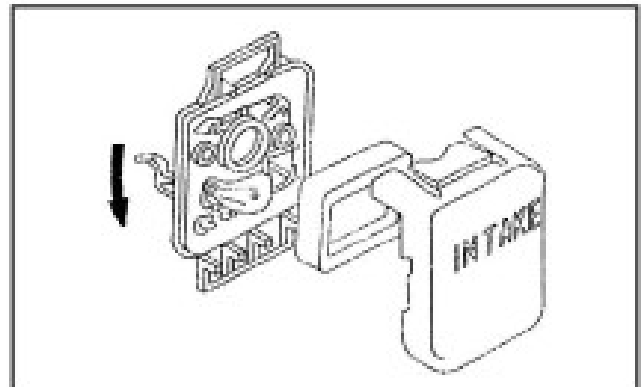
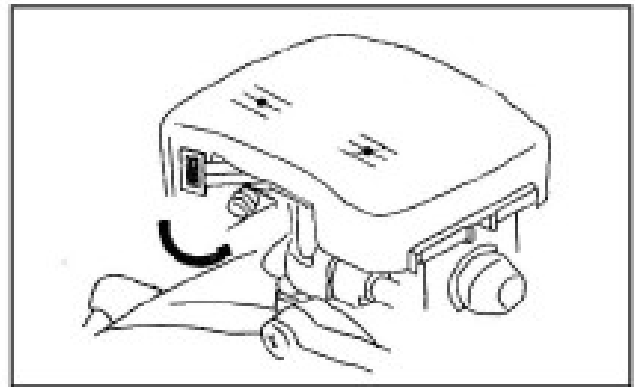


Checking the adjusting the idling speed

The cutting blades should not when the control lever is fully released.
-Idle speed should be set to 2.600rpm.

If necessary, correct it by means of the idle screw (the cutting blade must not run when the engine is on idle).

- Clockwise: for faster rate of revolution.
- Counter-clockwise: for slower rate of revolution Check that there is sufficient difference between idling and clutch engagement speed to ensure that the cutting tool is at a standstill while the engine is idling. (If necessary, reduce idling speed.) if the tool still continues to run under the idling conditions, consult your nearest authorized service agent.
- The clutch should engage at minimum 3.250 rpm.
- Check the functioning of the STOP switch, the lock-off lever, the control lever, and the lock button.



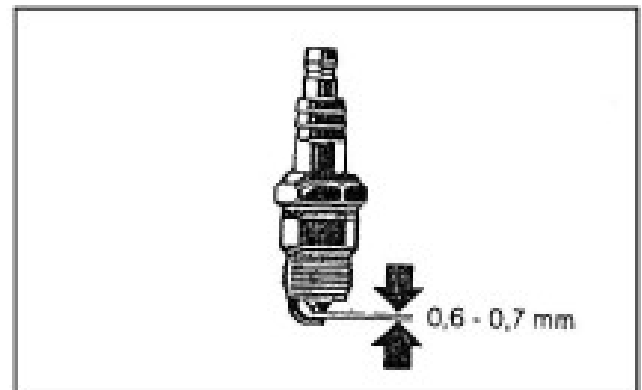
Cleaning the air cleaner-Every& hours (Daily)

-Remove the air cleaner cover.

-Push the choke lever up (arrow).To prevent dirt particles from entering the carburetor.

-Take out the sponge element, wash it in lukewarm water and dry it completely.

-After cleaning, put back the sponge element and air cleaner cover.



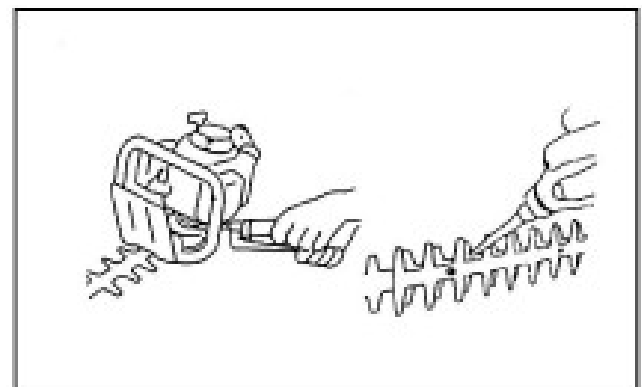
Checking the spark plug – Every 8 hours (Daily)

-Only use the supplied universal wrench to remove or to install the spark plug.

-The gap between the two electrodes of the spark plug should be 0.6 to 0.7mm. If the gap is too wide or too narrow, adjust it. If the spark plug is clogged with carbon or fouled, clean it thoroughly or replace it. Use an exact replacement.

Supply of grease and lubricant

-Supply grease the gear through the grease hole every 10 to 20 hours. (Shell Alvania No.3 or equivalent)



Suction head in the fuel – Every 50 hours (Monthly)

-The felt fitter (1) of the suction head is used to filter the fuel required by the carburetor.

-A periodical visual inspection of the felt fitter is to be conducted. For that purpose, open the tank cap, use a wire hook and pull out the suction head through the tank opening. Fitters found to have hardened, been polluted or clogged up are to be replaced.

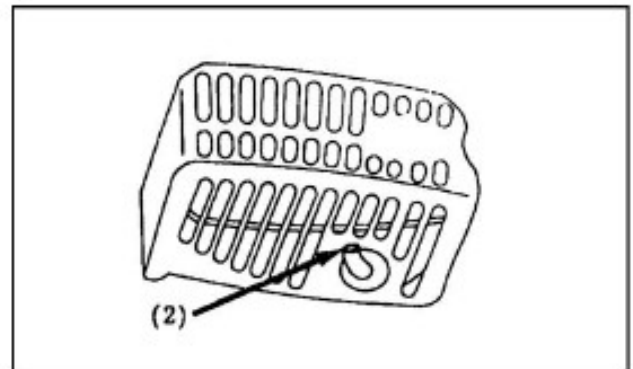
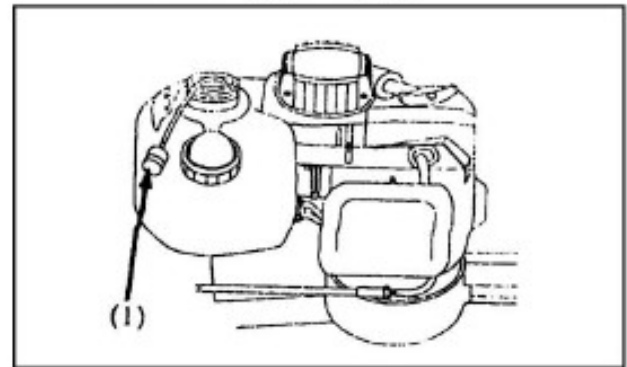
-Insufficient fuel supply can result in the admission maximum speed being exceeded. It is therefore important to replace the felt fitter at least quarterly to ensure satisfactory fuel supply to the carburetor.

Cleaning of muffler exhaust port-Every 50hours (Monthly)

-Check of muffler exhaust port (2) regularly.

-If it is clogged by carbon deposits, carefully scratch the deposits out with a suitable tool.

Do not allow carbon to fall into engine ports.



Replace fuel lines. Every 200 hours (Yearly)

Overhaul engine. Every 200 hours (Yearly)

Replace packing and gaskets with new ones: Every time engine is reassembled.

Any maintenance or adjustment work that has not been included and described in this manual is only to be performed by Authorized Service Agent.

Daily checkup and maintenance

To ensure a long service life and to avoid any damage to equipment, the following service operations should be performed at regular intervals.

-Before operation, check the machine for loose screw or missing parts. Pay particular attention to the tightness of the cutter blades screw. Every 8 hours (Daily)

-Before operation, always check for clogging of the cooling air passage and the cylinder fins. Clean them if necessary. Every 8 hours (Daily)

-Perform the following work daily after use:

- Clean the Hedge Trimmer externally and inspect damage.
- Clean the air filter. When working under extremely dusty conditions, clean the filter several times a day.
- Check the blades for damage and make sure they are firmly mounted.

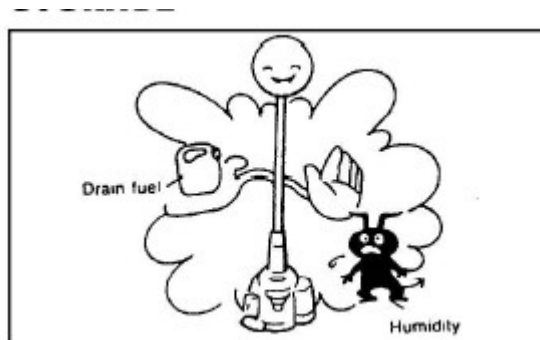
STORAGE

-When keeping the machine in storage for a long time. Drain fuel from the fuel tank and carburetor, as follows Drain all fuel from the fuel tank.

-Remove the spark plug and add a few drops of oil into the spark plug hole. Then, pull the starter gently to confirm that oil film covers the engine inside and tighten the spark plug.

-Clean dirt or dust from the cutter blade and outside of engine, wipe them with an oil-immersed cloth and keep the machine at a place as dry as possible.

-Abide by federal and local regulations for safe storage and handling of gasoline.



MAINTENANCE SCHEDULE

General	Engine assembly Screws and nuts	Visual inspection for damage and tightness Check for general condition and security
After each refueling	Throttle lever Safety lock key STOP switch	Functional check Functional check Functional check
Daily	Air filter Cooling air duct Cutting tool Idling speed	To be cleaned To be cleaned Check for damage and sharpness Inspection (cutting tool must not move)
Weekly	Spark plug Muffler	Inspection, replace if necessary Check and if necessary clean the opening
Quarterly	Suction head Fuel tank	To be replaced To be cleaned
Shutting down procedure	Fuel tank Carburetor	Empty fuel tank Operate until engine runs out fuel

FAULT LOCATION

Fault	System	Observation	Cause
Engine not starting or under difficulties	Ignition system	Ignition spark is present	Faulty fuel supply or compression system, mechanical
		No ignition spark	STOP-switch operated, wiring fault or short circuit, spark plug or connector defective, ignition module faulty
	Fuel supply	Fuel tank filled	Incorrect choke position, carburetor defective, suction head (gas line fittler) dirty, fuel supply line bent or interrupted
	Compression	Inside of engine	Cylinder bottom gasket defective, crankshaft seals damaged, cylinder or piston rings defective
		Outside of engine	Improper sealing of spark plug
Warm start problems	Mechanical fault	Starter not engaging	Broken starter spring, broken parts inside of the engine
		Tank filled Ignition spark existing	Carburetor contaminated, have it cleaned
Engine starts but dies immediately	Fuel supply	Tank filled	Incorrect idling adjustment, suction head or carburetor contaminated
			Feul tank vent defective, fuel supply line interrupted, cable or STOP-switch faulty
Insufficient performance	Several systems may simultaneously be affected	Engine idling	Air fittler contaminated, carburetor contaminated, muffler clogged, exhaust duct in the cylinder clogged