

Specifications

Model	WG-2512-PS	
External dimensions: Length x Width x Height	mm	270 x 230 x 235
Mass: Saw without guide bar and chain, empty tanks	kg	3.5
Volume:	ml	190
Fuel tank	ml	150
Tank for chain lubrication oil		Regular grade petrol.
Fuel (Mixture ratio)		Minimum 93 Octane unleaded petrol is recommended. Do not use fuel containing methyl alcohol or more than 10 % of ethyl alcohol.
		25 : 1 (4 %) for ISO-L-EGD Standard (ISO/CD13738), FC, FD grade and Premium 25 : 1 oil.
		Special chain oil or motor oil
Oil (Chain oil)		
Cutting length:	mm	300, 350, 400
All specified usable cutting lengths of guide bar		
Chain:	mm	9.53 (3/8 inch)
Specified pitch	mm	1.27 (0.050 inch)
Specified gauge (thickness of drive links)	mm	30, 35, 40
Type of guide bar	mm	1.27 (0.050 inch)
Guide bar gauge		E&S 910
Type of chain		Adjustable automatic oil pump
Lubrication		
Sprocket: Specified number of teeth		6
Engines:		
Type		Air cooled 2-stroke single cylinder
Carburettor		Diaphragm type
Magneto		Flywheel magneto, CDI system
Spark plug		BPMR7A LD
Starter		Recoil starter
Power transmission		Automatic centrifugal clutch
Engine displacement	ml (cm ³)	25.4
Maximum shaft brake power (ISO 7293)	kW	0.8
Recommended maximum speed with cutting attachment	r/min	1-1800
Recommended speed at idling	r/min	2800
Fuel consumption:		
Fuel consumption at maximum engine power	kg/h	0.72
Specific fuel consumption at maximum engine power	g/(kW-h)	496
Sound pressure level: (ISO 22868) L _{pAeq} =	dB(A)	98.27
Guaranteed sound power level: (2000/14/EC) L _{WA} =	dB(A)	109.83
Chain brake:		
(ISO 6535) Mean braking time at racing speed	s	0.12
Vibration: (ISO 22867) Declared values A _{hwg}	ms ⁻²	9.897
Front handle	ms ⁻²	9.895
Rear handle		
Other devices:		Front hand guard, Throttle trigger lockout, Chain catcher, Chain brake, Anti-vibration device, Spiked bumper

WOLF Garden

LEADING THE PACK FOR GENERATIONS

CHAINSAW USER'S MANUAL

Model No.

WG-2512-PS

2-Stroke

25.4cc



Original Instruction
CAUTION:

- Read all precautions and instructions in this manual before using this product. Keep this manual for future reference.
- Product may vary slightly from picture.

NOT FOR
COMMERCIAL
USE

Contents

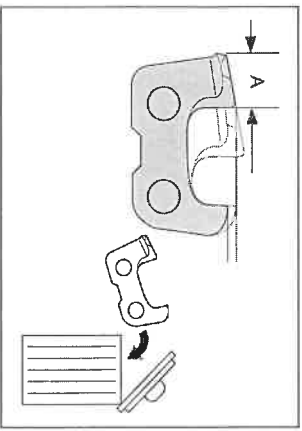
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Maintenance.....	17

TROUBLESHOOTING	
CAUSE	SOLUTION
THE UNIT WILL NOT START OR STARTS BUT DOES NOT CONTINUE TO RUN	
The unit was started incorrectly	Follow all Starting and Stopping Instructions
The carburetor mixture adjustment setting is incorrect	Contact our service center
The spark plug is fouled	Clean, gap or replace the spark plug
The fuel tank is empty	Fill the fuel tank with properly mixed fuel
THE UNIT STARTS, BUT THE ENGINE HAS LOW POWER	
The fuel filter is plugged	Contact our service center
The choke is in the wrong position	Move the choke to fully close
The spark arrestor screen is dirty	Clean the spark arrestor screen
The air filter is dirty	Clean the air filter
The carburetor mixture adjustment setting is incorrect	Contact our Amazon service
THE ENGINE HESITATES	
The carburetor mixture adjustment setting is incorrect	Contact our service center
The air filter is plugged	Clean or replace the air filter
The fuel is old and/or improperly mixed	Drain the fuel tank and add fresh, properly mixed fuel
THERE IS NO POWER WHEN THE UNIT IS UNDER LOAD	
The carburetor mixture adjustment setting is incorrect	Contact our service center
The fuel is old and/or improperly mixed	Drain the fuel tank and add fresh, properly mixed fuel
The air filter is plugged	Clean or replace the air filter
The spark plug is fouled	Clean, gap or replace the spark plug
THE ENGINE RUNS ERRATICALLY	
The spark plug is incorrectly gapped	Clean, gap or replace the spark plug
The spark arrestor screen is plugged	Clean the spark arrestor screen
The air filter is dirty	Clean or replace the air filter
THE ENGINE SMOKES EXCESSIVELY	
The carburetor mixture adjustment setting is incorrect	Contact our service center
The fuel mixture is incorrect	Drain the fuel tank and add fresh, properly mixed fuel
THE GUIDE BAR AND CHAIN ARE RUNNING HOT AND SMOKING OR STUCK	
The chain tension is too tight	Adjust the chain tension
The chain oil tank is empty	Refill the bar lube reservoir
The guide bar groove and/or oil passages are dirty	Clean the guide bar groove and oil passages
The oil flow from the automatic oiler is low	Increase the oil flow from the automatic oiler
THE CHAIN DOES NOT ROTATE WHILE THE ENGINE IS RUNNING	
The chain tension is too tight	Adjust the chain tension
The guide bar and chain are assembled incorrectly	Refer to Removing/Replacing the Guide Bar and Chain
The guide bar and chain are damaged	Inspect the guide bar and chain for damage
The drive assembly is damaged	Refer to Service Information
The chain brake is engaged	Disengage the chain brake
THE CHAIN ROTATES, BUT DOES NOT CUT	
The chain is dull	Sharpen the chain
The chain is on backwards	Reverse the direction of the chain

To sharpen the cutting teeth

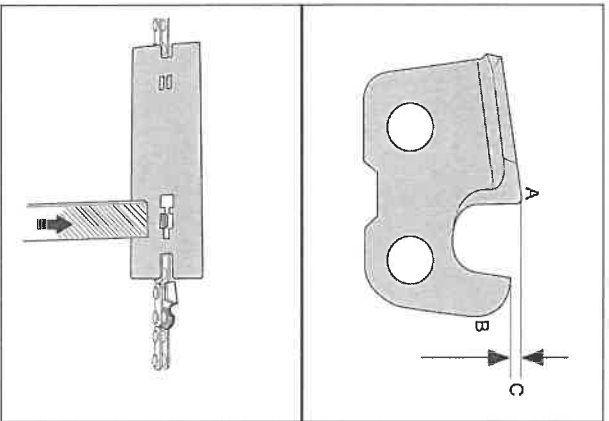
Use a round file and a file gauge to sharpen the cutting teeth. Information on the recommended dimension of the file and gauge for the saw chain installed on your product:

1. Make sure that the saw chain is correctly tensioned. A slack chain will move sideways, making it more difficult to sharpen correctly.
2. File all teeth on one side first. File the cutting teeth from the inside face and reduce the pressure on the return stroke.
3. Turn the product over and file the teeth on the other side.
4. File all the teeth to the same length. When the length of the cutting teeth is reduced to 4 mm (5/32") the saw chain is worn out and must be replaced.



To adjust the depth gauge setting

Sharpen the cutting teeth before you adjust the depth gauge setting. See *To sharpen the cutting teeth on page 20*. When you sharpen the cutting tooth (A), the depth gauge setting (C) will decrease. To maintain optimal cutting performance, the depth gauge (B) has to be filed down to achieve the recommended depth gauge setting.



Note: This recommendation assumes that the length of the cutting teeth is not reduced excessively.

Use a flat file and depth gauge tool to adjust the depth gauge.

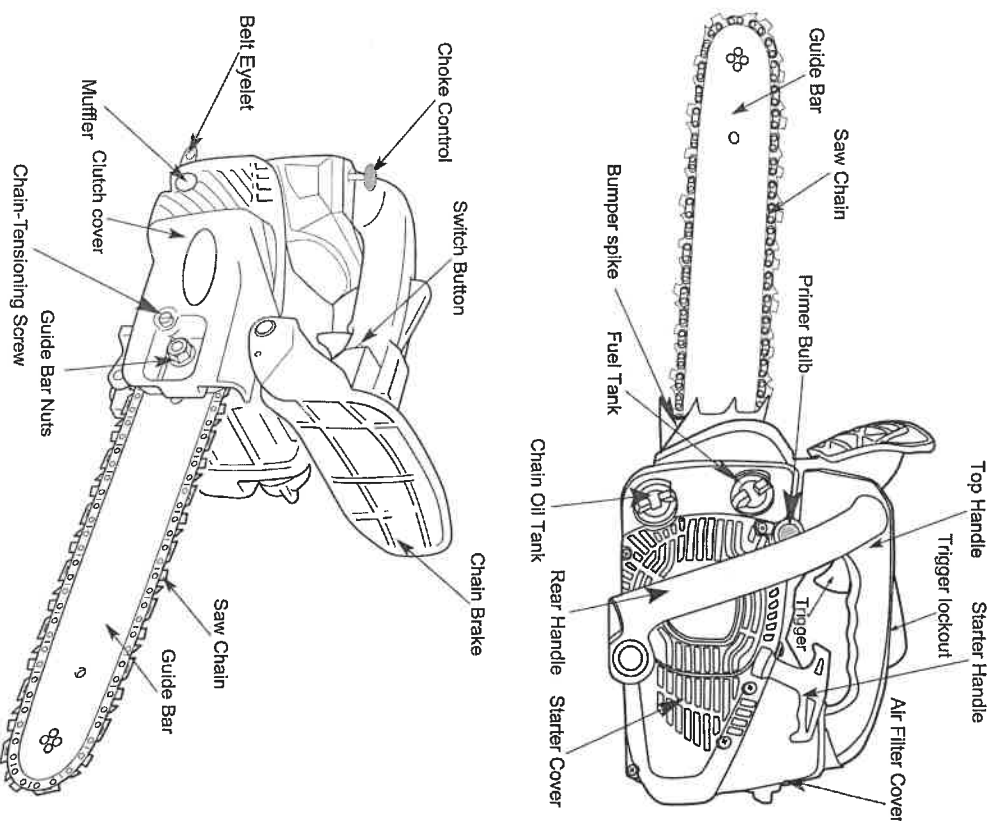
1. Put the depth gauge tool above the saw chain. Detailed information regarding how to use the depth gauge tool will be found on the package of the depth gauge tool.
2. Use the flat file to file off the tip of the depth gauge that protrudes through the depth gauge tool. The depth gauge setting is correct when you no longer feel resistance as you draw the file along the depth gauge tool.

Introduction

Operator's manual

READ ALL INSTRUCTIONS BEFORE OPERATING

Product overview



Symbols on the product

SYM MEANING



Be careful and use the product correctly. This product can cause serious injury or death to the operator or others.



Read the operator's manual carefully and make sure that you understand the instructions before you use this product.



Always wear approved protective helmet, approved hearing protection and eye protection.



Chain brake, engaged (right). Chain brake, disengaged (left).



Primer Bulb



Adjustment of the oil pump.



Fuel.



Chain oil.



Both of the operator's hands must be used to operate the chainsaw.



Never operate the chainsaw holding it with one hand only.



Never let the guide bar tip come in contact with any object.

Warning! Kickback may occur when the nose or tip of the guide bar touches an object, and cause a lightning fast reverse reaction, kicking the guide bar up and towards the operator. May cause serious personal injury.



Computed kickback bar stopping angle without actuated chainbrake, CKA wob.



Computed kickback bar stopping angle with actuated chainbrake, CKA wb.

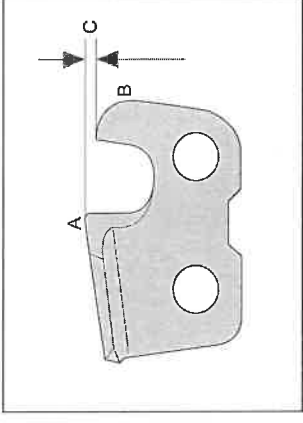
Note: Other symbols/decals on the product refer to certification requirements for some markets.

- the product has an accessory that is not from the manufacturer or not approved by the manufacturer.
- the product is not repaired at an approved service center or by an approved authority.

To sharpen the saw chain

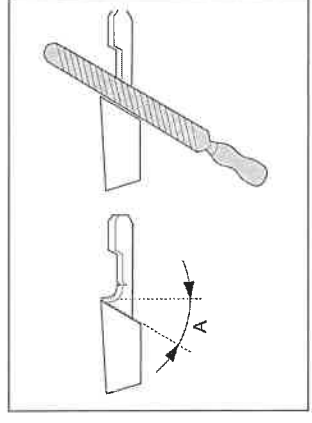
The cutter

The cutting part of the saw chain is called the cutter and consists of a cutting tooth (A) and the depth gauge (B). The cutters cutting depth is determined by the difference in height between the two, the depth gauge setting (C).

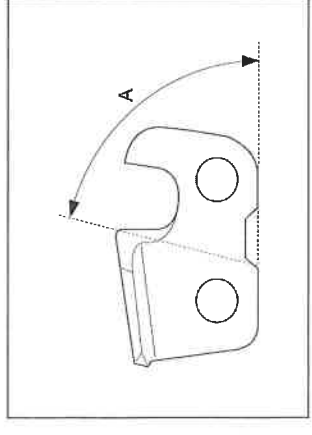


When you sharpen a cutting tooth there are four important factors to remember:

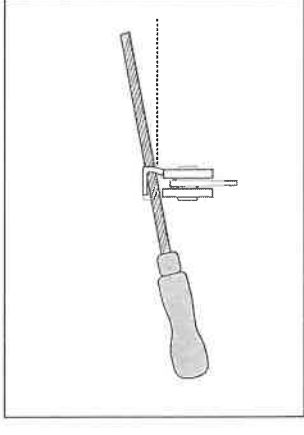
- Filing angle.



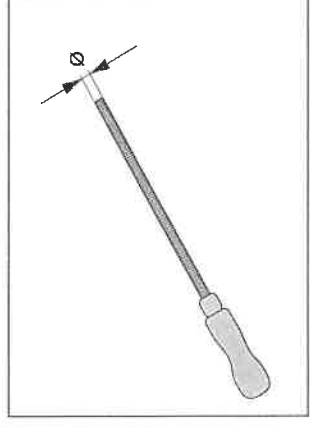
- Cutting angle.



- File position.



- Round file diameter.



To sharpen the cutting teeth

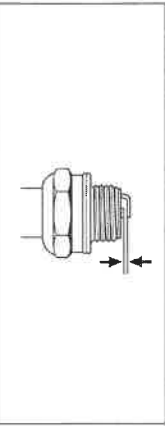
Use a round file and a file gauge to sharpen the cutting teeth. information on the recommended dimension of

To do a check of the spark plug



CAUTION: Use the recommended spark plug.
An incorrect spark plug can cause damage to the product.

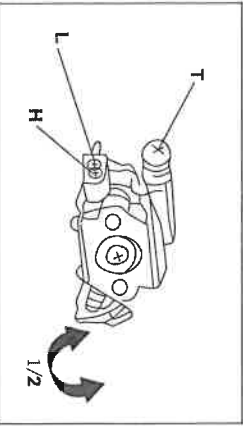
1. If the product is not easy to start or to operate or if the product operates incorrectly at idle speed, examine the spark plug for unwanted materials. To decrease the risk of unwanted material on the spark plug electrodes, do these steps:
 - a) make sure that the idle speed is correctly adjusted.
 - b) make sure that the fuel mixture is correct.
 - c) make sure that the air filter is clean.
2. Clean the spark plug if it is dirty.
3. Make sure that the electrode gap is correct.



4. Replace the spark plug monthly or more frequently if necessary.

Carburetor adjustment

Because of environmental and emissions laws, your product has adjustment limitations on the carburetor adjuster screws. This decreases the harmful exhaust fumes from your product. You can only turn the adjustment screws maximum 1/2 turn.



Basic adjustments and run-in

The basic carburetor adjustments are done at the factory.



CAUTION: Do not operate the product at too high speed during the first 10 hours of operation.



CAUTION: If the saw chain rotates at idle speed, turn the idle speed screw counterclockwise until the saw chain stops.

To adjust the low speed needle (L)

- Turn the low speed needle clockwise until stop.

Note: If the product has a bad acceleration capacity or if the idle speed is not correct, turn the low speed needle counterclockwise. Turn the low speed needle until the acceleration capacity and idle speed is correct.

To adjust the idle speed screw (T)

1. Start the product.
2. Turn the idle speed screw clockwise until the saw chain starts to rotate.
3. Turn the idle speed screw counterclockwise until the saw chain stops.

Note: The idle speed is correctly adjusted when the engine runs correctly in all positions. The idle speed must also be safely below the speed at which the saw chain starts to rotate.



WARNING: If the saw chain does not stop when you turn the idle speed screw, speak to our Service Center. Do not use the product until it is correctly adjusted.

To adjust the high speed needle (H)

The engine is adjusted at the factory to operate at sea level. At higher altitudes, in different weather or different temperatures it can be necessary to adjust the high speed needle.

- Turn the high speed needle to make adjustments.



CAUTION: Do not turn the high speed needle screw across the adjustment limitation stop. This can cause damage to the piston and the cylinder.

To examine if the carburetor is correctly adjusted

- Make sure that the product has the correct acceleration capacity.
- Make sure that the product 2-cycles a little at full throttle.
- Make sure that the saw chain does not rotate at idle speed.
- If the product is not easy to start or has less acceleration capacity, adjust the low and high speed needles.



CAUTION: Incorrect adjustments can cause damage to the engine.

Safety

Safety definitions

The definitions below give the level of severity for each signal word.



WARNING: Injury to persons.



CAUTION: Damage to the product.

Note: This information makes the product easier to use.

General safety instructions



WARNING: Read the warning instructions that follow before you use the product.

A chainsaw is a dangerous tool if used carelessly or incorrectly and can cause serious injury or death. It is very important that you read and understand the contents of this operator's manual.

- Under no circumstances may the design of the product be modified without the permission of the manufacturer. Do not use a product that appears to have been modified by others and only use accessories recommended for this product. Non-authorized modifications and/or accessories can result in serious personal injury or the death of the operator or others. Your warranty may not cover damage or liability caused by the use of non-authorized accessories or replacement parts.
- The inside of the muffler contain chemicals that may be carcinogenic. Avoid contact with these elements in the event of a damaged muffler.
- Long term inhalation of the engine's exhaust fumes, chain oil mist and sawdust can represent a health risk.
- This product produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before operating this product.
- The information in this operator's manual is never a substitute for professional skills and experience. If you get into a situation where you feel unsafe, stop and seek expert advice. Contact our Service Center or an experienced chainsaw user. Do not attempt any task that you feel unsure of!
- When using this product, a fire extinguisher should be available.
- Keep handles dry, clean and free of oil.
- Beware of carbon monoxide poisoning. Operate the product in well ventilated areas only.
- Do not attempt a pruning or limbing operation in a standing tree unless specifically trained to do so.

Safety instructions for operation



WARNING: Read the warning instructions that follow before you use the product.

- This top handle chainsaw is designed specifically for tree surgery and maintenance in the tree. Due to the special compact handle design (closely spaced handles), there is an increased risk of losing control. For this reason these special chainsaws should be used only for work in a tree by persons who are trained in special cutting and working techniques and who are properly secured (lift bucket, ropes, safety harness). Regular chainsaws (with wider spaced handles) are recommended for all other cutting work at ground level.
- Working in a tree requires the use of special cutting and working techniques which must be observed in order to reduce the increased risk of personal injury. Never work in a tree unless you have received specific, professional training for such work, including training in the use of safety and other climbing equipment, such as harnesses, ropes, belts, climbing irons, snap hooks, carabiners, etcetera.
- Never attempt to catch falling sections. Never cut in the tree when you are only secured with one rope.
- Always use two secured ropes.
- During critical felling operations, hearing protectors should be fitted immediately when the sawing is completed so that sounds and warning signals can be heard.
- Before using this product you must understand the effects of kickback and how to avoid them. Refer to *Kickback information on page 10* for instructions.
- Never use a product that is faulty. Carry out the safety checks, maintenance and service instructions described in this manual. Some maintenance and service measures must be carried out by trained and qualified specialists.
- Never use the product with visible damage to the spark plug cap and ignition cable. A risk of sparking arises, which can cause a fire.
- Never use the product if you are fatigued, while under the influence of alcohol or drugs, medication or anything that could affect your vision, alertness, coordination or judgement.

- Do not use the product in bad weather such as dense fog, heavy rain, strong wind, intense cold, etcetera. Working in bad weather is tiring and often brings added risks, such as icy ground, unpredictable felling direction, etcetera.
- Faulty cutting equipment or the wrong combination of guide bar and saw chain increases the risk of kickback! Only use the guide bar and saw chain combinations we recommend, and follow the filing instructions.
- Never start a product unless the guide bar, saw chain and air covers are fitted correctly. Refer to *Introduction on page 7* for instructions. Without a guide bar and saw chain attached to the product the clutch can come loose and cause serious injury.



- Never start the product indoors. Exhaust fumes can be dangerous if inhaled.
- Observe your surroundings and make sure that there is no risk of people or animals coming in contact with or affect your control of the product.

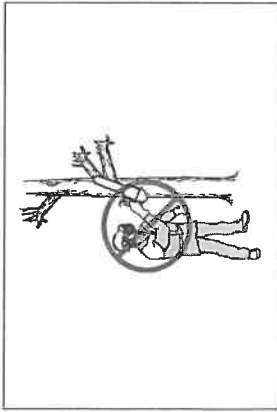


- Lack of concentration can lead to kickback, if the kickback zone of the bar accidentally touches a branch, nearby tree or some other object.
- Never use a chainsaw by holding it with one hand. A chainsaw is not safely controlled with one hand; you can cut yourself. Always have a secure, firm grip around the handles with both hands.
- Always hold the chainsaw firmly with your right hand on the top handle and your left hand on the front handle. Wrap your fingers and thumbs around the handles. You should use this grip whether you are right handed or left handed. This grip minimizes the

effect of kickback and lets you keep the chainsaw under control. Do not let go of the handles!

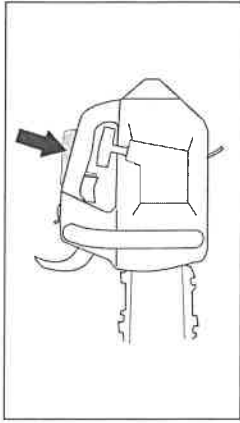


Never use the chainsaw above shoulder height.

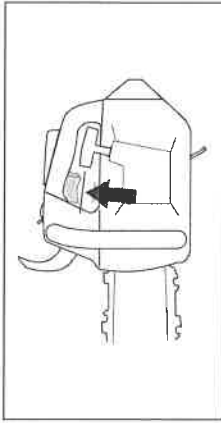


- Do not use the product in a situation where you cannot call for help in case of an accident. Sometimes chips get stuck in the clutch cover causing the saw chain to jam. Always stop the engine before cleaning.
- If the saw chain jams in the cut: stop the engine! Running an engine in a confined or badly ventilated area can result in death due to carbon monoxide poisoning.
- The exhaust fumes from the engine are hot and may contain sparks which can start a fire. Do not start the product indoors or near flammable material. Use the chain brake as a parking brake when you start the product and when you move short distances. Always carry the product in the front handle. This decreases the risk that you or a person near you get hit by the saw chain.
- Overexposure to vibration can lead to circulatory damage or nerve damage in people who have impaired circulation. Contact your doctor if you experience symptoms of overexposure to vibration. Such symptoms include numbness, loss of feeling, tingling, pricking, pain, loss of strength, changes in skin colour or condition. These symptoms normally appear in the fingers, hands or wrists. These symptoms may be increased in cold temperatures. It is not possible to cover every conceivable situation you can face when using a chainsaw. Always

- Push down the throttle trigger lockout and make sure that it goes back to its initial position when you release it.



- Make sure that the throttle trigger is locked at the idle position when the throttle trigger lockout is released.



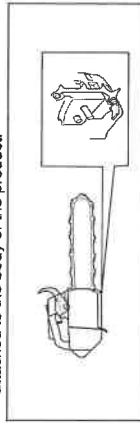
- Start the chainsaw and apply full throttle.
- Release the throttle trigger and make sure that the saw chain stops and stays stationary.



WARNING: If the saw chain rotates when the throttle trigger is in the idle position, speak to our Service Center.

To do a check of the chain catcher

- Make sure that there is no damage on the chain catcher.
- Make sure that the chain catcher is stable and attached to the body of the product.



To do a check of the vibration damping system

- Make sure that there are no cracks or deformation on the vibration damping units.
- Make sure that the vibration damping units are correctly attached to the engine unit and handle unit.

To do a check of the start/stop switch

- Start the engine.
- Push the start/stop switch to the STOP position. The engine must stop. (1 Open .0 Stop)



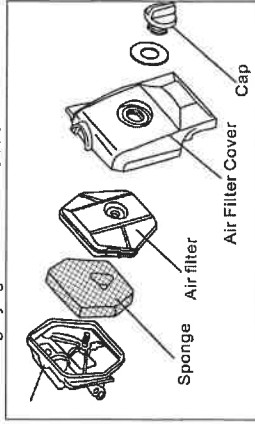
To clean the air filter

Clean the air filter from dirt and dust regularly. This prevents carburetor malfunctions, starting problems, loss of engine power, wear to engine parts and more fuel consumption than usual.

- Remove the air filter cover and the air filter.
- Use a brush or shake the air filter clean. Use detergent and water to clean it fully.

Note: An air filter that is used for a long time can not be fully cleaned. Replace the air filter regularly and always replace a defective air filter.

- Attach the air filter and make sure that the air filter seals tightly against the filter holder.



Note: Because of different work conditions, weather or season, your product can be used with different types of air filter. Speak to your service Center for more information.

Maintenance

Introduction

WARNING: Read and understand the safety chapter before you do maintenance on the product.

Maintenance and checks of the safety devices on the product

To do a check of the brake band

1. Use a brush to remove wood dust, resin and dirt from the chain brake and clutch drum. Dirt and wear can decrease the function of the brake.



2. Do a check of the brake band. The brake band must be at a minimum of 0.6 mm/0.024 in thick at its thinnest point.

To do a check of the front hand guard

1. Make sure that the front hand guard is not damaged and that there are no defects, such as cracks.
2. Make sure that the front hand guard moves freely and that it is attached safely to the clutch cover.



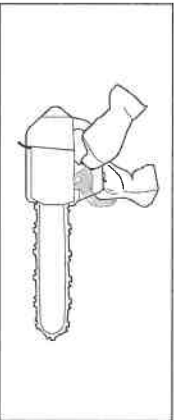
To do a check of the chain brake

1. Start the product.



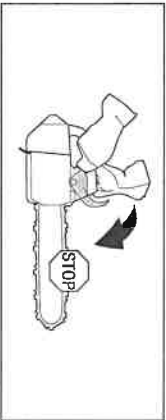
WARNING: Make sure that the saw chain does not touch the ground or other objects.

2. Hold the product lightly.



WARNING: Make sure that the saw chain does not touch the ground or other objects.

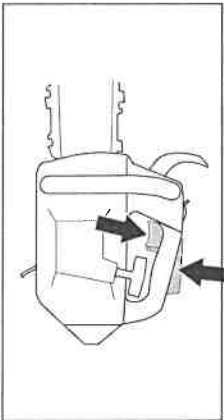
3. Apply full throttle and tilt your left wrist against the front hand guard to engage the chain brake. The saw chain must stop immediately.



WARNING: Do not let go of the front handle when you engage the chain brake.

To do a check of the throttle trigger and the throttle trigger lockout

1. Make sure that the throttle trigger and throttle trigger lockout move freely and that the return spring works correctly.



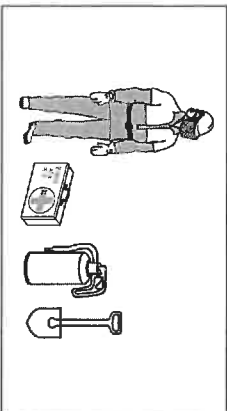
exercise care and use your common sense. Avoid all situations which you consider to be beyond your capability. If you still feel uncertain about operating procedures after reading these instructions, you should consult an expert before continuing. Contact our Service Center if you have any questions about the use of the chainsaw. We will willingly be of service and provide you with advice as well as help you to use your chainsaw both efficiently and safely. Attend a training course in chainsaw usage if possible. Online, forestry school or your library can provide information about which training materials and courses are available.



Personal protective equipment



WARNING: Read the warning instructions that follow before you use the product.



- Most chainsaw accidents occur when the saw chain touches the operator. You must use approved personal protective equipment during operation. Personal protective equipment does not give you full protection from injuries but it decreases the degree of injury if an accident occurs. Speak to our Service Center for recommendations about which equipment to use.
- Your clothing must be close-fitting but not limit your movements. Regularly do a check of the condition of the personal protective equipment.
- Use an approved protective helmet.
- Use approved hearing protection. Long-term exposure to noise can result in permanent damage to the hearing.
- Use protective glasses or a face visor to decrease the risk of injury from thrown objects. The product can throw objects, such as wood chips, small pieces of wood and more, at large force. This can result in serious injury, especially to the eyes.

- Use gloves with saw protection.
- Use pants with saw protection.
- Use boots with saw protection, steel toe-cap and non-slip sole.
- Always have a first-aid kit with you.
- Risk of sparks. Keep fire extinguishing tools and a shovel near to prevent forest fires.

Safety devices on the product



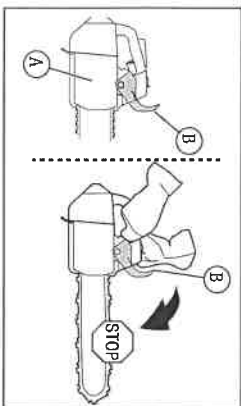
WARNING: Read the warning instructions that follow before you use the product.

- Do not use a product with defective safety devices.
- Do a check of the safety devices regularly.
- If the safety devices are defective, speak to our Service Center.

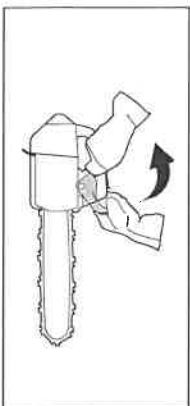
Chain brake and front hand guard

Your product has a chain brake that stops the saw chain if you get a kickback. The chain brake decreases the risk of accidents, but only you can prevent them.

The chain brake (A) engages manually by your left hand or automatically by the inertia release mechanism. Push the front hand guard (B) forward to engage the chain brake manually.



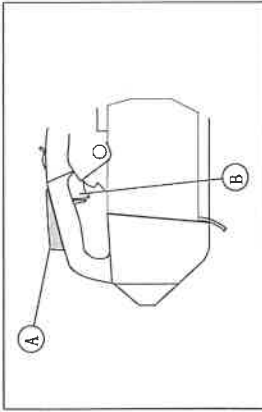
Pull the front hand guard rearward to disengage the chain brake.



Throttle trigger lockout

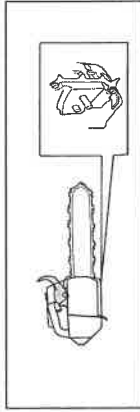
The throttle trigger lockout prevents accidental operation of the throttle trigger. If you put your hand around the

handle and press the throttle trigger lockout (A), it releases the throttle trigger (B). If you release the handle, the throttle trigger and the throttle trigger lockout move back to their initial positions. This function locks the throttle trigger at idle speed.



Chain catcher

The chain catcher catches the saw chain if it breaks or derails. Correct saw chain tension and correctly applied maintenance on the saw chain and guide bar, decrease the risk of accidents.

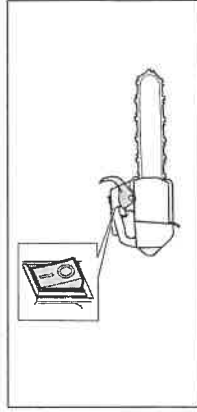


Vibration damping system

The vibration damping system decreases vibration in the handles. Vibration damping units operate as a separation between the product body and the handle unit.

Start/stop switch

Use the start/stop switch to stop the engine.



Muffler

WARNING: The muffler becomes very hot during/after operation and at idle speed. There is a risk of fire, especially when you operate the product near flammable materials and/or fumes.

WARNING: Do not operate a product without a muffler or with a defective muffler. A defective muffler can increase the noise level and the risk of fire. Keep fire extinguishing tools near. Do not use a product without, or with a broken, spark arrestor mesh if you must have a spark arrestor mesh in your area.

The muffler keeps the noise levels to a minimum and points the exhaust fumes away from the operator. In areas with a hot, dry weather there is a high risk of fire. Obey local regulations and maintenance instructions.

Fuel safety

WARNING: Read the warning instructions that follow before you use the product.

- Make sure there is plenty of ventilation when refuelling or mixing fuel (petrol and two-stroke oil).
- Fuel and fuel vapour are highly flammable and can cause serious injury when inhaled or allowed to come in contact with the skin. For this reason observe caution when handling fuel and make sure there is adequate ventilation.
- Take care when handling fuel and chain oil. Be aware of the risks of fire, explosion and those associated with inhalation.
- Do not smoke and do not place any hot objects in the vicinity of fuel.
- Always stop the engine and let it cool for a few minutes before refuelling.
- When refuelling, open the fuel cap slowly so that any excess pressure is released gently.
- Tighten the fuel cap carefully after refuelling.
- Never refuel the product while the engine is running.

2. Use approved carabiners to attach the free end of the safety strap to one of the connection points on the harness. This is your primary connection point.



CAUTION: The safety strap must only be attached to the rope eyelet.

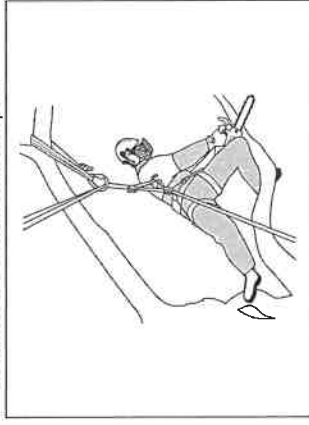
3. Make sure that you are in a stable and safe position to make the cut.
4. Release the product from the secondary connection point, start the product and make the cut.
5. Engage the chain brake directly after the cut is completed.
6. Stop the product and put it in its secondary connection point.

To operate the product in a tree

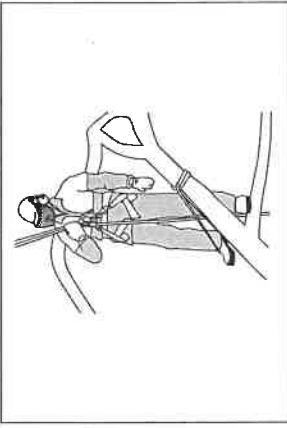


WARNING: Most accidents occur when the operator does not have full control of the product or the work position.

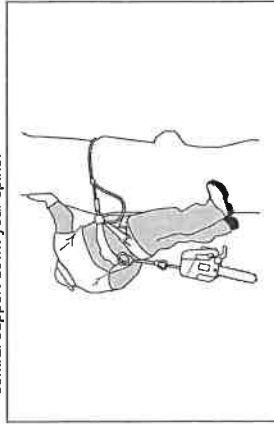
- Keep a safe work position.
- Cut horizontal sections at hip level and vertical sections at solar plexus level.
- Hold the product with 2 hands.
- Make sure that you are stable on your feet and keep a low lateral force when you cut vertical branches. Steer the safety line through a different connection point to remove or prevent increasing lateral forces. You can also use an adjustable strap directly from the harness to a different connection point.



- Use a foot loop to keep a safe work position.



- Do a check of the harness, belt and ropes at a regular interval.
- If you must climb with the product, attach the product to the rear connection point on the harness. The rear connection point keeps the product clear from climbing lines and makes sure that the weight has central support down your spine.



WARNING: You must engage the chain brake when you lower the product onto its strap.



To remove a trapped product

1. Stop the product.
2. Attach the product safely to the tree inboard, against the trunk side, of the cut or a different tool line.
3. Carefully pull the saw away from the kerf while you lift the branch as necessary.



WARNING: Do not try to pull the product free. Risk of serious injury.

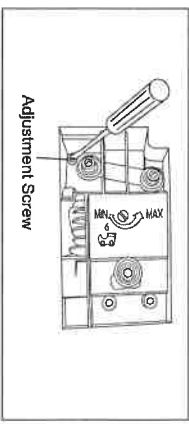
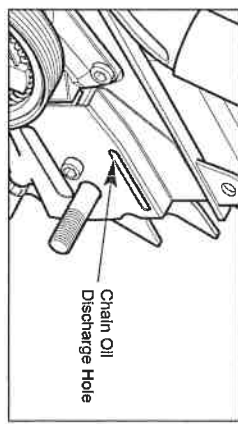
4. If it is necessary, use a hand saw or a second chainsaw to release the product. Cut the branch at a minimum of 30 cm/12 in from the caught product. Make the cut on the outer end from where the product is caught.

Adjusting the automatic oiler

The oiler automatically delivers the proper amount of oil to the guide bar and saw chain. As the engine speed increases, so does the oil flow.

The amount of oil flowing to the guide bar and saw chain may be changed by turning the adjustment screw with a small standard screwdriver.

Turn the screw clockwise to decrease oil flow or turn the screw counterclockwise to increase oil flow



Note: Empty your oil tank when you don't use
if not the oil will keep coming out.

To start the product in the tree

Note: Make sure that you have sufficient fuel before you start the product.

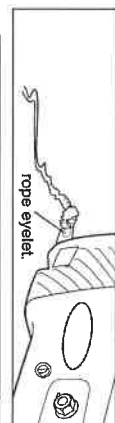
- Engage the chain brake.
- Hold the product on the left or right side of your body when you start the product.
 - If you hold the product on your left side, put your left hand on the front handle. Hold the starter rope handle with your right hand and thrust the product away from your body when you start the product.
 - If you hold the product on your right side, put your right hand on one of the two handles. Hold the starter rope handle with your left hand and thrust the product away from your body when you start the product.

To prepare the product for operation in the tree

Ground operator

As a ground operator, do the following steps.

- Examine the product.
- Fill the fuel and chain oil tanks.
- Attach the end of an approved safety strap to the rope eyelet.



Note: A safety stop makes sure that the product does not hit the ground if it falls.

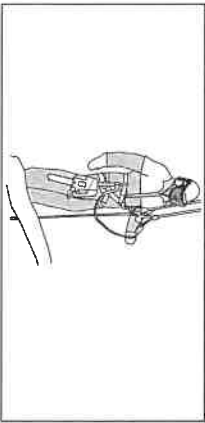
- Make sure that there is a carabiner on the other end of the safety stop.
- Start and warm up the product.
- Stop the product.
- Engage the chain brake.
- Lift the product to the operator in the tree using ascent tools.

WARNING: Make sure that the product is safely attached when you lift it to the operator in the tree.

Tree operator

As a tree operator, follow the instructions below.

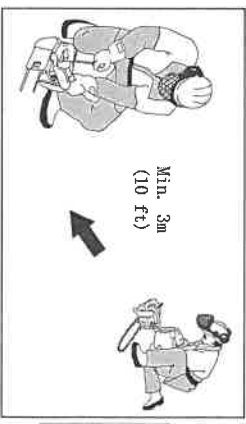
- Before you disconnect the safety stop from the ascent tools, you must attach the product to the harness. Attach the product to the harness through the belt eyelet or a steel ring on the safety stop.



WARNING: Attach the safety stop to 1 on the recommended connection points on the harness.

WARNING: If you use only the safety strap to attach the product to the harness, lower the product fully down with the safety stop. Do not let go of the product from a height.

- Always move the product at least 3 m (10 ft) away from the refueling area and fuel source before starting.



After refueling, there are some situations where you must never start the product:

- If you have spilled fuel or chain oil on the product. Wipe off the spillage and allow remaining fuel to evaporate.
- If you have spilled fuel on yourself or on your clothes. Change your clothes and wash any part of your body that has come in contact with fuel. Use soap and water.
- If the product leaks fuel. Regularly do a check for leaks from the fuel tank, fuel cap and fuel lines.

Safety instructions for maintenance

WARNING: Read the warning instructions that follow before you do maintenance on the product.

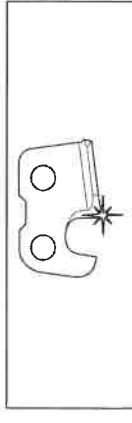
- Do only the maintenance and servicing given in this operator's manual. Let professional servicing personnel do all other servicing and repairs.
- Regularly do the safety checks, maintenance and service instructions given in this manual. Regular maintenance increases the life of the product and decreases the risk of accidents.
- If the safety checks in this operator's manual is not approved after you do maintenance, speak to our Service Center. We guarantee that there are professional repairs and servicing available for your product.

Safety instructions for the cutting equipment

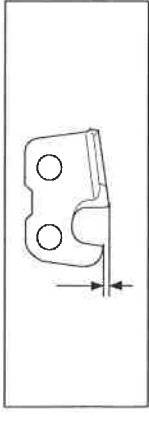
WARNING: Read the warning instructions that follow before you use the product.

- Only use the guide bars/saw chain combinations and filing equipment that we recommend.

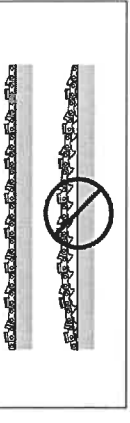
- Use protective gloves when you use or do maintenance on the saw chain. A saw chain that does not move can also cause injuries.
- Keep the cutting teeth correctly sharpened. Obey the instructions and use the recommended file gauge. A saw chain that is damaged or incorrectly sharpened increases the risk of accidents.



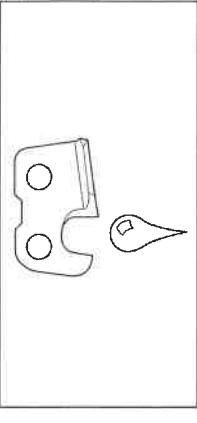
Keep the correct depth gauge setting. Obey the instructions and use the recommended depth gauge setting. Too large depth gauge setting increases the risk of kickback.



Make sure that the saw chain has the correct tension. If the saw chain is not tight against the guide bar, the saw chain can derail. An incorrect saw chain tension increases wear on the guide bar, saw chain and chain drive sprocket.



Do maintenance on the cutting equipment regularly and keep it correctly lubricated. If the saw chain is not correctly lubricated, the risk of wear on the guide bar, saw chain and chain drive sprocket increases.



Kickback information



WARNING: A kickback can cause serious injury or death to the operator or others. To decrease the risk you must know the causes of kickback and how to prevent them.

A kickback occurs when the kickback zone of the guide bar touches an object. A kickback can occur suddenly and with large force, which throws the product in the direction of the operator.



Kickback always occurs in the cutting plane of the guide bar. Usually, the product is thrown against the operator but can also move in a different direction. It is how you use the product when the kickback occurs that causes the direction of the movement.



A smaller bar tip radius decreases the force of the kickback.

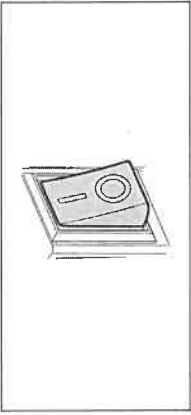
Use a low kickback saw chain to decrease the effects of kickback. Do not let the kickback zone touch an object.



WARNING: No saw chain fully prevents kickback. Always obey the instructions.

To stop the engine

- Push the stop switch(0) to stop the engine.



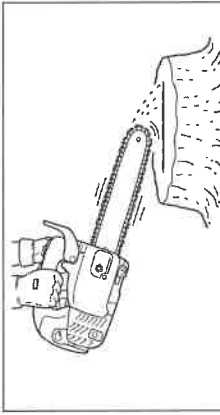
Note: Stop engine (0)
Open engine (1)

To lubricate the cutting equipment

To do a check of the chain saw lubrication

Do a check of the chain saw lubrication each time you refuel.

1. Point the nose of the guide bar at a light color surface almost 20 cm (8 in) away.
2. After 1 minute of running, a line of oil shows on the light surface.



3. If you cannot see the line of oil after 1 minute, clean the oil channel in the guide bar. Clean the groove in the edge of the guide bar. Make sure the guide bar nose sprocket turns freely and that there are no blockages in the lubrication hole. Clean and lubricate the tip sprocket.

The engine doesn't start

1. Examine the choke button position
2. Examine the choke position
3. Examine the muffler and cylinder
feel fuel in the smoke hole with your fingers

Cylinder flooded

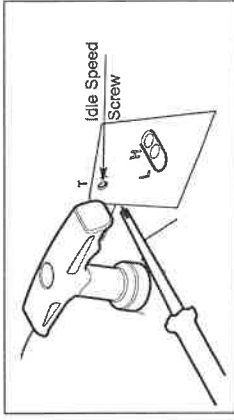
- a. Turn off the switch button.
- b. Remove the air filter cover.
- c. Remove the air filter.
- d. Remove the spark plug.
- e. Turn the machine upside down.
- f. Pull the starting rope(5-8times) to let the fuel flow out of the cylinder.
- g. Put back all the parts.

Note:

Make sure the fuel doesn't spill on you body.
4. Start the engine again.

When you pull the trigger-it turns off.

1. Examine the choke position(fully close).
2. Examine the brake .(make sure brake off)
3. Examine the saw chain.
Make sure chain still in the drive sprocket
4. Idle adjustment screw (T)



Use Idle screwdriver to turn the idle adjustment screw 1/4 to 1/2 turn anticlockwise.

5. Start the engine again.

Engine runs but the chain is not running

1. Examine the brake pad (brake off).
2. Examine the choke position(fully close).
3. Examine the saw chain.
Make sure chain still in the drive sprocket.
Make sure chain turn easily by hand.

Engine runs but clutch cover smokes

1. Examine the brake pad (brake off).
The brake spring will melt clutch
2. Examine the saw chain
Make sure chain still in the drive sprocket.
The drive sprocket will melt turbine

Common questions about kickback

- Will the hand always engage the chain brake during a kickback?

No. It is necessary to use some force to push the front hand guard forward. If you do not use the force necessary, the chain brake will not be engaged. You must also hold the handles of the product stable with two hands during work. If a kickback occurs, it is possible that the chain brake does not stop the saw chain before it touches you. There are also some positions in which your hand can not touch the front hand guard to engage the chain brake. An example of this is in the felling position.

- Will the inertia release mechanism always engage the chain brake during kickback?

No. First, the chain brake must operate correctly. Refer to *To do a check of the chain brake on page 18* for instructions about how to do a check of the chain brake. We recommend you to do this each time before you use the product. Second, the force of the kickback must be large to engage the chain brake. If the chain brake is too sensitive, it can engage during rough operation.

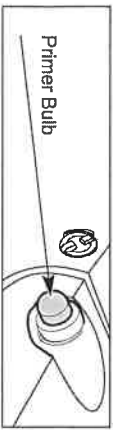
- Will the chain brake always protect me from injury during a Kickback?

No. The chain brake must operate correctly to give protection. The chain brake must also be engaged during a kickback to stop the saw chain. If you are near the guide bar, it is possible that the chain brake does not have time to stop the saw chain before it hits you.

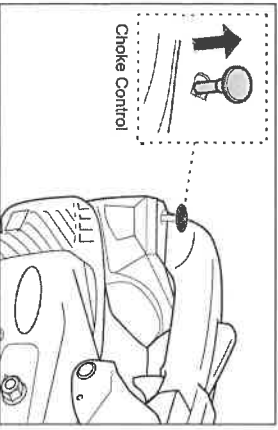


WARNING: Only you and the correct working technique can prevent kickbacks.

3. Push the air primer bulb 6 times.

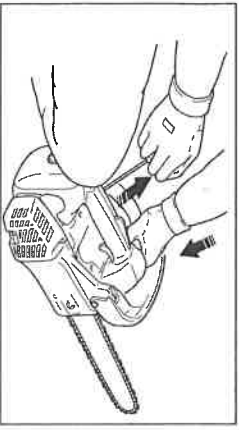


4. Pull the choke control out fully.



5. Hold the body of the product on the ground. Put your left hand on the front handle.

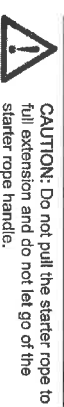
6. Put your knee on the rear part of the Top handle. Pull the starter rope handle slowly with your right hand until you feel some resistance.



7. Continue to pull the starter rope handle until the engine starts or tries to start (pull max 6 times).

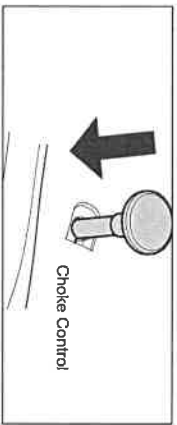


WARNING: Do not twist the starter rope around your hand.



CAUTION: Do not pull the starter rope to full extension and do not let go of the starter rope handle.

8. If the engine starts or tries to start, push the choke control back fully position.



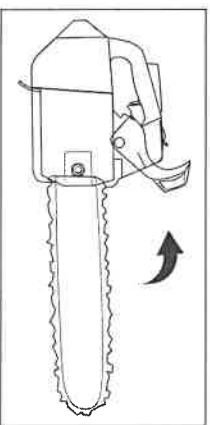
Note: You can identify when the engine fires through a "puff" sound.

9. Pull the starter rope handle until the engine starts.

10. Quickly disengage the throttle trigger lockout to set the product to idle speed.



11. Move the front hand guard rearward to disengage the chain brake.



12. Use the product.

To start the warm engine

1. Move the front hand guard forward to engage the chain brake.
2. Open the switch button(1 open).
3. Push the air primer bulb 6 times.
4. Pull the starter rope handle until the engine starts .
5. Use the product.

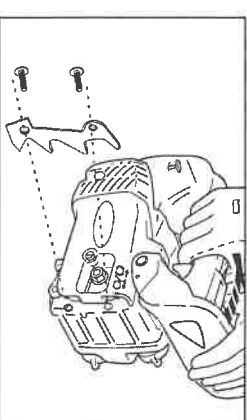
Introduction



WARNING: Read and understand the safety chapter before you assemble the product.

To assemble the guide bar and saw chain

1. Install the bumper spike.

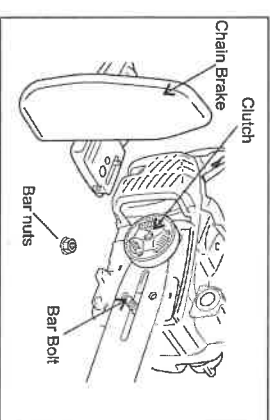


2. Disengage the chain brake.

Loosen the bar nut and remove the clutch cover.

Note: If the clutch cover is not easy to remove, tighten the bar nut, engage the chain brake and release. A click is heard if it is released correctly.

3. Assemble the guide bar onto the bar bolt. Move the guide bar to its most rear position.



4. Install the saw chain correctly around the drive sprocket and put it in the groove on the guide bar.



WARNING: Always use protective gloves when you assemble the saw chain.

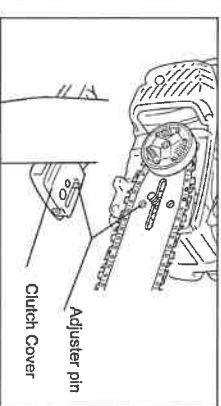


Assembly

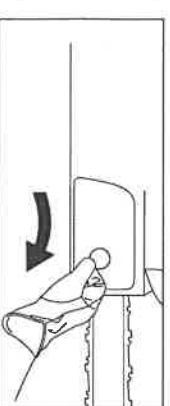
5. Make sure that the edges of the cutters point forward on the top edge of the guide bar.



6. Assemble the clutch cover and steer the chain adjuster pin to the hole in the guide bar.



7. Tighten the bar nut finger tight.

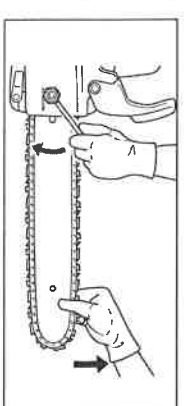


8. Tighten the saw chain.








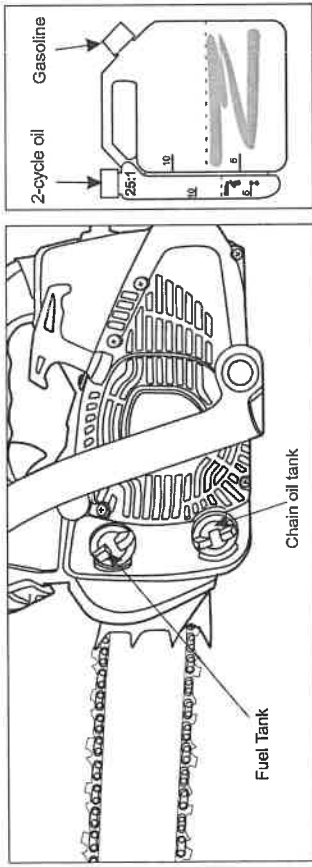
Make sure the chain you can easy turn it by hand


10. Tighten the bar nuts.



Operation

	WARNING: Read and understand the safety chapter before you operate the product.
	CAUTION: For proper engine operation and maximum reliability, pay strict attention to the oil and fuel mixing instructions on the 2-cycle oil container. Using improperly mixed fuel can severely damage the engine.
	WARNING: Gasoline is extremely flammable. Ignited vapors may explode. Always stop the engine and allow it to cool before filling the fuel tank. Do not smoke while filling the tank. Keep sparks and open flames at a distance from the area.
	WARNING: Remove the fuel cap slowly to avoid injury from fuel spray. Never operate the unit without the fuel cap securely in place.
	WARNING: Add fuel in a clean, well-ventilated outdoor area. Wipe up any spilled fuel immediately. Avoid creating a source of ignition for spill fuel. Do not start the engine until fuel vapors dissipate.



	
UNLEADED GAS	2 CYCLE OIL
1 GALLON US (3.8 LITERS)	5.1 FL. OZ. (152 ml)
1 LITER	40 ml

MIXING RATIO - 25:1

To use fuel

Fuel mixture ratio


The fuel mixture ratio for the gasoline and two-cycle engine oil is 25:1

To make the fuel mixture

- Determine the correct quantity of gasoline and engine oil (mixture ratio 25:1). Do not make more than 30 days quantity of fuel mixture.
- Add half of the gasoline quantity to a clean fuel container with an antispill valve.




CAUTION: Do not use gasoline with more than 10% ethanol concentration (E10). This can cause damage to the product.

 **CAUTION:** Do not use gasoline with an octane number less than 90 RON (87 AKI). This can cause damage to the product.

Note: Use gasoline with a higher octane number if you frequently use the product at continuously high engine speed.

- Add the full quantity of the two-cycle engine oil to the fuel container.

 **CAUTION:** Always use air-cooled two-cycled engine oil of high quality. Other oils can cause damage to the product.

- Shake the fuel mixture to mix the contents.
- Add the remaining gasoline quantity to the fuel container.
- Shake the fuel mixture to mix the contents.
- Fill the fuel tank of the product with the fuel mixture.

To fill the fuel tank

- Make sure that the fuel mixture is correct and that the fuel mixture is in a fuel container with an antispill valve.
- If fuel is on the container, remove the unwanted fuel and let the container dry.
- Make sure that the area near the fuel tank cap is clean.
- Remove the fuel tank cap.
- Shake the fuel container before you add the fuel mixture to the fuel tank.
- Put back the fuel tank cap.

To lubricate the saw chain

The product has an automatic lubrication system. The saw chain oil tank and the fuel tank are designed so that the fuel runs out before the saw chain oil. This safety feature requires that the correct chain oil is used and that the instructions are obeyed.

- Use vegetable-based saw chain oil or a standard chain oil.
- Make sure that the area near the cap of the saw chain oil tank is clean.
- Remove the cap of the saw chain oil tank.

- Fill the saw chain oil tank with the recommended saw chain oil.
- Put back the cap of the saw chain oil tank.

To start and stop

Before you start the engine

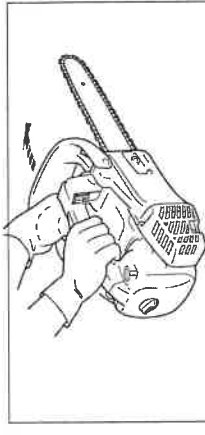
- Examine the product for missing, damaged, loose or worn parts.
- Examine the nuts, screws and bolts.
- Examine the air filter.
- Examine the trigger lockout and the trigger for correct operation.
- Examine the stop switch for correct operation.
- Examine the product for fuel leaks.
- Examine the saw chain sharpness and tension.

To start a cold engine



WARNING: The chain brake must be engaged when the product is started to decrease the risk of injury.

- Move the front hand guard forward to engage the chain brake.



- Open the switch button(1 open).

