

CRAFTOP®



Owner's Manual

Pole Saw

NTPS260D



EXPERTS
IN EQUIPMENTS OF
GARDENING AND AGRICULTURE

ENGLISH
VERSION: 00-202211

We thank you for buying CRAFTOP Pole Saw

This pole saw provides advanced technology in incorporating many convenient features for you to perform your daily cutting work.

Before attempting to use this pole saw, please read this manual carefully until you completely understand and can follow all safety rules, precautions, operating and maintenance instructions. It will help you both to become more familiar with this pole saw and to recognize and avoid situations that could endanger you and others. **Careless or improper use may cause serious or even fatal injury!**

If you have any question about your pole saw and this manual, please contact your local authorized dealer or service center. They always welcome your questions, suggestions, and constructive criticism.

We hope you enjoy this pole saw and wish you many years of safe and enjoyable cutting work.

CRAFTOP CANADA LTD.

The logo for CRAFTOP is rendered in a bold, italicized, sans-serif font. The letters are a light red or pink color. The 'C' is particularly stylized, with a thick, horizontal bar extending from its top left. A registered trademark symbol (®) is positioned to the upper right of the 'P'.

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Guide to use this manual

This Owner's Manual refers to a CRAFTOP pole saw, also called a machine, product or unit in this Owner's Manual.

All information, specifications, descriptions and illustrations in this manual are as accurate as known at the time of publication, but are subject to change without notice. Due to ongoing product development, there may be difference between your machine and the information in this manual. No legal obligations or commitments can be delivered from the information, specifications, descriptions, or illustrations in this manual.

Illustrations are only for orientation and are merely used to help explain the text descriptions and instructions. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

Some signs or symbols on the machine may be a little different refer to special certification requirements for certain markets.

Any technical modifications to the machine that were introduced after the editorial deadline, please consult your local dealer for more supplementary information.

All safety precautions and instructions described in this manual should be observed during operation of the pole saw, and all applicable federal, state and local safety regulations, standards, and ordinances should be observed as well.

Do not sell, lend or rent the machine without this owner's manual. Always be sure to include this owner's manual together with the machine, and make sure that anyone using it understands all the information and follows all the instruction contained in this manual.

Signs and symbols in this manual

DANGER

Texts with this symbol contain information regarding hazardous situations which will cause death or severe injures if not avoided.

WARNING

Texts with this symbol contain information regarding hazardous situations which could cause death or severe injures if not avoided.

CAUTION

Texts with this symbol contain information regarding hazardous situations which could cause minor or moderate injures if not avoided.

NOTICE

Texts with this symbol information regarding situation which could cause pole saw damage if not avoided.

information

Texts with this symbol contain supplementary information.

Read and understand the Owner's Manual.

It is very important that you read this Owner's Manual carefully, make sure that you completely understand and can follow all safety rules, precautions, operating and maintenance instructions before attempting to use this pole saw, failure to do so may cause serious or even fatal injury!

Special safety precautions must be observed when working with this machine because it has very sharp, high-speed cutting attachments.

Wear proper clothing.

Wear eye, ear and head protection.

Always wear appropriate personal protective equipments for pole saw operation, inclusive of eye protection, ear protection, and head protection.

Face mask required.

Operators who are sensitive to dust or other common airborne allergens may need to wear a dust mask.





Hands protection.
Always wear appropriate gloves for pole saw operation.



In the event of impending danger or in an emergency, switch off the engine immediately by pressing the engine stop switch backward to STOP position.



Foot protection required.
Steel toe shoes with anti-slip sole required in working area.

Signs and symbols on the machine

For the purpose of safety operation and maintenance, the meanings of signs and symbols may be attached to or embossed on the machine.



Fire hazard.
Risk of fire.
Highly flammable material.



Choke control.
Choke closed.
“Cold start” position.



No smoking.
Do not smoke in this area.



Choke control.
Choke open.
“Warm start” or “Running” position.



Sharp edges.
Watch your fingers.
Do not touch the saw chain while the engine is running.



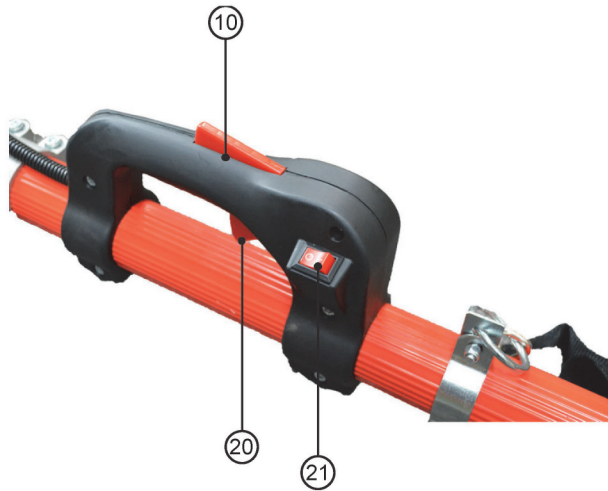
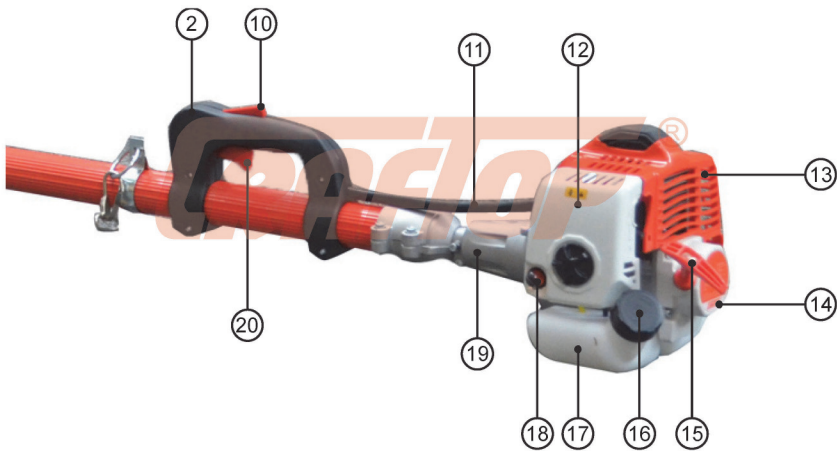
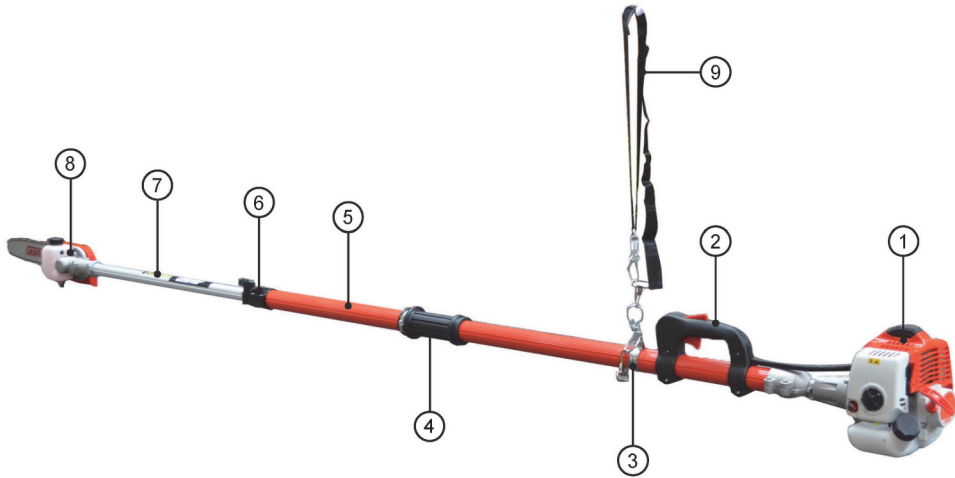
Hazards of electric shock.
Be careful of high voltage cable when you use machine.
Do not touch!

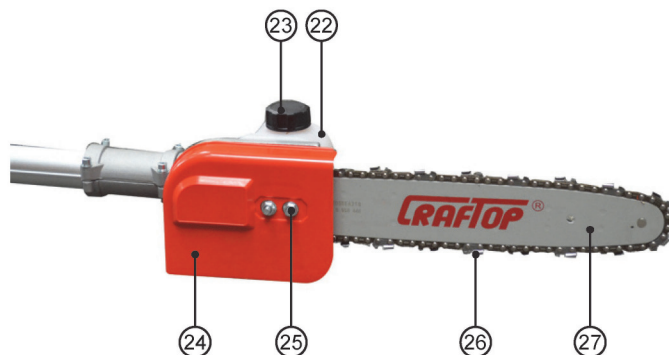


Hot surface.
Do not touch.

Product overview

General overview





- | | | | | | |
|---|---------------------|----|---------------------------------|----|------------------------|
| 1 | Power head | 10 | Throttle trigger safety lockout | 19 | Connection flange |
| 2 | Rear control handle | 11 | Control cable | 20 | Throttle trigger |
| 3 | Harness clamp hook | 12 | Air filter cover | 21 | Stop switch |
| 4 | Front handle | 13 | Engine cover | 22 | Chain oil tank |
| 5 | Lower tube assembly | 14 | Recoil starter | 23 | Chain oil tank cap |
| 6 | Tube locking knob | 15 | Recoil starter handle | 24 | Protective guard |
| 7 | Upper tube assembly | 16 | Fuel tank cap | 25 | Chain tensioning screw |
| 8 | Cutting attachment | 17 | Fuel tank | 26 | Saw chain |
| 9 | Harness | 18 | Prime bulb | 27 | Guide bar |

General introduction

This pole saw is designed especially to cut difficult-to-reach branches in order to trim trees, hedges, and other foliage.

This pole saw has an extendable pole, so that you can stand on the ground and reach high branches and cut, trim, or prune them to your desire.

NOTICE

Never use this machine for any other purposes. Never try to cut stones, metals, plastics or any other hard objects. Using for other purposes than cutting branches may damage the machine or cause serious injury.

Technical specification

MODEL		NTPS260D	
Item	Description	Unit	Specification
Overall	Dimensions (L x W x H)	mm	2550x260x270
	Gross weight	kg	14.5
	Net weight	kg	9.5
Engine	Type		Single cylinder, air cooled, 2-strokes
	Model		1E34FN
	Rated power	kw/rpm	0.7/7000
	Displacement	cc	26
	Carburetor		RUIXING

MODEL		NTPS260D	
Item	Description	Unit	Specification
	Type		Diaphragm
	Starting method		Manual
	Spark plug		RCJ6Y
	Electrode gap	mm	0.5~0.7
	Engine speed, Idle	rpm	2700-3300
	Max Engine speed, -Working	rpm	7500
	Ignition method		C.D.I
Cutting head	Saw chain quantity	pcs	1
	Guide bar quantity	mm	1
	Bar length	inch	12
Transmission	Type		Gear
Fuel system	Fuel type		Mixture of unleaded gasoline and two-stroke oil
	Fuel mixture ratio		Gasoline : Oil = 40:1
	Gasoline		Unleaded gasoline with minimum octane 92
	Oil		2 stroke engine oil
	Fuel tank capacity	L	0.7
Chain lubrication	Lubrication oil type		2 stroke engine oil
	Tank capacity	ml	140
Guide bar	Type		12", 3/8", 050-44E
	Sprocket		9 Teeth
	Standard bar length	inch	12
	Maximum cutting length	mm	300
	Recommended bar length	inch	12
	Guide Bar Model No.		050-44E
	Pitch	Inch(mm)	3/8" (9.525)
	Gauge	inch	0.050
Cutting Pipe	Adjustable Length	Yes/No	Yes
	Length	m	2.6~4.1
	Diameter	mm	46.5
	Thickness	mm	2.0
Noise levels	Equivalent noise pressure level	dB(A)	96
	Equivalent noise power level	dB(A)	112
Vibration levels	Handle	m/s ²	16.1

information

Specifications, descriptions and illustrations in this manual are as accurate as known at the time of publication, but are subject to change without notice.

Safety precautions and instructions



Special safety precautions must be observed when working with this machine because it has very sharp, high-speed saw chain. Careless or improper use may cause serious or even fatal death.



Before attempting to use this pole saw, please read this manual carefully until you completely understand and can follow all safety rules, precautions, operating and maintenance instructions. Failure to do so could result in serious personal injury or machine failure.

Safety precautions

WARNING

- Observe all applicable local safety regulations, standards and ordinances.
- If you have not used this type of pole saw before, have your dealer or other experienced operator show you how to operate your machine.
- Because a pole saw runs at very high speeds, some special precautions must be observed to reduce the risk of accident and personal injury. Careless or improper use may cause serious or even fatal injury.
- The use of this pole saw may be hazardous. The saw chain has many sharp edges. If the sharp edge contacts your body, they will cut you, even if the saw chain is not moving.
- The exhaust from this machine may contain chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.
- The noise emitted from this machine may be restricted to certain times by national or local regulations.
- Never permit a person without sufficient training or instruction to operate this machine.
- Minors should never be allowed to use this pole saw. Do not allow other persons near the pole saw when starting or cutting. Keep bystanders, especially children, and animals out of the work area. Keep bystanders, children, and animals a minimum of 50 feet (15m) from the work area.
- The person who use this pole saw must be in good physical condition and mental health, and not under the influence of alcohol and drugs. Never use this pole saw when you are fatigued, sick, or upset. If you feel tired, take a break.
- The components of this machine generate an electromagnetic field during operation, which may interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with pacemakers should consult with their physician and the

pacemaker manufacturer before operating this machine. In the absence of such information, CRAFTOP does not recommend the use of this machine by anyone who has a pacemaker.

- The owner of this machine is responsible for avoiding injury to third parties or damage to their property.

CAUTION

Prolonged exposure to cold and/or vibration may result in injury. Read and follow all safety and operation instructions to minimize risk of injury. Failure to follow instructions may result in painful wrist/hand/arm injuries.

Raynaud's Phenomenon may affect the fingers of certain individual if a person is exposed to vibration and cold. Exposure to vibration and cold may cause tingling and burning sensations, followed by loss of color and numbness in the fingers. The following precautions are strongly recommended:

- Keep your body warm, especially the head, neck, hands, wrists, ankles and feet.
- Maintain good blood circulation by performing vigorous arm exercises during frequent work breaks.
- Limit the hours of operation, have a rest when you feel tired or fatigued.
- If you experience discomfort, redness, and swelling of the fingers followed by whitening and loss of feeling, consult your physician before continuing exposing yourself to cold and vibration.

Overusing the muscles and tendons of the fingers, hands, arms, and shoulders may cause soreness, swelling, numbness, weakness, and extreme pain in those areas.

- Avoid using your wrist in a bent, extended, or twisted posture. Instead, try to maintain a straight wrist position. Also, when grasping, use your whole hand, not just the thumb and index finger.
- Take periodic breaks to minimize repetition and let your hands have a rest.
- Reduce the speed and force with which you do the repetitive movement.
- Do exercise to strengthen your hands and arm muscles.
- Immediately stop using the machine and other power tools, and consult a doctor if you feel tingling, numbness, or pain in the fingers, hands, wrists, or arms.

DANGER

All over head electrical conductors and communications wires can have electricity flow with high voltages. This machine is not insulated against electrical shock. Never touch wires directly or indirectly, otherwise serious injury or even death may result. Keep the pole saw at least 10 meters (33 feet) away from electrical line or branches that contact electrical lines.

DANGER

Do not operate this machine indoors or in inadequately ventilated areas. Engine exhaust contains poisonous emissions and can cause serious injury or death.

Clothing and PPE

WARNING

Most pole saw accidents happen when the saw chain touches the operator. You must wear proper clothing and approved personal protective equipments (PPE) whenever you use a pole saw.

Wear proper clothing.

Clothing must be sturdy but allow complete freedom of movement. Wear snug-fitting clothing, an overall and jacket combination, do not wear a work coat.

Avoid clothing that could get caught on branches or brush or moving parts of the machine. Do not wear a scarf, necktie or jewelry. Tie up and confine long hair with a hair net, cap, or hard hat for instance.



Wear eye, ear and head protection.

Always wear appropriate personal protective equipments for pole saw operation, inclusive of eye protection, ear protection, and hard head protection. We recommend wearing a face shield as additional face and eye protection.



Face mask required.

Operators who are sensitive to dust or other common airborne allergens may need to wear a dust mask.

Dust masks can provide protection against dust, plant debris, and other plant matter such as pollen. Make sure the mask does not impair your vision, and replace the mask as needed to prevent air restrictions.



Hands protection.

Always wear heavy-duty work gloves made of durable material (e.g. leather) to improve your grip on the pole saw handle for pole saw operation.



Foot protection required.

Wear sturdy footwear with nonslip soles and steel toes within your working area.



Personal protective equipments cannot eliminate the risk of injury, but it will reduce the degree of injury if an accident does happen. Ask your pole saw dealer for help in choosing the right equipments.

Long-time or continuous exposure to high noise levels may cause permanent hearing impairment. Always

wear approved hearing protection when operating a pole saw.

Handle your pole saw safely

WARNING

This pole saw must only be used to cut difficult-to-reach branches in order to trim trees, hedges, and other foliage. Do not use the machine to cut grass, solid metal, sheet metal, plastic, or any other types of material.

Do not use the pole saw as a lever to lift, move or break objects, nor lock it on fixed supports.

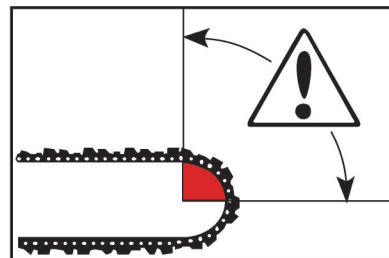
Under any circumstance, you should not modify the original design of the pole saw without approval from the manufacturer. Always use genuine spare parts. Unauthorized modifications or accessories may lead to serious or even fatal injury.

Under any circumstance, you should not operate your pole saw if it is damaged, improperly adjusted or maintained, or not completely or securely assembled. Always inspect the pole saw before each use, and replace the parts immediately if it is worn, loose, damaged or missing.

WARNING

Kickback can happen very suddenly and violently; kicking the saw, bar and chain back at the operator. If this happens when the chain is moving, it can cause very serious or even fatal injuries. It is vital that you understand what causes kickback and that you can avoid it by taking care and using the right working technique.

- **Beware of kickback!** Kickback can occur whenever the tip of the guide bar touches an object while the saw is operating. Kickback may force the bar up and back toward the operator with lightning-like speed.



- **Beware of pinching!** Pinching the saw along the tip of the guide bar may force the bar back rapidly toward the operator. Pinching can occur whenever wood closed in around the moving saw chain.
- If a saw chain should bind fast in a cut, shut off the engine immediately. Push the branch or tree to ease the bind and free the saw chain.
- Keep the saw chain sharp and properly adjusted.
- Always disconnect spark plug wire and place wire where it cannot contact spark plug to prevent accidental starting when setting up, transporting, adjusting or making repairs except carburetor adjustments.
- Always hold the pole saw firmly with two hands when the engine is running. Do not operate a pole saw with one hand. Serious injury to the operator, helpers, bystanders or any combination of these persons may

result from one-handed operation. **The pole saw MUST be used with two hands!**

- Operate the pole saw only in a well-ventilated outdoor area. Never start or run the engine inside a closed room or building. Exhaust fumes contain dangerous carbon monoxide.
- Never operate the machine at night, at times of heavy fog, or at any other times when your field of vision might be limited and it would be difficult to maintain a clear view of the working area.
- During rain, storms at times of strong or gale-force winds, or at any other times when weather conditions might make it unsafe to use this machine.
- Carefully plan your cutting operation in advance. Never start cutting until you have a clear work area.
- Maintain footing and balance at all times. Do not stand on slippery, uneven or unstable surfaces. Do not operate the pole saw in odd position or on a ladder or ladders.
- Always shut off the engine before putting the pole saw down.
- Keep exhaust area clear of flammable debris. Avoid contact hot surfaces during and immediately after operation.
- Keep the pole saw as clean as possible. Keep it free of loose vegetation and mud etc.
- Use a damp cloth, soft bristle brush, and/or air compressor (Max 25 PSI) to clear your pole saw. Do not use a pressure washer to clean pole saw as the solid jet of high pressure water may damage parts of the machine.

Maintain in good work order

CAUTION

All pole saw service, other than the items listed in the maintenance section of this manual, should be performed by authorized service dealer or competent pole saw service personnel.

WARNING

Only use high-quality replacement parts in order to avoid the risk of accidents and damage to the power tool. If you have any questions in this respect, consult an authorized dealer or service center. CRAFTOP recommends the use of genuine spare parts. They are specifically designed to match your model and meet your performance requirements.

- Always maintain this pole saw according to this owner's manual and follow the recommended scheduled maintenance.
- To reduce the risk of injury, always shut off the engine before carrying out any maintenance or repairs or cleaning the machine, only excepts carburetor and idle speed adjustments.
- Never modify or disable any of the pole saw's safety devices.
- Make sure the chain and sprocket are correctly adjusted before operating the machine. Never attempt chain adjustment with the engine running!

- Always make sure the cutting attachment is properly installed and firmly tightened before operation.
- Check that the cutting attachment is in safe operating condition. Dull, loose or damaged saw chain should not be used.
- Never use a cracked or warped guide bar. Replace it with a serviceable one and make sure it fits properly.
- Check the machine for loose/missing nuts, bolts, and screws, make sure there are no missing or loose fasteners and the stop switch and throttle controls are working properly. Tighten and/or replace it as needed.
- Do not turn the engine over on the starter with the spark plug boot or spark plug removed since there is otherwise a risk of fire from uncontained sparking.
- Check fuel system for leaks due to fuel tank damage, especially if the machine is dropped accidentally. If damages or leaks are found, do not use the machine any more, otherwise serious personal injury or property damage may occur. Have your machine repaired by an authorized dealer or service center before using.
- Check the fuel filler cap for leaks at regular intervals.
- Check the chain lubrication oil level is located at the proper position.
- To reduce the risk of fire, do not service or store your machine near open flames.
- Always use genuine parts and accessories when repairing or maintaining this machine.
- Only use a spark plug type which is approved by CRAFTOP and make sure it is in good condition.
- Do not make unauthorized modifications or substitutions to the guide bar or chain.
- Inspect the ignition lead (insulation in good condition, secure connection).
- Check the condition of the muffler. To reduce the risk of fire and damage to hearing, do not operate your machine if the muffler is damaged or missing.
- Do not touch a the muffler, spark plug, or other metallic parts of the engine while the engine is running or immediately shutting down, otherwise burn injury will result.
- When planning your work schedule, allow plenty of time to rest. Limit the amount of time over which the machine is to be use continuously to somewhere around 30~40 minutes per session, and take 10~20 minutes of rest between work sessions. Also try to keep the total amount of work performed in a single day under 2 hours or less.

Transporting your pole saw

WARNING

Always stop the engine before putting the pole saw down. Carrying a pole saw with the engine running may be extremely dangerous.

- When transporting your pole saw by hand, the engine must be shut off and the saw chain must be covered with the chain cover (scabbard) and in the proper position (for example, the saw chain should be pointing backward). Avoid touching hot parts of the

machine, especially the muffler and gear housing, otherwise you could suffer serious burns.



- When transporting your pole saw in a vehicle, the saw chain should be covered with the chain cover (scabbard) and properly secured to avoid turnover, fuel spillage and damage to your machine.

Handle fuel with caution

You pole saw use a gasoline-oil mixture for fuel.

WARNING
Gasoline is an extremely flammable fuel. Pay high attention when mixing, storing or handling, otherwise serious personal injury may result.



If spilled and ignited by a spark or other ignition source, gasoline can cause fire and serious burn injury or property damage.



Do not smoke or bring any fire or flame while handling fuel or while operating the pole saw. Note that combustible fuel vapor may escape from the fuel system.

- Mix and pour fuel in a well ventilated outdoor area on bare ground; store fuel in a cool, dry well ventilated place; and use an approved, marked container for all fuel purposes. Wipe up all fuel spills before starting the machine.
- Eliminate all sources of sparks or flame (i.e. smoking, open flames, or work that can cause sparks) in the areas where fuel is mixed, poured, or stored. Always shut off the engine and allow it to cool down before refueling.
- Never smoke or light fires near the pole saw. Keep the machine away from excessive heat. Engine fuel is very flammable and fire could lead to serious personal injury or property damage.
- Always use with caution when handling fuel. Wipe up all spills and then move the pole saw at least 10feet (3 meters) from the fueling point before starting the engine.
- To reduce the risk of fire and explosion, fuel your machine only in a well-ventilated area, outdoors away from flames, pilot lights, heaters, electric motors, and other sources of ignition
- Always shut off the engine before refueling, let the machine cool down in a non-combustible area, not on dry leaves, straw, paper, etc. Do not fuel a hot engine because fuel may spill out and cause a fire.

- Loose a bit of the fuel cap carefully so as to allow any pressure build-up in the fuel tank to release slowly and avoid fuel spillage. Never remove the fuel cap when engine is running!
- Do not overfill the fuel tank. If you spill fuel, wipe the machine immediately. If fuel spills on your clothing, change it immediately.
- Tight the fuel cap securely to the proper position, make sure it does not loosen or come off due to the machine vibrations.
- To reduce the risk of serious or fatal burn injuries, check for fuel leakage. If fuel leakage is found, do not start or run the engine until leak is fixed.
- Do not inhale fuel fumes as they are toxic.
- Store the machine and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.

Before starting the engine

An area within a minimum radius of 50feet (15m) from the using the machine should be considered as a hazardous area, into which on one should enter. If necessary, yellow warning rope and warning signs should be placed around the perimeter of the area. When work is to be performed simultaneously by two or more persons, special care should also be taken to constantly look around or otherwise check for the presence and locations of other people working, so as to maintain sufficient safety distance between each person.

Before starting the engine, check that your machine is properly assembled and set in good condition.

- Check the fuel system for leaks, paying high attention to visible parts such as the fuel tank cap, hose connections and the manual fuel pump (if equipped). If there are any leaks or damage, do not start the engine because of potential risk of fire. Have your machine repaired by an authorized dealer or service center before using it again.
- The engine stop switch must move easily in direction of STOP position and spring back to the normal RUN position.
- Smooth action of throttle trigger lockout and throttle trigger - the throttle trigger must return automatically to the idle position by itself.
- Check that the spark plug boot is secure – a loosen boot may cause arcing that could ignite combustible fumes and cause a fire.
- Cutting attachments securely mounted and in good condition (clean, move freely, not warped, properly sharpened).
- Check the cutter guard for damage.
- Never attempt to modify the controls or safety devices in any way.
- Keep all handles dry and clean, free from oil and dirt – for safe control of the machine.
- To reduce the risk of accidents, do not operate your machine if it is damaged or not properly assembled.
- Before starting the engine, make sure the saw chain is not contacting anything.

When starting the engine

WARNING

Note that the saw chain continue to run for a short period after you let go of the throttle trigger, due to flywheel effect.

- Always move the machine to a place well away from a fuel storage area or the readily flammable materials before starting the engine. Never run the engine without the spark arrestor screen in place. Start the engine at least 10feet (3m) from the fueling spot, outdoors only.
- Keep bystanders, especially children and animals at least 50feet (15m) from the operating point. If you are approached, immediately stop the engine.
- This machine is equipped with a centrifugal clutch mechanism, so the cutting attachments begin to move as soon as the engine is started by squeeze the throttle trigger into the start position.
- Place the machine on firm ground in an open and well ventilated area. Make sure you have good balance and secure footing. Hold the machine securely. The cutting attachments must not contact the ground and all other obstructions because they may begin to run when the engine starts.
- Your machine is designed to be operated by one person only. Do not allow other persons in the work area even when starting.
- To reduce the risk of injury, avoid contact with the cutting attachments.
- Do not drop start the power tool, just follows the way and start the engine as described in this manual.
- Never place the throttle trigger into the high-speed position when starting the engine.
- Never start the engine by standing on the cutting attachments side.
- Check idle speed setting: The cutting attachments must not move when the engine is idling with the throttle trigger released. If it continues to move even after the throttle trigger has been completely released, shut off the engine and take the machine to your authorized dealer or service center for inspection and/or repair.

information

When a new machine is first operated, in the first few minutes grease may come out of the gear case. But, since this is excessive grease, there is no cause of alarm. Just wipe it off with the engine stopped for next use.

During operation

WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all moving parts. Always stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before removing obstructions, clearing debris, or servicing unit.



Do not touch any moving parts, especially the cutting attachments, while the motor is running. If the cutting attachments become jammed by thick branches or other obstructions, switch off the engine immediately before attempting to free the saw chain – there is otherwise a risk of injury.



To avoid the risk of electrocution, do not touch electric power lines – never cut through electric power lines.



Hot surface.
Do not touch.



In the event of impending danger or in an emergency, switch off the engine immediately by pressing the engine stop switch backward to STOP position.

- Always carry related tools, equipments, spare parts, and consumables with you:
 - Attached tools in the product package.
 - Personal protective equipments.
 - Properly reserved fuel
 - Spare parts (spare saw chain, etc.).
 - Things to notify your working are (rope, warning signs, etc.).
 - Whistle (for collaboration or emergency).
 - Hatchet or saw (for removal of obstacles).
- Check that there are no bystanders, children, and animals in the general work area. If someone comes:
 - Guard against hazardous situations at all times. Warn adults to keep children and pets away from your working area. Be careful if you are approached. Injury may result from flying debris.
 - If someone calls out or otherwise interrupts you while working, always be sure to shut off the engine before turning around. Avoid operating which people, especially children are nearby.
- Always be aware of surroundings and stay alert for possible hazards that you may not hear due to the noise of the machine.
- Make sure there is always good ventilation when operating the pole saw. Fumes from engine exhaust can cause serious injury or death. Never run the engine indoors!
- Make sure you always have good balance and secure footing. Place your feet slightly apart (slightly further apart than the width of your shoulders), so that your weight is distributed evenly across both legs, and always be sure to maintain a steady, even posture while working.

- Take special care in slippery conditions (ice, wet ground, snow), on slopes or uneven ground.
- Clear away fallen branches, scrub and cuttings.
- Watch out for obstacles (roots, tree stumps or holes) which could cause you to trip or stumble.
- When working at heights:
 - Always use a lift bucket.
 - Never work on a ladder or in a tree.
 - Never work on an insecure support.
 - Never operate your machine with one hand.
- Watch the cutting attachments at all times. Do not cut areas of the tree that you cannot see clearly. Check the conditions of working area to avoid any accident by hitting hidden obstacles, such as stumps, stones, cans, or broken glass.

WARNING

To reduce the risk of cutting injuries, keep hands and feet away from the cutting tool. Never touch a moving tool with your hand or any other part of your body.

- Never stand directly underneath the branch you are cutting - be wary of falling branches. The cut-off branches may hit you and cause serious injury. Note that a branch may spring back at you after it hits the ground.
- Never operate the pole saw at an angle greater than 60° in order to reduce the risk of being struck by falling objects during operation.
- When cutting a limb that is under tension, be alert for spring-back so that you will not be struck by the moving limb.
- Stop the machine immediately if it suddenly begins vibrate or shake. Inspect for broken, missing or improperly installed parts or attachments.
- Make sure the idle speed setting is correct. The cutting attachments must not run when the engine is idling with the throttle trigger released. If the cutting attachments still run, have your machine checked by an authorized dealer or service center, to make proper adjustments or repairs. Check and correct the idle speed setting regularly.
- Note that the saw chain continue to run for a short period after you let go of the throttle trigger, due to flywheel effect.
- The gearbox becomes hot during operation. To reduce the risk of burn injury, do not touch the gearbox housing.
- Be particularly alert and cautious when wearing hearing protection because your ability to hear warnings (shouts, alarms, etc.) is restricted.
- To reduce the risk of accidents, take sufficient break in good time to avoid tiredness or exhaustion.
- Work calmly and carefully in daylight conditions and only when visibility is good. Stay alert so as not to endanger others.
- To reduce the risk of serious or fatal injury from breathing toxic fumes, ensure proper ventilation when working in trenches, hollows or other confined locations.
- To reduce the risk of accidents, stop work immediately in the event of nausea, headache, visual disturbances (e.g. reduced field of vision), problems with hearing, dizziness, deterioration in ability to concentrate. Apart from other possibilities, these symptoms may be caused by an excessively high concentration of exhaust gases in the work area.
- Operate your machine so that it produces a minimum of noise and emissions. Do not run the engine unnecessarily, accelerate the engine only when working. To avoid noise complaints, in general operate the machine between 8AM and 5PM on weekdays, and 9AM to 5PM on weekends, detail please refer to your local regulations.
- Do not operate your machine in the starting throttle position because engine speed cannot be controlled in this position.
- Never allow the engine to run at high RPM without a load. Doing so could damage the engine.
- To reduce the risk of fire, do not smoke while operating or standing near your machine. Note that combustible fuel vapor may escape from the fuel system. Always clean plant residue, chips, debris, leaves and excess lubricant off the engine and muffler. Note that stop the engine before you perform the cleaning work.
- If your power tool is subjected to unusually high loads for which it was not designed (e.g. heavy impact or a fall), always check that it is in good condition before continuing work. Check the fuel system in particular for leaks and make sure the safety devices are working properly. Do not continue operating your machine if it is damaged. In case of doubt, consult your local authorized dealer or service center.
- Opening the throttle while the saw chain is blocked increases the load and reduces engine speed. The clutch then slips continuously and this causes overheating and damage to important components (e.g. clutch, polymer housing components) – and this can increase the risk of injury from the cutting attachments moving while the engine is idling.
- Do not operate the pole saw with the muffler removed.
- The dust that occurs during operation may be harmful to health. If dust levels are very high, wear a suitable respirator.
- Before leaving the power tool unattended: Shut off the engine.
- Check the cutting attachments at regular short intervals during operation or immediately if there is a noticeable change in cutting behavior:
 - Shut off the engine.
 - Wait until the cutting attachments have come to a complete standstill.
 - Check condition and tightness, look for cracks.
 - Check sharpness.

After finishing your work

- Never transport the pole saw nor set it down with the engine running. An engine that's running could be accidentally accelerated causing the chain to rotate.

- Always clean dust and dirt off the machine. Do not use any grease solvents for this purpose.
- Do not use a pressure washer to clean pole saw. The solid jet of high pressure water may damage parts of the machine.
- Make sure the chain cover is in place when storing the pole saw.

Assembly

This model is factory assembled.

Your pole saw requires some assembly. This machine ships from our factory without fuel mixture and saw chain lubrication oil. It must be properly serviced with fuel and oil before operation. If you have any questions regarding the assembly of your machine, please contact local authorized dealer or service center.

Proper PPE are required when you unpack the box and perform the assembly work.

WARNING

Always shut off the engine and allow it cool down before carrying out any work on the pole saw.

WARNING

Do not make unauthorized modifications or alternations to you pole saw or its components.



Always wear appropriate gloves when handling the pole saw, in order to protect your hands from injury. The cutting attachments are sharp and can cut you even when it is not moving!

If you received the pole saw in completely assembled status, repeat all steps to ensure your pole saw is properly assembled and all fasteners are secured.

Preparation for assembly

Unpack the box, take out the machine and all accessories, familiarized yourself with the pole saw and its various components.

Understanding your machine helps ensure top performance, longer service life, and safer operation.

Before assembly, check the part list of the package to make sure you have all the components required for a complete unit.

Install the power head

1. Place the power head on a clean, rigid, flat surface, with spark plug facing up.

CAUTION

Do not remove the D-shaped shim washer! The shim washer prevents damage from over-tightening the tube clamp screw.

2. Carefully inspect all components for damage.

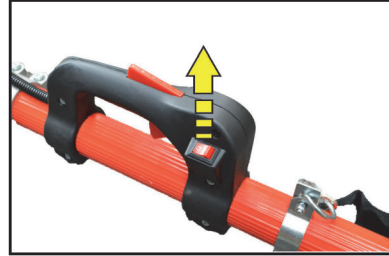
information

The terms “left”, “left-hand”, and “LH”; “right”, “right-hand”, and “RH”; “front” and “rear refer to directions as viewed by the operator during normal operation.”

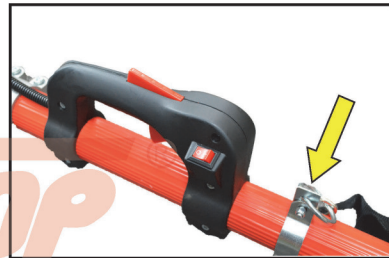
NOTICE

Do not force the lower tube into the power head! Excessive force can damage the components.

3. Position the lower tube so that the stop switch faces up.



4. Tighten the clamp screw firmly.



Connecting the throttle cable

1. Remove the spark plug cap.



2. Rotate the air filter cover knob counterclockwise, and then remove the air filter cover.



3. Loop the ribbed cable assembly to the top left side of the engine.

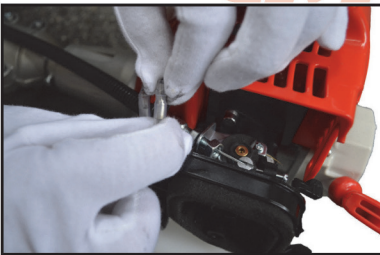


NOTICE
The black ground wire (with a ring fitting on the end) is located between the two cable adjuster nuts.

4. Connect the S-shaped end of the throttle cable to the throttle lever on top of the carburetor.



5. Turn the cable adjuster nuts sufficiently for the throttle cable to fit in the notch on the fan cover. Make sure the ignition ground lead is located on the rearward side of the notch.
6. Connect the male fitting of the red ignition wire into the female fitting of the red wire attached to the engine.



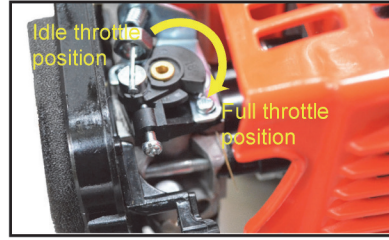
Adjusting the throttle cable

1. Loosen throttle cable nuts (M10, two pieces) at the fan cover.



2. Adjust the throttle cable adjuster nuts until you achieve a free play on the throttle trigger about 6mm.
3. When 6mm free play is achieved, tighten these two M10 throttle cable nuts. When the throttle cable is

correctly adjusted, and the throttle trigger is fully depressed (full throttle), the throttle will contact the stop on the throttle body.



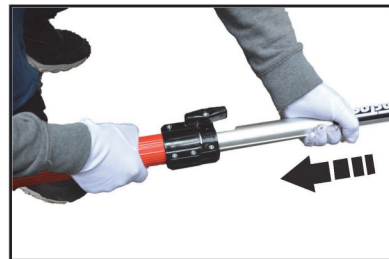
4. Replace the air filter cover.
5. Replace the spark plug cap.

Assembling the tube sections

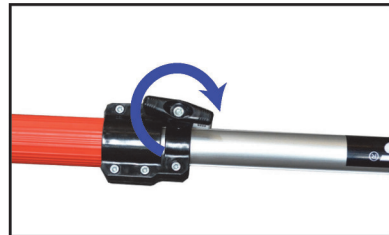
1. Place the power head, lower tube assembly and the upper tube assembly on a clean, flat surface so that both assemblies align end to end. The power head and lower tube assembly should be facing up, and the lower tube assembly should be positioned with the locking hole in the tube end facing up.

NOTICE
Keep the open ends of the tubes clean and free of impurities!

2. Slip off the protective covers from the ends of both tubes, and loosen the coupler screw knob.
3. Insert the upper tube assembly into the coupler, arrow on the upper tube decal facing up, until the line of the decal is flush with the end of the coupler. Rock the upper tube back and forth until you are sure it snaps in place by the coupler lock.



4. When these two tubes are locked together, press down on the spring-loaded latch protector and tighten the coupler screw.



Disassembling the pole sections

1. With the pole saw on a clean, flat surface, loosen the coupler screw. The spring-loaded coupler protector should pop up.

2. Press down on the latch with your finger or thumb.
3. Pull the upper tube assembly out of the coupler.



Installing the chain

! WARNING
Never attempt to install, replace, or adjust the chain with the engine running.

! WARNING
The saw chain is very sharp. Wear gloves to protect your hands when handling.

! NOTICE
For longest chain life, let new or replacement chain loops sock in oil overnight before installation.

1. Using the small end of the plug wrench, remove the sprocket cover nut (turn counterclockwise to remove) and remove the sprocket cover.

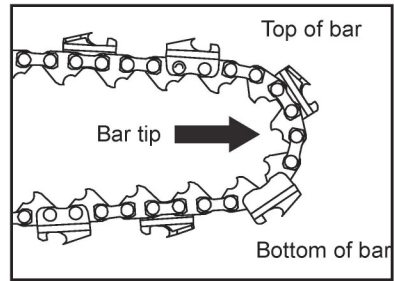


! CAUTION
The chain cover is used for transportation and storage. Remove chain cover before using the machine.

2. Place the guide bar over the guide bar adjustment stud on the cutting head assembly. Align the chain tensioning pin with the hole in the guide bar.



3. Install the chain loop over the drive links within the guide bar groove, and then align the chain over the drive sprocket. Make sure the cutter is properly oriented.



i information
If chain installation is difficult or if the chain appears too tight, refer to the section "Adjusting the Chain".

! WARNING
Never operate the pole pruner without the sprocket cover installed.

4. Install the sprocket cover over the bar stud. Using finger-pressure only, install the sprocket cover nut.
5. Refer to the next section for chain adjusting procedures.

Adjusting the chain

! WARNING
Never attempt to install, replace, or adjust the chain with the engine running.

! WARNING
The saw chain is very sharp. Wear gloves to protect your hands when handling.

! CAUTION
A loose chain can jump off the guide bar causing damage to the chain and associated equipment. Always make sure the chain is properly adjusted; check more often when you are breaking in a new chain.

! NOTICE
Proper chain adjustment is essential for maximum performance, long chain life, and operator safety. Always inspect chain tension before operating the pole saw.

1. Place the pole pruner on a clean, flat surface. (For readjustment during operation, shut down the engine, then allow the guide bar and chain to cool before proceeding with the adjustment procedure.)
2. Loosen the sprocket cover nut with a plug wrench.



3. Lift the nose of the guide bar while turning the chain tensioning screw.

- Turn the screw clockwise to tighten the chain.
- Turn the screw counterclockwise to loosen the chain.



4. Pull the chain by hand along the top of the guide bar several times from the engine to the bar's tip. The chain should feel snug but still pull freely.



5. Tighten the sprocket cover nut securely while lifting the tip of the guide bar.
6. Inspect the chain for correct adjustment (more frequently with a new chain). The chain should feel snug but still pull freely.

Chain lubricant

The chain bar and saw chain require continuous lubrication. Lubrication is provided by the automatic lubrication system when the oil tank is kept filled. Lack of oil will quickly ruin the bar and chain. Insufficient oil will cause overheating shown by smoke coming from the saw chain and/or discoloration of the chain bar.

The sizes of the chain oil tank and fuel tank have been chosen so that the saw will run out of fuel before running out of oil. This means that you should never run with a dry chain.

However, this safety feature requires that you use the right sort of chain oil (if the oil is too thin it will run out before the fuel), and that you adjust the carburetor as recommended (a weak mixture may mean that the fuel lasts longer than the oil). You should also use the recommended cutting equipment (a bar that is too long will use more chain oil). The above conditions also apply to models with an adjustable oil pump.

! NOTICE

Never operate your chain saw without chain lubrication. If the chain runs dry, the whole cutting attachments will be irretrievably damaged within a very short time. Always check chain lubrication and the oil level in the tank before starting work.

For automatic and reliable lubrication of the chain and bar, always use an environmentally compatible quality chain and bar lubricant with good adhesive characteristics.

! NOTICE

The service life of the chain and guide bar depends on the quality of the lubricant. It is therefore essential to use only a specially formulated chain lubricant.

! NOTICE

Never use waste oil. Waste oil does not have the necessary lubricating properties, and it can result in damage to the oil pump, the bar and the chain. Renewed contact with waste oil can cause skin cancer. Moreover, waste oil is environmentally harmful.

It is important to use oil of the right viscosity according to the air temperature.

In temperatures below 0°C (32°F) some oils become too viscous. This can overload the oil pump and result in damage to the oil pump components.

Contact your authorized dealer or service center when choosing chain oil.

! WARNING

Never fill the oil reservoir nor adjust the oiler with the engine running.

! NOTICE

The service life of the chain and guide bar is affected by the quality of the lubricant. Using superior lubricant Bar and Chain Oil will help ensure a long service life. For cold weather operation, mix bar and chain oil with an equal part of kerosene.

1. Carefully and thoroughly clean the oil filler cap and the area around it to make sure that no dirt falls into the oil tank.

! NOTICE

The oil reservoir has a capacity sufficient to provide about 40 minutes of cutting time (when set to deliver the minimum flow rate, or about as long as you'll get from a tank of fuel).

2. Place the pole pruner on a clean, flat surface with the oil filler cap facing up.



3. Wipe off any debris from the oil cap and from around the oil filler neck.
4. Remove the oil filler cap and fill the oil tank with bar and chain oil.



NOTICE
 Refill the oil tank every time you refuel. Take care not to spill chain oil while refilling, and do not overfill the tank.

- Wipe up spilled oil from the unit before restarting the pole saw.
- Replace the oil filler cap.

NOTICE
 The volume of chain oil and fuel tanks are adjusted to each other. Therefore, always fill chain oil and fuel at the same time.

There must still be a small amount of oil in the oil tank when the fuel tank is empty.

If the oil level in the tank does not go down, the reason may be a fault in the oil supply system, please check chain lubrication, clean the oil pipes, and contact authorized dealer or service center for assistance if necessary.

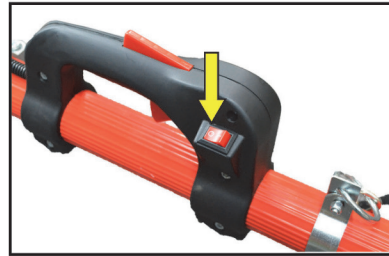
Adjusting oil flow rate

CAUTION
 An increase in bar oil flow rate will speed oil consumption, requiring more frequent checks on the oil reservoir. To ensure sufficient lubrication, it may be necessary to check the oil level more frequently than at fuel tank refills.

The guide bar and chain are lubricated automatically by a pump that operates whenever the chain rotates. The pump is set at the factory to deliver a minimum flow rate, but it can be adjusted in the field. A temporary increase in oil flow is often desirable when cutting things like hardwood or wood with a lot of pitch.

Adjust the pump as follows:

- Stop the engine and make sure the stop switch is in the STOP position.



- Place the unit on its side with the oil tank up.

CAUTION
 The oil flow adjusting screw must be pressed in slightly in order to turn. Failure to do so could damage the pump and screw.

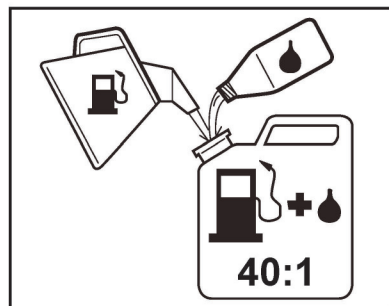
- With a screwdriver, push in on the oil flow rate adjusting screw and turn in the desired direction:
 - Clockwise → decrease lubrication.
 - Counterclockwise → increase lubrication.

Fuel and fueling

Fuel

WARNING
 Gasoline is very flammable. Avoid smoking or bringing any flame or sparks near fuel. Make sure to stop the engine and allow it cool down before refueling the machine. Select well-ventilated outdoor bare ground for fueling and move at least 3 m (10 ft) away from the fuming point before starting the engine.

NOTICE
 The pole saw is equipped with a two-stroke engine, and it is certified to operate on unleaded gasoline and two-stroke air cooled engine oil at a recommended mix ratio of 40:1. It is important to accurately measure the amount of oil to be mixed to ensure that the correct mixture is obtained. When mixing small amount of fuel, even small inaccuracies can drastically affect the ratio of the mixture.



Gasoline: Use good quality unleaded gasoline. Some gasoline contain alcohol as an oxygenate. Oxygenated fuels may cause increased operating temperatures. Under certain conditions, alcohol-based fuels may also reduce the lubricating qualities of some mixing oils.

Never use any fuel containing more than 10% alcohol by volume! When an oxygenated fuel must be used, fuel containing an oxygenate such as MTBE is preferred over an alcohol based fuel. Gasoline containing methanol (wood alcohol) is NOT approved.

- Poor quality gasoline or oil may damage sealing rings, fuel lines or fuel tank of the engine.
- Unleaded gasoline is recommended to reduce the contamination of the air for the sake of your health and the environment.
- The lowest octane recommended is 92. If you run the engine on a lower octane grade than 92 so-called, knocking can occur. This gives rise to a high engine temperature, which can result in serious engine damage.
- If you use a gasoline of an lower octane value than prescribed, there is a danger that the engine temperature may rise and an engine problem such as piston seizing may consequently occur.
- When working with continuous high speed (e.g. delimiting), a higher octane grade is recommended.
- Exhaust emission are controlled by the fundamental engine parameters and components (for example, carburetion, ignition timing and port timing) without addition of any major hardware or the introduction of an inert material during combustion.
- Take care when handling gasoline. Avoid direct contact with the skin and avoid inhaling fuel vapor

Two-stroke oil: Two-stroke air-cooled engine oil must be used. Generic oils and some outboard motor oils may not be intended for use in high-performance air cooled 2-cycle engines, and should never be used in the engine!

- Never use two-stroke oil intended for water cooled outboard motors, so-called, outboard oil.
- Never use oil intended for four-stroke engines.

Mixing

1. Measure out the quantities of gasoline and oil to be mixed.
2. Put half of the gasoline into a clean container approved for fuel use.
3. Pour in entire amount of oil and agitate well.
4. Pour in the remaining amount of gasoline and agitate again for at least one minute. As some oil may be difficult to agitate depending on oil ingredients, sufficient agitation is necessary for the engine to last long. Be careful that, if the agitation is insufficient, there is an increase danger of early piston seizing due to abnormal lean mixture.



5. Put a clear indication on the outside of the container to avoid mixing up with gasoline or other containers.
6. Indicate the contents on outside of container for easy identification.



NOTICE

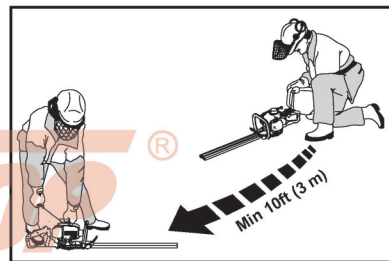
Mix only enough fuel for your immediate needs! If fuel must be stored longer than 30 days, it should first be treated with a stabilizer

Fueling



WARNING

- Do not smoke or place warm objects in the vicinity of the fuel.
- Select bare ground for fueling.
- Always shut off the engine and allow it cool down completely before refueling the machine.
- Move at least 10 feet (3 meters) away from the fueling point before starting the engine.
- Never smoke or light any fires near the pruner or fuels!



1. Place the machine on a flat, level surface.
2. Before fueling, clean the filler cap and the area around it to ensure that no dirt falls into the tank.
3. Loosen a bit of the fuel cap carefully so as to allow any pressure build-up in the fuel tank to release slowly. Never remove the fuel cap when engine is running!



4. Put mixed fuel into the fuel tank to 80% of the full capacity. Make sure the fuel is well mixed by shaking the container before fuelling. Take care not to spill fuel while fueling and do not overfill the tank.



5. Tighten the fuel cap securely after fuelling.
6. Wipe up any fuel spillage around the fuel cap and fuel tank.

CAUTION

Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, empty the fuel system before storage for 30 days or longer, drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. Never use engine or carburetor cleaner products in the fuel tank, otherwise permanent damage may occur.

- If fuel without mixing of oil (raw gasoline), it will cause severe damage to the internal engine parts very quickly.
- Do not use gasohol, otherwise it can cause deterioration of rubber and/or plastic parts and disruption of engine lubrication.
- Do not use 4-cycle engine oil, otherwise it can cause spark plug fouling, exhaust port blocking, or piston ring sticking.
- Mixed fuels which have been left unused for a period of one month or more may clog the carburetor and result in the engine failing to operate properly.
- In the case of storing the product for a long period of time, clean the fuel tank after rendering it empty. Next, activate the engine and empty the carburetor of the composite fuel.
- In the case of scrapping the used mixed oil container, scrap it only at an authorized repository site.

NOTICE

If your fuel cap cannot be tightened properly, it may be damaged or broken. Stop using the pole saw and take it to your authorized dealer or service center for repair.

Start and stop the engine

WARNING

It is very dangerous to run a pole saw that equipped with broken parts or lacks of any parts. Before starting the engine, make sure that all the parts including cutting attachments and chain guard are installed properly.

WARNING

The saw chain has very sharp cutters and they will start moving upon the engine starts. Touching them may

lead to severe personal injury. Avoid touching saw chain whenever possible, and always wear gloves to protect hands.

WARNING

To reduce the risk of serious or even fatal injury:

- Do not allow children or other unauthorized persons to attempt to start or otherwise use the machine.
- Never allow children or unauthorized persons access to the machine.
- Never leave the machine unattended while working or during work breaks
- After work, store the machine in a safe, secure location out of the reach of children and other unauthorized persons
- Observe safety precautions and instructions.

WARNING

When starting the engine, make sure that your body does not contact with the muffler. A hot muffler can cause serious burns.

WARNING

When starting the engine, make sure the cutting attachment is well clear of bystanders, pets or objects. The attachment may rotate during start-up.

CAUTION

Never operate the pole pruner unless a cutting attachment is installed.

Start the engine

WARNING

Before you start the engine, make sure that the cutting attachments are not touching ground or any other obstacles.

CAUTION


The saw chain cover is used for transportation and storage. Remove chain cover before starting and using the machine.

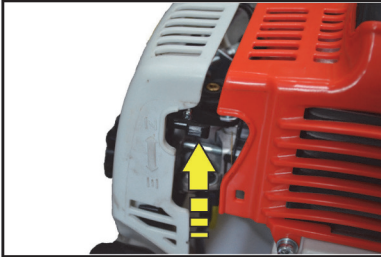
1. Fill mixed fuel into the fuel tank and tighten the fuel cap securely.



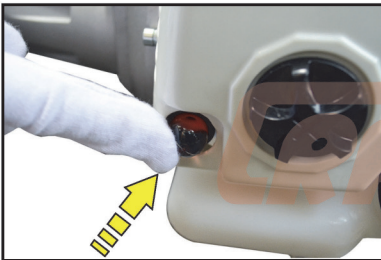
2. Move stop switch to "ON" position.



3. Move choke control lever upwards to “CLOSE”  position.



4. Pump purge bulb until fuel is visible and flows freely in the clear fuel tank return line. Pump bulb an additional 4 or 5 times.



5. Place the machine on a flat and firm ground in a clear area.
6. Place the unit firmly on the ground, making sure it is stable and that the cutting attachment is free and clear of any bystanders or objects.
7. Hold onto the top of engine outer cover with your left hand.




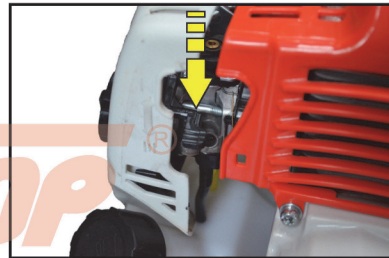
8. Grip the starter rope handle securely with right hand, and pull it slowly until you feel the starter engage.



NOTICE

The recoil starter can be damaged by abuse. Always engage the starter before attempting to crank the engine. Do not pull out the starter rope all the way, otherwise it might break. Do not let the starter rope snap back by itself. Guide it slowly back into the housing, so that the starter rope can rewind properly.

9. Pull the starter handle quickly to start the engine.
10. When the engine starts or fires, move choke control lever downwards to “OPEN”  position.



WARNING

The cutting attachment will engage and rotate as the engine starts and accelerates.

11. If the engine did not continue to run, repeat the appropriate cranking procedure (warm or cold engine).

NOTICE

When the engine starts, clear excess fuel from the combustion chamber by revving the engine several times with the throttle trigger (operating the trigger will automatically disengage the “fast idle” setting).

12. Restart engine if necessary and allow the machine to warm up at idle engine speed for several minutes.

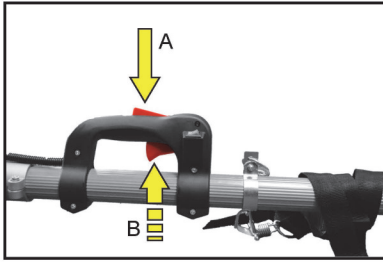
WARNING

The saw chain must not move at idle speed, otherwise serious personal injury may result. Periodic carburetor adjustment may be necessary to assure saw chain does not move at idle speed. If saw chain moves, have the carburetor readjusted by your local authorized dealer or service center.

NOTICE

When restarting the engine immediately after stopping it, leave the choke control lever in “OPEN” position.

- After engine warm-up, grip the front handle and rear handle firmly. Depress the throttle trigger safety lockout (A), and gradually depress throttle trigger (B) to increase engine RPM to operating speed.



i information

The WARM starting procedure is almost same as COLD starting except the choke control lever position, instead it is starting from "OPEN" position.

! NOTICE

When restarting the engine immediately after stopping it, leave the choke control lever in "OPEN" position.

Start a flooded engine

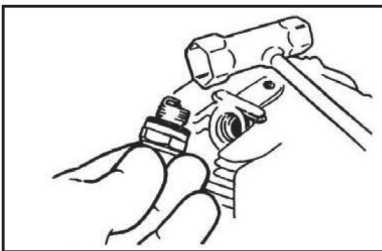
Repeat the appropriate cranking procedure (warm or cold engine). If the engine fails to start after repeated attempts; the engine is likely flooded.

Proceed to the following procedure.

- Pull and remove the spark plug cable.



- Disconnect the spark plug lead, and then use the spark plug wrench to remove the spark plug (turn counterclockwise to remove).

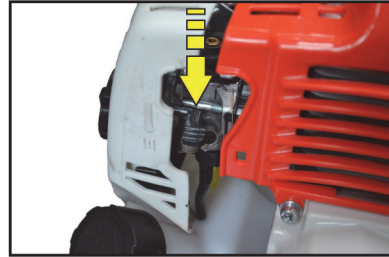


- Open the choke and fully depress the throttle trigger with your left hand, then pull the starter handle rapidly with your right hand to clear excess fuel from the combustion chamber.

! NOTICE

Incorrect spark plug installation can result in serious engine damage.

- Reinstall the spark plug and tighten it firmly. If a torque wrench is available, torque the spark plug to 16.7~18.6 Nm.
- Repeat the starting procedure for a warm engine (set the choke lever to "OPEN" |↕| position).



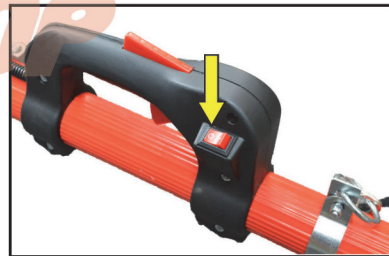
- If the engine still fails to start, refer to the troubleshooting section of this manual.

Stop the engine

! WARNING

The cutting attachment can continue rotating after the engine is switched off!

- Release throttle trigger and allow engine to return to idle speed for two or three minutes.
- Move the stop switch backwards to "OFF" position.



! WARNING

If engine does not stop when engine stop switch is moved to "STOP" position, move choke control lever to "CLOSE" position to stall engine. Have your local authorized dealer or service center to repair engine stop switch before using the machine again.

Operation

This section describes basic operation instructions with safety rules for using a pole saw to perform your cutting work. This information is no substitute for professional skills and experience. If you get into a situation where you feel unsafe, stop and seek expert advice. Do not attempt any task that you feel unsure of!

! WARNING

Engine exhaust is hot, and it can cause serious burns. Engine exhaust contains Carbon Monoxide (CO), a poison gas. Breathing CO can cause unconsciousness, serious injury, or death. Always position your machine

so that exhaust is directed away from your face and body.

! WARNING

Pole saw chain is very sharp. Touching them may lead to severe personal injury. Avoid touching saw chain whenever the cutting attachments are moving, and always wear gloves to protect your hands.

! WARNING

Never remove hands from unit when saw chain are moving.

! WARNING

The engine continues running even when saw chain has stopped due to an obstruction. If this occurs, stop the engine, disconnect ignition cable and remove the obstruction.

i information

Observe all country-specific or municipal rules and regulations for using this pole saw.

Do not use your machine during other people's normal rest periods.

i information

Any working position above head height is tiring. To minimize the risk of accidents, work in such positions for short periods only.

Wearing the harness

1. Hook the harness hook to the hanger on the outer pipe.



2. Wear the harness so that the hook stays at your right hand side.



3. Adjust the length of the strap so that you can hold and operate the machine comfortably.



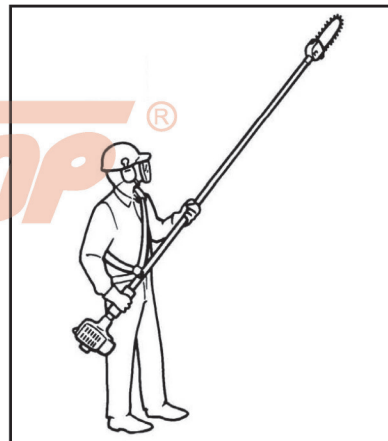
Holding and controlling the machine

! WARNING

Never attempt to operate your power tool with one hand. Loose of control of the power tool could result in serious or even fatal injury.

Always hold the machine firmly with both hands on the handles while you are working. Wrap your fingers and thumbs around the handles.

Place your left hand on the shaft and your right hand on rear grip and throttle trigger. Left-handers must follow these instructions too. Keep your hands in this position to help maintain control of your pole saw while working at all times.

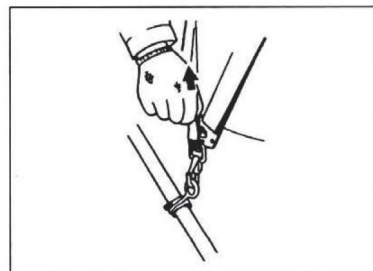


! WARNING

Most pole saw accidents happen when the saw chain touches the operator. You must wear proper clothing and approved personal protective equipments (PPE) whenever you use a pole saw.

Emergency release

In case of emergency, strongly pull the white tab at the hook, the machine will be release from the strap.



Working position

Hold the control handle with your right hand, and the shaft with your left hand. Your left arm should be extended to the most comfortable position.

WARNING

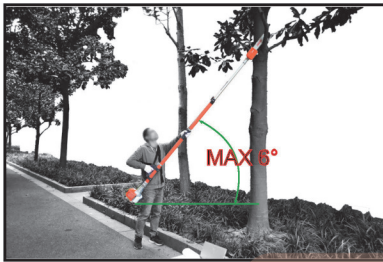
The shaft should always be held at an angle of 60° or less.

Cutting sequence

To allow branches a free fall, always cut the lower branches first. Prune heavy branches (large diameter) in several controllable pieces.

Typical application - Standard cut

The most convenient working position is a tool angle of 60°, but any other angle may be used to suit the situation concerned.



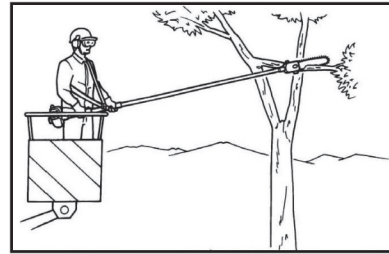
Typical application - Cutting above obstacles

Thanks to the unit's long reach it is possible to prune branches that are overhanging obstacles, such as rivers or lakes. The tool angle in this case depends on the position of the branch.



Typical application - Cutting on a work platform

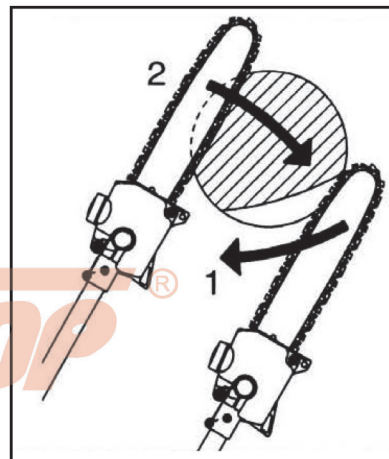
The unit's long reach enables cutting to be performed next to the trunk without the risk of the work platform damaging other branches. The tool angle in this case depends on the position of the branch.



Relieving cut

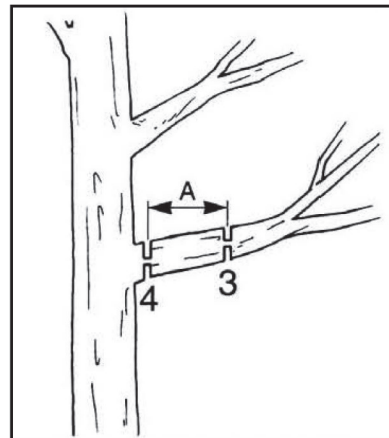
To avoid tearing the bark, kickback or pinching the bar when pruning thick branches, always start by performing a relieving cut (1) on the underside of the branch.

To do this, apply the cutting attachment and pull it across the bottom of the branch as far as the bar nose. Perform the cross-cut (2).



Flush-cutting thick branches

If branch diameter is more than 10 cm (4"), first perform undercut (3) and cross-cut at a distance (A) of about 25cm (10") from the final cut. Then carry out the flush-cut (4), starting with a relieving cut and finishing with a cross-cut.



Maintenance and care

! WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all moving attachments.

Always stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before performing any maintenance, repair, or cleaning work on the machine.

Allow the machine to cool down before performing maintenance service. Wear gloves to protect hands from sharp edges and hot surfaces.

Before cleaning, inspecting or repairing the machine, make sure that engine has been stopped and cooled down. Disconnect the spark plug to prevent accidental starting.

! WARNING

Non-standard parts may not operate properly with your unit and may cause damage and lead to personal injury.

Muffler

! WARNING

Operating the engine without a muffler or with a muffler that is damaged or improperly installed can increase engine noise sufficiently to lead to hearing loss.

This machine must never be operated with a faulty or missing spark arrestor or muffler. Make sure the muffler is well secured and in good condition. A worn or damaged muffler is a fire hazard and may also cause hearing loss.

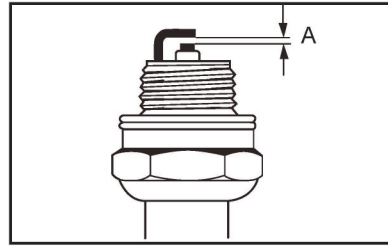
Spark plug

Starting failure and misfiring are often caused by a fouled spark plug. Clean the spark plug and check that the plug gap is in the correct range.

1. Remove spark plug and check for fouling, worn and rounded center electrode.




2. Clean the plug or replace with a new one. Do not clean it with sand blast. Remaining sand will damage the engine.
3. According to Technical Specification, adjust spark plug gap (A) by bending outer electrode.
4. Tighten spark plug with a torque of 5.5~6 Nm.
5. Check and make sure the spark plug and wire connections are tight and clean.

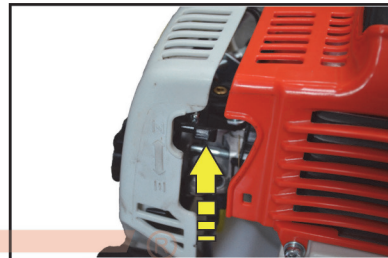


! NOTICE

Using any spark plug other than those designated in this manual may result in the engine failing to operate properly, or in the engine becoming overheated and damaged.

Air filter

1. Move choke control lever to "CLOSE"  position. This prevents dirt from entering into the carburetor throat when the air filter is removed.



2. Brush accumulated dirt from air filter area.
3. Rotate the air filter cover knob counterclockwise, and then remove the air filter cover.



4. Brush dirt from inside cover.



5. Replace air filter if it is damaged, fuel soaked, very dirty, or the rubber sealing edges are deformed.
 - Lightly brush debris from filter.
 - Soak heavily soiled filters in warm, soapy water/detergent solution to loosen dirt, and then brush lightly.

6. Dry the air filter completely before re-installing.
7. Install air filter in air filter case.
8. Insert air filter cover onto the air filter case, the fix it with the knob.

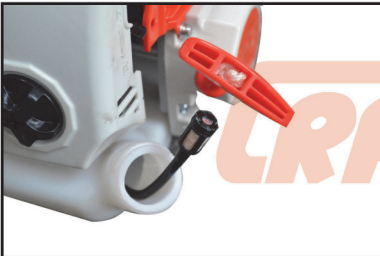
Fuel filter

! DANGER
 Fuel is very flammable. Use extreme care when mixing, storing or handling, or serious personal injury may result.

1. Use a clean rag to remove loose dirt from around fuel cap and empty fuel tank.



2. Use a fuel line hook to pull the fuel line and filter from the tank.



3. Remove the used fuel filter from the line, replace it with a new fuel filter.
4. Install the new fuel filter.

Carburetor adjustment

The carburetor has been adjusted at the factory with a standard setting.

This setting provides an optimal fuel-air mixture under most operating conditions.

! WARNING
 The cutting attachment must not move at idle speed, otherwise serious personal injury may result. Periodic carburetor adjustment may be necessary to ensure cutting attachments do not move at idle speed.

The engine must return to idle speed whenever the throttle trigger is released. Idle speed is adjustable and must be set low enough to permit the engine clutch to disengage the chain saw when throttle trigger is released.

! NOTICE
 Carburetor adjustments, other than idle speed, must be performed by an authorized dealer or service center.

1. Start the engine and allow it running at idle speed about two or three minutes, or until it warms up.
2. If the cutting attachment rotates at engine idle speed, reduce the idle speed by turning the idle speed adjusting screw counterclockwise as necessary.



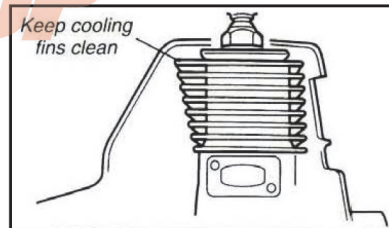
3. If the engine is stalling at idle speed, increase idle speed by turning the idle speed adjustment screw clockwise.

! WARNING
 When carburetor adjustment is completed properly, the cutting attachment should not move at idle speed, otherwise serious personal injury may result.

Daily maintenance

Prior to each work day, perform the following:

- Remove all dirt and debris from the engine, check the cooling fins and air filter for clogging, and dean as necessary.



- Carefully remove any accumulating of dirt or debris from the muffler and fuel tank. Dirt build-up in these areas can lead to engine overheating, fire, or premature wear.

- Check for loose or missing screws or components. Make sure the cutting attachment is free of debris and securely fastened.
- Check the entire machine for leaking fuel or grease.
- Make sure nuts, bolts, and except carburetor adjusting screws) are tight.

10-hour maintenance

CAUTION

Do not operate the machine if the air cleaner or element is damaged, or if the element is wet or water-soaked.

Every 10 hours of operation, (more frequently in dusty or dirty conditions):

- Remove the air cleaner element from the air filter housing and clean it thoroughly with soap and water.
- Rinse and dry thoroughly.
- Add a few drops of oil and work it in, then reassemble the element.

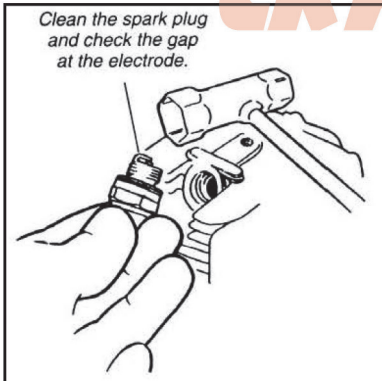
10/15-hour maintenance

CAUTION

Before removing the spark plug, clean the area around the plug to prevent dirt and dust from getting into the engine's internal parts.

Every 10 to 15 hours of operation:

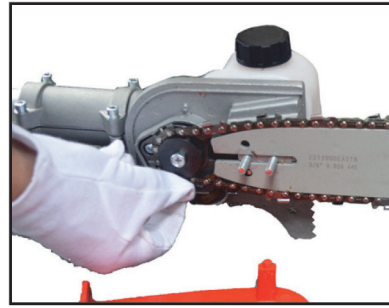
- Remove and clean the spark plug.
- Adjust the spark plug electrode gap to 0.6 ~ 0.7 mm.



50-hour maintenance

Every 50 hours of operation (more frequently in dusty or dirty conditions):

- Remove and clean the cylinder cover and clean dirt and debris from the cylinder cooling fins.
- Remove the sprocket cover and inspect the sprocket for excessive dirt, debris, or wear. Remove the guide bar and clean out the guide bar groove. If the sprocket is excessively worn, replace it with a new one.



- Lubricate the gear case. To perform this operation, first remove the gear case from the upper outer tube as follows

NOTICE

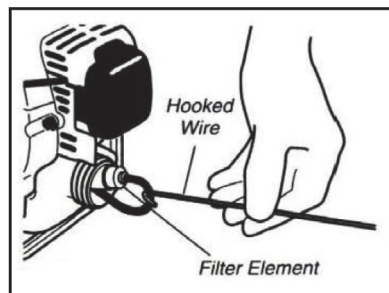
Do not remove the D-shaped shim washer from the gearcase clamp! The shim washer prevents damage from over-tightening the tube clamp screw.

- Loosen the gear case clamp bolt.
- Remove the index bolt from the gear case.
- Slide the gear case out of the tube. Using a lever-type grease gun, pump lithium-base grease (about 10 grams) into the grease fitting until you see old grease being purged from the gear case, this can be seen in the outer tube cavity. Clean up excess grease, and then reassemble the gear case onto the outer tube.

CAUTION

Make sure you do not pierce the fuel line with the end of the hooked wire. The line is delicate and can be damaged easily.

- Use a wire hook to extract the fuel filter from inside the fuel tank. Inspect the fuel filter element for signs of contamination. Replace it with a new one if required. Before reinstalling the filter, inspect the fuel line. If you find damage or deterioration, remove the unit from service until it can be inspected by trained service technician.



Sharpening the Chain

When the cutting edges of the cutter become dull, they can be re-sharpened with a few strokes of a file.

In order to keep the saw chain in balance, all cutting edges must be sharpened equally.

In addition, inspect the chain for correct adjustment (more frequently with a new chain). The chain should feel snug but still pull freely.



! NOTICE

File all cutters to the same angle and depth! Unequal filing may cause the saw to vibrate or cut erratically.

1. Using a 4.5 mm round file, sharpen all cutters to a 30° angle. Make sure that one fifth (20%) of the file's diameter is always held above the cutter's top plate.

! NOTICE

For consistent filing angles, use a filing guide such as Oregon P/N 31692 or equivalent.

2. After all cutters are sharpened, use a depth gauge joiner to measure the height of each depth gauge.
3. As required, lower the depth gauges to a height of 0.5mm. Use a flat file.
4. After all depth gauges have been adjusted, use a flat file to round each depth gauge leading edge to its original curvature and angle.

Storage

! DANGER

Do not store the machine in enclosure where fuel fumes may accumulate or reach an open flame or spark, otherwise serious personal injury may result.

! WARNING

The muffler and surrounding covers become hot during operation. Always keep exhaust area clear of flammable debris during transportation or when storing, otherwise serious property damage or personal injury may result.

! WARNING

Pole saw chain is very sharp. Touching them may lead to severe personal injury. Avoid touching moving saw chain, and always wear gloves to protect hands.

! CAUTION

Make sure you do not pierce the fuel line with the end of the hooked wire. The line is delicate and can be damaged easily.

! NOTICE

Gasoline stored in the carburetor for extended periods can cause hard starting, and could also lead to increased service and maintenance costs.

Do not store your machine for periods of time 30 days or longer without performing protective storage maintenance which includes the following procedure:

1. Remove accumulation of grease, oil, dirt and debris from exterior of unit.
2. Clean external parts thoroughly and apply a light coating of oil to all metal surfaces.
3. Place the engine stop switch in the "STOP" position.
4. Perform all periodic lubrication and services that are required.
5. Apply clean oil to the entire length of the saw chain. Be certain the chain bar bolts and nuts are lubricated as well.
6. Install the chain guard (scabbard) to saw chain and guide bar.
7. Securely tighten all the screws and nuts.
8. Drain all fuel from the carburetor and the fuel tank.
9. Remove the spark plug and pour about 3crn3 of oil into the cylinder through the spark plug hole. Slowly pull the recoiled starter 2 or 3 times so oil will evenly coat the interior of the engine. Reinstall the spark plug.
10. Repair or replace any worn or damaged parts.
11. Remove the air cleaner element from the carburetor and clean it thoroughly with soap and water. Rinse and dry thoroughly, then add a few drops of oil and work it in. Reassemble.
12. Store your machine in a dry, dust-free place, out of the reach of children.

! NOTICE

Always store and transport pole saws in a stable, horizontal position. Always install chain guard when transporting or storing unit.

Disposal

Observe all country-specific and local waste disposal rules and regulations.

CRAFTOP products must not be thrown in the garbage bin. Take the product, accessories and packaging to an approved disposal site for environment friendly recycling.

Do not throw the cuttings that you cut down in the garbage bin, as they can be composted!

Contact your local authorized dealer or service center for the latest information on waste disposal.

Troubleshooting guide

DANGER

Fuel vapors are extremely flammable and may cause fire and/or explosion. Never test for ignition spark by grounding spark plug near cylinder plug hole, otherwise serious personal injury may result.

Problem	Cause	Solution
Engine starts hard OR Engine does not start	No fuel at carburetor - Fuel filter or fuel line obstructed - Carburetor issue	- Clean or replace - Contact authorized dealer or service center
	No fuel at cylinder - Carburetor issue	Contact authorized dealer or service center
	Muffler wet with fuel - Fuel mixture is too rich	Open choke lever Clean or replace air filter Adjust carburetor Contact authorized dealer or service center
	No spark at end of plug wire - Engine switch at OFF position - Electrical problem - Interlock switch issue	- Set engine switch to ON position - Contact authorized dealer or service center - Contact authorized dealer or service center
	No spark - Incorrect spark plug gap - Electrode covered with carbon - Fouled with fuel - Spark plug defective	- Adjust electrode gap to specification - Clean or replace spark plug - Clean or replace spark plug - Replace spark plug
Engine runs, but dies OR Engine does not accelerate properly	Air filter is dirty	Clean or replace air filter
	Fuel filter dirty	Replace fuel filter or replace fuel
	Fuel vent blocked	Clean
	Spark plug dirty or worn	Clean , adjust or replace
	Improper carburetor adjustment	Contact authorized dealer or service center
	Cooling system dirty or blocked	Clean cooling system
Exhaust port / Spark arrestor screen blocked	Clean or replace	
Engine does not crank	Internal engine problem	Contact authorized dealer or service center

Problem	Cause	Solution
Engine does not start OR Runs only a few seconds after starting.	<ul style="list-style-type: none"> - Engine switch OFF - Engine flooded - Fuel tank empty - Spark plug has no spark - Fuel not reaching carburetor 	<ul style="list-style-type: none"> - Move engine switch to ON - Follow start warm engine procedure - Fill fuel tank with correct fuel mixture - Replace with new spark plug - Check for dirty fuel filter; replace. Check for kinked or split fuel line; repair or replace.
Engine idle speed not set properly	<ul style="list-style-type: none"> - Carburetor adjustment. requires - Crankshaft seals worn 	Contact authorized dealer or service center
Engine does not accelerate, lacks power, or dies under a load.	<ul style="list-style-type: none"> - Air filter dirty. - Spark plug fouled. - Chain brake engaged. - Carburetor adjustment. requires 	<ul style="list-style-type: none"> - Clean or replace air filter. - Clean or replace plug and adjust the gap. - Disengage chain brake. - Contact authorized dealer or service center
Engine smokes excessively.	Too much oil mixed with gasoline.	Empty fuel tank completely and refill with correct fuel mixture.
Chain moves at idle speed.	<ul style="list-style-type: none"> - Idle speed requires adjustment. - Clutch requires repair 	Contact an authorized dealer or service center.

 **information**

If your pole saw seems to need further service, please consult with your local authorized dealer or service center.

CRAFTOP®

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Manual del usuario

Sierra de pértiga

NTPS260D



EXPERTOS
EN EQUIPOS JARDINERIA
Y AGRICULTURA

ESPAÑOL
VERSIÓN: 00-202211

Gracias por comprar Sierra de p rtiga CRAFTOP

Esta sierra de p rtiga proporciona tecnolog a avanzada al incorporar muchas caracter sticas convenientes para que pueda realizar su trabajo de corte diario.

Antes de intentar usar esta sierra de p rtiga, lea atentamente este manual hasta que comprenda completamente y pueda seguir todas las reglas de seguridad, precauciones e instrucciones de operaci n y mantenimiento. Le ayudar  tanto a familiarizarse con esta sierra de p rtiga como a reconocer y evitar situaciones que podr an ponerlo en peligro a usted y a los dem s.  El uso negligente o inadecuado puede causar lesiones graves o incluso mortales!

Si tiene alguna pregunta sobre su sierra de p rtiga y este manual, comun quese con su distribuidor local o centro de servicio autorizado. Siempre agradecen sus preguntas, sugerencias y cr ticas constructivas.

Esperamos que disfrute de esta sierra de p rtiga y le deseamos muchos a os de trabajo de corte seguro y agradable.

CRAFTOP CANADA LTD.

The logo for CRAFTOP is displayed in a bold, italicized, orange font. The word "CRAFTOP" is written in a stylized, blocky font with a slight shadow effect. To the right of the word is a registered trademark symbol ( ).

CRAFTOP  

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Guía para usar este manual

Este Manual del usuario se refiere a una sierra de pértiga CRAFTOP, también denominada máquina, producto o unidad en este Manual del usuario.

Toda la información, especificaciones, descripciones e ilustraciones de este manual son tan precisas como se sabe en el momento de la publicación, pero están sujetas a cambios sin previo aviso. Debido al desarrollo continuo del producto, puede haber diferencias entre su máquina y la información de este manual. No se pueden derivar obligaciones o compromisos legales de la información, especificaciones, descripciones o ilustraciones de este manual.

Las ilustraciones son solo para orientación y se utilizan simplemente para ayudar a explicar las descripciones e instrucciones del texto. Las ilustraciones pueden incluir equipos y accesorios opcionales, y es posible que no incluyan todo el equipo estándar.

Algunos signos o símbolos en la máquina pueden ser un poco diferentes; se refieren a requisitos de certificación especiales para ciertos mercados.

Cualquier modificación técnica a la máquina que se haya introducido después de la fecha límite editorial, consulte a su distribuidor local para obtener más información complementaria.

Todas las precauciones e instrucciones de seguridad descritas en este manual deben cumplirse durante la operación de la sierra de pértiga, y también deben respetarse todas las normas, normas y ordenanzas de seguridad federales, estatales y locales aplicables.

No venda, preste ni alquile la máquina sin este manual del usuario. Asegúrese siempre de incluir este manual del usuario junto con la máquina, y asegúrese de que cualquier persona que la use comprenda toda la información y siga todas las instrucciones contenidas en este manual.

Señales y símbolos en este manual

PELIGRO

Los textos con este símbolo contienen información sobre situaciones peligrosas que pueden causar la muerte o lesiones graves si no se evitan.

ADVERTENCIA

Los textos con este símbolo contienen información sobre situaciones peligrosas que podrían causar la muerte o lesiones graves si no se evitan.

PRECAUCIÓN

Los textos con este símbolo contienen información sobre situaciones peligrosas que podrían causar lesiones leves o moderadas si no se evitan.

AVISO

Los textos con este símbolo informan sobre una situación que podría provocar que la sierra de pértiga se dañe si no se evita.

Información

Los textos con este símbolo contienen información complementaria.

Lea y comprenda el Manual del propietario.

Es [®] muy importante que lea atentamente este Manual del propietario, asegúrese de que comprende completamente y puede seguir todas las reglas de seguridad, precauciones e instrucciones de operación y mantenimiento antes de intentar usar esta sierra de pértiga, de no hacerlo, puede causar lesiones graves o incluso fatales!

Se deben observar precauciones de seguridad especiales cuando se trabaja con esta máquina porque tiene accesorios de corte muy afilados y de alta velocidad.

Use ropa adecuada.

Use protección para los ojos, los oídos y la cabeza.

Siempre use equipos de protección personal apropiados para la operación de la sierra de pértiga, incluida la protección para los ojos, la protección para los oídos y la protección para la cabeza.





Se requiere mascarilla.

Los operadores que son sensibles al polvo u otros alérgenos comunes en el aire pueden necesitar usar una máscara contra el polvo.



Protección de manos.

Siempre use guantes apropiados para la operación de la sierra de pértiga.



Se requiere protección para los pies.

Se requieren zapatos con punta de acero y suela antideslizante en el área de trabajo.



Peligro de incendio.

Riesgo de fuego.
Materia altamente inflamable.



No Fumar.

No fume en esta área.



Bordes afilados.

Cuida tus dedos.

No toque la cadena de la sierra mientras el motor esté en marcha.



Riesgos de descarga eléctrica.

Tenga cuidado con el cable de alto voltaje cuando use la máquina.

¡No tocar!



Superficie caliente.

No tocar.



En caso de peligro inminente o en caso de emergencia, apague el motor inmediatamente presionando el interruptor de parada del motor hacia atrás hasta la posición STOP.

Signos y símbolos en la máquina

Para fines de seguridad en la operación y el mantenimiento, los significados de los signos y símbolos pueden estar adheridos o grabados en la máquina.



Control de estrangulamiento.

Estrangulador cerrado.
Posición de "arranque en frío".



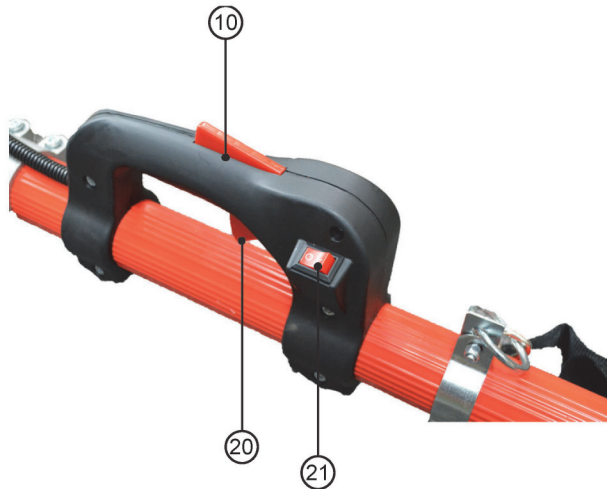
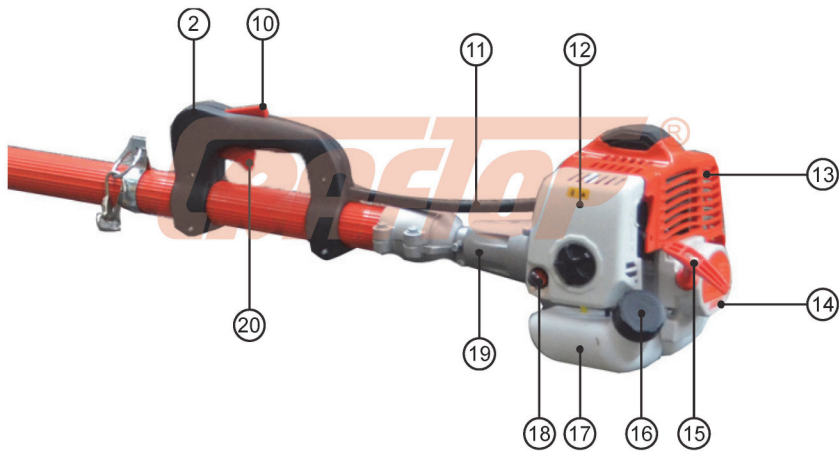
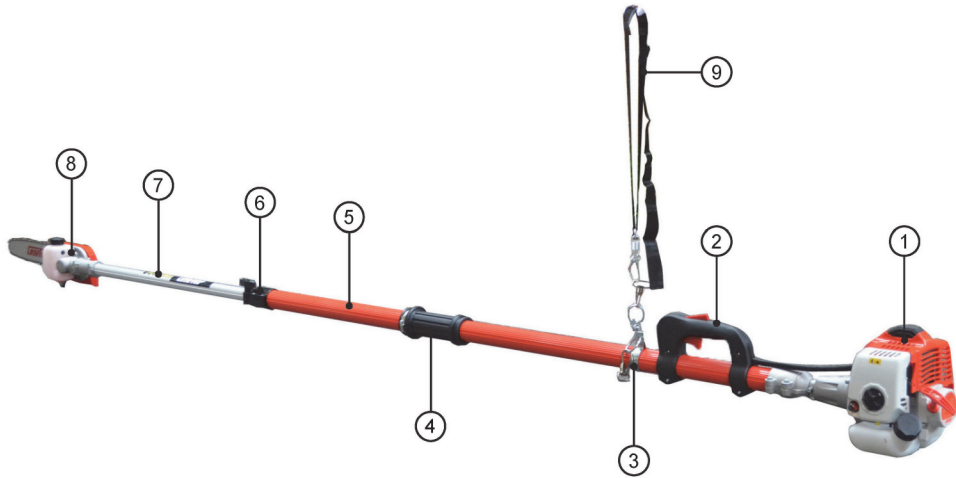
Control de estrangulamiento.

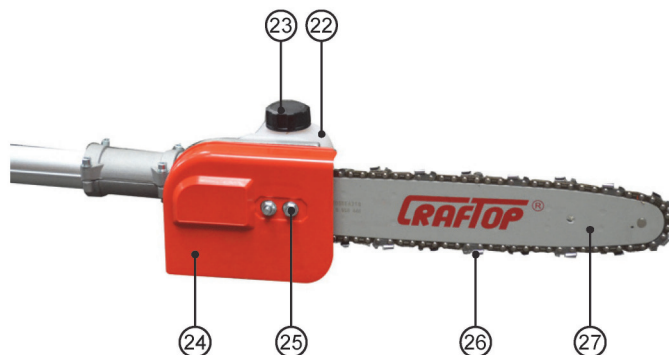
Estrangulador abierto.
Posición de "arranque en caliente" o "en marcha".



Descripción del producto

Visión general





1	Cabeza de energía	11	Cable de control	21	Interruptor de parada
2	Mango de control trasero	12	Tapa del filtro del aire	22	Tanque de aceite de cadena
3	Gancho de sujeción del arnés	13	Cubierta del motor	23	Tapa del tanque de aceite de cadena
4	Asa delantera	14	Arrancador del retroceso	24	Guardia de protección
5	Conjunto de tubo inferior	15	Mango de arranque de retroceso	25	Tornillo tensor de cadena
6	Perilla de bloqueo del tubo	16	Tapa del tanque de combustible	26	Cadena de sierra
7	Conjunto de tubo superior	17	Tanque de combustible	27	Barra guía
8	Accesorio de corte	18	Bombilla principal		
9	Arnés	19	Brida de conexión		
10	Bloque de seguridad del gatillo del acelerador	20	Gatillo del acelerador		

Introducción general

Esta sierra de pértiga está diseñada especialmente para cortar ramas difíciles de alcanzar para podar árboles, setos y otro follaje.

Esta sierra de pértiga tiene una pértiga extensible, para que pueda pararse en el suelo y alcanzar ramas altas y cortarlas, podarlas o podarlas a su gusto.

AVISO

Nunca utilice esta máquina para otros fines. Nunca intente cortar piedras, metales, plásticos o cualquier otro objeto duro.

El uso para otros fines que no sean cortar ramas puede dañar la máquina o causar lesiones graves.

Especificación técnica

MODELO		NTPS260D	
Artículo	Descripción	Unidad	Especificación
General	Dimensiones (largo x ancho x alto)	mm	2550x260x270
	Peso bruto	kg	14.5
	Peso neto	kg	9.5
Motor	Tipo		Monocilíndrico, refrigerado por aire, 2 tiempos

MODELO		NTPS260D	
Artículo	Descripción	Unidad	Especificación
	Modelo		1E34FN
	Potencia nominal	kw/rpm	0.7/7000
	Desplazamiento	cc	26
	Carburador		RUIXING
	Tipo		Diafragma
	Método de inicio		Manual
	Bujía		RCJ6Y
	Espacio entre electrodos	mm	0.5~0.7
	Velocidad del motor, ralentí	rpm	2700-3300
	Velocidad máxima del motor, -Laboral	rpm	7500
	método de encendido		C.D.I
Cabeza de corte	Cantidad de cadena de sierra	pcs	1
	Cantidad de barra guía	mm	1
	Longitud de la barra	Pulgada	12
Transmisión	Tipo		Engranaje
Sistema combustible de	Tipo de combustible		Mezcla de gasolina sin plomo y aceite de dos tiempos
	Relación de mezcla de combustible		Gasolina: Aceite = 40:1
	Gasolina		Gasolina sin plomo con mínimo octano 92
	Aceite		aceite de motor de 2 tiempos
	Capacidad del tanque de combustible	L	0.7
Lubricación de cadenas	Tipo de aceite lubricante		aceite de motor de 2 tiempos
	Capacidad del tanque	ml	140
Barra guía	Tipo		12", 3/8", 050-44E
	Rueda de espigas		9 dientes
	Longitud de barra estándar	Pulgada	12
	Longitud máxima de corte	mm	300
	Longitud de barra recomendada	Pulgada	12
	Núm. de modelo de barra guía		050-44E
	Paso	Pulgada (mm)	3/8" (9.525)
	Indicador	Pulgada	0.050
Tubo de corte	Longitud ajustable	Si/No	Si
	Longitud	m	2.6~4.1
	Diámetro	mm	46.5

MODELO		NTPS260D	
Artículo	Descripción	Unidad	Especificación
	Espesor	mm	2.0
Niveles de ruido	Nivel de presión de ruido equivalente	dB(A)	96
	Nivel de potencia de ruido equivalente	dB(A)	112
Niveles de vibración	Manejar	m/s ²	16.1

Información

Las especificaciones, descripciones e ilustraciones de este manual son tan precisas como se sabe en el momento de la publicación, pero están sujetas a cambios sin previo aviso.

Precauciones e instrucciones de seguridad



Se deben observar precauciones de seguridad especiales cuando se trabaja con esta máquina porque tiene una cadena de sierra muy afilada y de alta velocidad. El uso descuidado o inadecuado puede causar la muerte grave o incluso la muerte.



Antes de intentar usar esta sierra de pértiga, lea atentamente este manual hasta que comprenda completamente y pueda seguir todas las reglas de seguridad, precauciones e instrucciones de operación y mantenimiento. El no hacerlo podría resultar en lesiones personales graves o fallas en la máquina.

Precauciones de seguridad

ADVERTENCIA

- Observe todas las normas, normas y ordenanzas de seguridad locales aplicables.
- Si no ha usado este tipo de sierra de pértiga antes, pídale a su distribuidor u otro operador experimentado que le muestre cómo operar su máquina.
- Debido a que una sierra de pértiga funciona a velocidades muy altas, se deben observar algunas precauciones especiales para reducir el riesgo de accidentes y lesiones personales. El uso descuidado o inadecuado puede causar lesiones graves o incluso mortales.
- El uso de esta sierra de pértiga puede ser peligroso. La cadena de sierra tiene muchos bordes afilados. Si el borde afilado entra en contacto con su cuerpo, lo cortarán, incluso si la cadena de la sierra no se mueve.
- El escape de esta máquina puede contener sustancias químicas reconocidas por el Estado de California como causantes de cáncer, defectos de nacimiento u otros daños reproductivos.

• El ruido emitido por esta máquina puede estar restringido a determinadas horas por las normativas nacionales o locales.

• Nunca permita que una persona sin suficiente entrenamiento o instrucción opere esta máquina.

• Nunca se debe permitir que los menores utilicen esta sierra de pértiga. No permita que otras personas se acerquen a la sierra de pértiga cuando arranque o corte. Mantenga a los transeúntes, especialmente niños y animales fuera del área de trabajo. Mantenga a los transeúntes, niños y animales a una distancia mínima de 50 pies (15 m) del área de trabajo.

• La persona que utilice esta sierra de pértiga debe estar en buenas condiciones físicas y de salud mental, y no estar bajo la influencia del alcohol y las drogas. Nunca use esta sierra de pértiga cuando esté fatigado, enfermo o molesto. Si te sientes cansado, tómate un descanso.

• Los componentes de esta máquina generan un campo electromagnético durante su funcionamiento, lo que puede interferir con algunos marcapasos. Para reducir el riesgo de lesiones graves o fatales, las personas con marcapasos deben consultar a su médico y al fabricante del marcapasos antes de operar esta máquina. En ausencia de dicha información, CRAFTOP no recomienda el uso de esta máquina a ninguna persona que tenga un marcapasos.

• El propietario de esta máquina es responsable de evitar lesiones a terceros o daños a su propiedad.

PRECAUCIÓN

La exposición prolongada al frío y/o la vibración puede provocar lesiones. Lea y siga todas las instrucciones de seguridad y operación para minimizar el riesgo de lesiones. El incumplimiento de las instrucciones puede provocar lesiones dolorosas en la muñeca, la mano o el brazo.

El fenómeno de Raynaud puede afectar los dedos de ciertas personas si una persona está expuesta a vibraciones y frío. La exposición a vibraciones y frío puede causar sensaciones de hormigueo y ardor, seguidas de pérdida de color y entumecimiento en los dedos. Se recomiendan encarecidamente las siguientes precauciones:

- Mantenga su cuerpo caliente, especialmente la cabeza, el cuello, las manos, las muñecas, los tobillos y los pies.
- Mantenga una buena circulación sanguínea realizando ejercicios vigorosos con los brazos durante los descansos frecuentes en el trabajo.
- Limite las horas de operación, descanse cuando se sienta cansado o fatigado.
- Si experimenta molestias, enrojecimiento e hinchazón de los dedos seguidos de palidez y pérdida de sensibilidad, consulte a su médico antes de continuar exponiéndose al frío y las vibraciones.

El uso excesivo de los músculos y tendones de los dedos, manos, brazos y hombros puede causar dolor, hinchazón, entumecimiento, debilidad y dolor extremo en esas áreas.

- Evite usar la muñeca en una postura doblada, extendida o torcida. En su lugar, intente mantener una posición de muñeca recta. Además, al agarrar, use toda la mano, no solo el pulgar y el índice.
- Tome descansos periódicos para minimizar la repetición y deje que sus manos descansen.
- Reduzca la velocidad y la fuerza con la que realiza el movimiento repetitivo.
- Haga ejercicio para fortalecer las manos y los músculos de los brazos.
- Deje de usar la máquina y otras herramientas eléctricas inmediatamente y consulte a un médico si siente hormigueo, entumecimiento o dolor en los dedos, las manos, las muñecas o los brazos.

PELIGRO

Los conductores eléctricos y los cables de comunicaciones por encima de la cabeza pueden tener un flujo de electricidad con altos voltajes. Esta máquina no está aislada contra descargas eléctricas. Nunca toque los cables directa o indirectamente, de lo contrario podría sufrir lesiones graves o incluso la muerte. Mantenga la sierra de pértiga a una distancia mínima de 10 metros (33 pies) de líneas eléctricas o ramas que entren en contacto con líneas eléctricas.

PELIGRO

No opere esta máquina en interiores o en áreas con ventilación inadecuada. El escape del motor contiene emisiones venenosas y puede causar lesiones graves o la muerte.

Vestuario y EPP

ADVERTENCIA

La mayoría de los accidentes con sierras de pértiga ocurren cuando la cadena de la sierra toca al operador. Debe usar ropa adecuada y equipos de protección personal (EPP) aprobados siempre que use una sierra de pértiga.



Use ropa adecuada.

La ropa debe ser resistente pero permitir total libertad de movimiento. Use ropa ajustada, una combinación de overol y chaqueta, no use una bata de

trabajo.

Evitar ropa que pueda quedar atrapada en ramas, matorrales o partes móviles de la máquina. No use bufanda, corbata o joyas. Ate y limite el cabello largo con una red para el cabello, una gorra o un casco, por ejemplo

Use protección para los ojos, los oídos y la cabeza.

Siempre use equipos de protección personal apropiados para la operación de la sierra de pértiga, incluida protección para los ojos, protección para los oídos y protección para la cabeza. Recomendamos usar un protector facial como protección adicional para la cara y los ojos

Se requiere mascarilla.

Los operadores que son sensibles al polvo u otros alérgenos comunes en el aire pueden necesitar usar una máscara contra el polvo.

Las máscaras contra el polvo pueden brindar protección contra el polvo, los restos de plantas y otras materias vegetales como el polen. Asegúrese de que la máscara no perjudique su visión y reemplácela según sea necesario para evitar restricciones de aire.

Protección de manos.

Siempre use guantes de trabajo resistentes hechos de un material duradero (p. ej., cuero) para mejorar su agarre en el mango de la sierra de pértiga para la operación de la sierra de pértiga.

Se requiere protección para los pies.

Use calzado resistente con suelas antideslizantes y puntas de acero dentro de su área de trabajo.



Los equipos de protección personal no pueden eliminar el riesgo de lesión, pero reducirán el grado de lesión si ocurre un accidente. Pida ayuda a su distribuidor de sierras de pértiga para elegir los equipos adecuados.

La exposición prolongada o continua a altos niveles de ruido puede causar una discapacidad auditiva permanente. Siempre use protección auditiva aprobada cuando opere una sierra de pértiga.

Maneje su sierra de pértiga con seguridad

ADVERTENCIA

Esta sierra de pértiga solo debe usarse para cortar ramas difíciles de alcanzar para podar árboles, setos y otro follaje. No utilice la máquina para cortar hierba, metal sólido, láminas de metal, plástico o cualquier otro tipo de material.

No utilice la sierra de p rtiga como palanca para levantar, mover o romper objetos, ni la bloquee en soportes fijos.

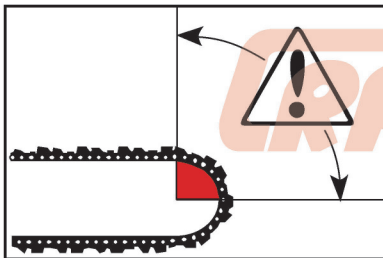
Bajo ninguna circunstancia, no debe modificar el dise o original de la sierra de p rtiga sin la aprobaci n del fabricante. Utilice siempre repuestos originales. Las modificaciones o accesorios no autorizados pueden provocar lesiones graves o incluso mortales.

Bajo ninguna circunstancia, no debe operar su sierra de p rtiga si est  da ada, mal ajustada o mantenida, o no ensamblada completamente o de manera segura. Siempre inspeccione la sierra de p rtiga antes de cada uso y reemplace las piezas inmediatamente si est n desgastadas, sueltas, da adas o faltan.

! ADVERTENCIA

El contragolpe puede ocurrir de forma muy repentina y violenta; patear la sierra, la barra y la cadena hacia el operador. Si esto sucede con la cadena en movimiento, puede causar lesiones muy graves o incluso mortales. Es vital que comprenda qu  causa el contragolpe y que pueda evitarlo teniendo cuidado y utilizando la t cnica de trabajo adecuada.

- **!Cuidado con el contragolpe!** El retroceso puede ocurrir siempre que la punta de la barra gu a toque un objeto mientras la sierra est  funcionando. El contragolpe puede hacer que la barra suba y retroceda hacia el operador a la velocidad de un rayo.



- **!Cuidado con los pellizcos!** Apretar la sierra a lo largo de la punta de la barra gu a puede hacer que la barra retroceda r pidamente hacia el operador. Los pellizcos pueden ocurrir siempre que la madera se cierre alrededor de la cadena de sierra en movimiento.
- Si una cadena de sierra se atasca r pidamente en un corte, apague el motor inmediatamente. Empuje la rama o el  rbol para aliviar el atasco y liberar la cadena de la sierra.
- Mantenga la cadena de la sierra afilada y correctamente ajustada.
- Desconecte siempre el cable de la buj a y col quelo donde no pueda hacer contacto con la buj a para evitar un arranque accidental al instalar, transportar, ajustar o realizar reparaciones, excepto los ajustes del carburador.
- Siempre sostenga la sierra de p rtiga firmemente con las dos manos cuando el motor est  en marcha. No opere una sierra de p rtiga con una sola mano. La operaci n con una mano puede causar lesiones graves al operador, ayudantes, transe ntes o cualquier combinaci n de estas personas. !La sierra de p rtiga DEBE usarse con las dos manos!

- Opere la sierra de p rtiga solo en un  rea exterior bien ventilada. Nunca arranque ni haga funcionar el motor dentro de una habitaci n o edificio cerrado. Los gases de escape contienen mon xido de carbono peligroso.
- Nunca opere la m quina de noche, en momentos de mucha niebla o en cualquier otro momento en el que su campo de visi n pueda ser limitado y sea dif cil mantener una visi n clara del  rea de trabajo.
- Durante la lluvia, tormentas, en momentos de vientos fuertes o huracanados, o en cualquier otro momento en que las condiciones meteorol gicas puedan hacer que el uso de esta m quina no sea seguro.
- Planifique cuidadosamente su operaci n de corte por adelantado. Nunca comience a cortar hasta que tenga un  rea de trabajo despejada.
- Mantenga el equilibrio y el equilibrio en todo momento. No se pare sobre superficies resbaladizas, irregulares o inestables. No opere la sierra de p rtiga en una posici n extra a o en una escalera o escaleras.
- Apague siempre el motor antes de dejar la sierra de p rtiga.
- Mantenga el  rea de escape libre de residuos inflamables. Evite el contacto con superficies calientes durante e inmediatamente despu s de la operaci n.
- Mantenga la sierra de p rtiga lo m s limpia posible. Mant ngalo libre de vegetaci n suelta, barro, etc.
- Use un pa o h medo, un cepillo de cerdas suaves y/o un compresor de aire (m x. 25 PSI) para limpiar la sierra de p rtiga. No use una lavadora a presi n para limpiar la sierra de p rtiga ya que el chorro s lido de agua a alta presi n puede da ar partes de la m quina.

Mantener en buen estado de funcionamiento

! PRECAUCI N

Todo el servicio de la sierra de p rtiga, excepto los elementos enumerados en la secci n de mantenimiento de este manual, debe ser realizado por un distribuidor de servicio autorizado o personal de servicio competente para la sierra de p rtiga.

! ADVERTENCIA

Utilice  nicamente piezas de repuesto de alta calidad para evitar el riesgo de accidentes y da os en la herramienta el ctrica. Si tiene alguna pregunta a este respecto, consulte a un distribuidor o centro de servicio autorizado. CRAFTOP recomienda el uso de repuestos originales. Est n dise ados espec ficamente para adaptarse a su modelo y cumplir con sus requisitos de rendimiento.

- Siempre mantenga esta sierra de p rtiga de acuerdo con este manual del propietario y siga el mantenimiento programado recomendado.
- Para reducir el riesgo de lesiones, siempre apague el motor antes de realizar cualquier mantenimiento, reparaci n o limpieza de la m quina, excepto los ajustes del carburador y la velocidad de ralent .

- Nunca modifique ni desactive ninguno de los dispositivos de seguridad de la sierra de pértiga.
- Asegúrese de que la cadena y la rueda dentada estén correctamente ajustadas antes de operar la máquina. ¡Nunca intente ajustar la cadena con el motor en marcha!
- Siempre asegúrese de que el accesorio de corte esté correctamente instalado y firmemente apretado antes de la operación.
- Compruebe que el accesorio de corte esté en condiciones de funcionamiento seguras. No se debe utilizar una cadena de sierra desafilada, suelta o dañada.
- Nunca use una barra guía agrietada o deformada. Reemplácelo por uno reparable y asegúrese de que encaje correctamente.
- Revise la máquina en busca de tuercas, pernos y tornillos sueltos o faltantes, asegúrese de que no falten sujetadores o estén sueltos y que el interruptor de parada y los controles del acelerador funcionen correctamente. Apriete y/o reemplácelo según sea necesario.
- No encienda el motor en el motor de arranque con el capuchón de la bujía o la bujía quitada, ya que de lo contrario existe el riesgo de incendio debido a las chispas no contenidas.
- Revise el sistema de combustible en busca de fugas debido a daños en el tanque de combustible, especialmente si la máquina se cae accidentalmente. Si se encuentran daños o fugas, no utilice más la máquina, de lo contrario pueden producirse lesiones personales graves o daños materiales. Haga que su máquina sea reparada por un distribuidor o centro de servicio autorizado antes de usarla.
- Compruebe periódicamente el tapón de llenado de combustible en busca de fugas.
- Verifique que el nivel de aceite de lubricación de la cadena esté ubicado en la posición correcta.
- Para reducir el riesgo de incendio, no repare ni almacene su máquina cerca de llamas abiertas.
- Utilice siempre piezas y accesorios originales cuando repare o realice el mantenimiento de esta máquina.
- Utilice únicamente un tipo de bujía aprobado por CRAFTOP y asegúrese de que esté en buenas condiciones.
- No realice modificaciones o sustituciones no autorizadas en la barra guía o la cadena.
- Inspeccione el cable de encendido (aislamiento en buen estado, conexión segura).
- Compruebe el estado del silenciador. Para reducir el riesgo de incendio y daño auditivo, no opere su máquina si el silenciador está dañado o falta.
- No toque el silenciador, la bujía u otras partes metálicas del motor mientras el motor está funcionando o apagándose inmediatamente, de lo contrario se producirán quemaduras.
- Al planificar su horario de trabajo, deje suficiente tiempo para descansar. Limite la cantidad de tiempo durante el cual la máquina se utilizará de forma continua a alrededor de 30 a 40 minutos por sesión, y tómese 10 a 20 minutos de descanso entre sesiones

de trabajo. También trate de mantener la cantidad total de trabajo realizado en un solo día por debajo de 2 horas o menos.

Transporte de su sierra de pértiga

⚠ ADVERTENCIA

Detenga siempre el motor antes de dejar la sierra de pértiga. Transportar una sierra de pértiga con el motor en marcha puede ser extremadamente peligroso.

- Cuando transporte su sierra de pértiga a mano, el motor debe estar apagado y la cadena de la sierra debe estar cubierta con la cubierta de la cadena (vainas) y en la posición adecuada (por ejemplo, la cadena de la sierra debe apuntar hacia atrás). Evite tocar las partes calientes de la máquina, especialmente el silenciador y la caja de engranajes, de lo contrario podría sufrir quemaduras graves.



- Cuando transporte su sierra de pértiga en un vehículo, la cadena de la sierra debe estar cubierta con la cubierta de la cadena (vainas) y debidamente asegurada para evitar volcaduras, derrames de combustible y daños a su máquina.

Manipule el combustible con precaución

La sierra de pértiga utiliza una mezcla de gasolina y aceite como combustible.

⚠ ADVERTENCIA

La gasolina es un combustible extremadamente inflamable. Preste mucha atención al mezclar, almacenar o manipular, de lo contrario se pueden producir lesiones personales graves.



Si se derrama y se enciende con una chispa u otra fuente de ignición, la gasolina puede provocar incendios y quemaduras graves o daños a la propiedad.



No fume ni traiga fuego o llamas mientras manipula combustible o mientras opera la sierra de pértiga. Tenga en cuenta que el vapor de combustible puede escapar del sistema de combustible.

- Mezcle y vierta el combustible en un área al aire libre bien ventilada sobre suelo desnudo; almacene el combustible en un lugar fresco, seco y bien ventilado; y use un contenedor aprobado y marcado para todos los propósitos de combustible. Limpie todos los derrames de combustible antes de arrancar la máquina.

- Elimine todas las fuentes de chispas o llamas (es decir, fumar, llamas abiertas o trabajos que puedan generar chispas) en las áreas donde se mezcla, vierte o almacena el combustible. Apague siempre el motor y deje que se enfríe antes de repostar.
- Nunca fume ni encienda fuego cerca de la sierra de pértiga. Mantenga la máquina alejada del calor excesivo. El combustible del motor es muy inflamable y el fuego podría provocar lesiones personales graves o daños a la propiedad.
- Utilice siempre con precaución cuando manipule combustible. Limpie todos los derrames y luego mueva la sierra de pértiga al menos 10 pies (3 metros) desde el punto de abastecimiento de combustible antes de arrancar el motor.
- Para reducir el riesgo de incendio y explosión, alimente su máquina solo en un área bien ventilada, al aire libre, lejos de llamas, luces piloto, calentadores, motores eléctricos y otras fuentes de ignición.
- Apague siempre el motor antes de repostar, deje que la máquina se enfríe en un área no combustible, no sobre hojas secas, paja, papel, etc. No alimente un motor caliente porque el combustible puede derramarse y provocar un incendio.
- Suelte un poco la tapa de combustible con cuidado para permitir que cualquier acumulación de presión en el tanque de combustible se libere lentamente y evitar derrames de combustible. ¡Nunca quite la tapa de combustible cuando el motor está en marcha!
- No sobrellene el tanque de combustible. Si derrama combustible, limpie la máquina inmediatamente. Si se derrama combustible sobre su ropa, cámbiela inmediatamente.
- Apriete firmemente la tapa del combustible en la posición adecuada, asegúrese de que no se afloje ni se salga debido a las vibraciones de la máquina.
- Para reducir el riesgo de lesiones por quemaduras graves o mortales, compruebe si hay fugas de combustible. Si se encuentra una fuga de combustible, no arranque ni haga funcionar el motor hasta que se repare la fuga.
- No inhale los vapores de combustible, ya que son tóxicos.
- Guarde la máquina y el combustible en un área donde los vapores del combustible no puedan alcanzar chispas o llamas abiertas de calentadores de agua, motores o interruptores eléctricos, hornos, etc.

Antes de encender el motor

Un área dentro de un radio mínimo de 50 pies (15 m) desde el uso de la máquina se debe considerar como un área peligrosa, a la cual se debe ingresar. Si es necesario, se deben colocar cuerdas de advertencia amarillas y señales de advertencia alrededor del perímetro del área. Cuando el trabajo deba ser realizado simultáneamente por dos o más personas, también se debe tener especial cuidado en mirar constantemente a su alrededor o comprobar de otro modo la presencia y ubicación de otras personas trabajando, a fin de mantener una distancia de seguridad suficiente entre cada persona.

Antes de arrancar el motor, verifique que su máquina esté correctamente ensamblada y configurada en buenas condiciones.

- Revise el sistema de combustible en busca de fugas, prestando especial atención a las partes visibles, como la tapa del tanque de combustible, las conexiones de las mangueras y la bomba de combustible manual (si está equipada). Si hay fugas o daños, no arranque el motor debido al riesgo potencial de incendio. Haga reparar su máquina por un distribuidor o centro de servicio autorizado antes de volver a usarla.
- El interruptor de parada del motor debe moverse fácilmente en la dirección de la posición de PARADA y volver a la posición normal de FUNCIONAMIENTO.
- Acción suave del bloqueo del gatillo del acelerador y del gatillo del acelerador: el gatillo del acelerador debe volver automáticamente a la posición de ralentí por sí mismo.
- Verifique que el capuchón de la bujía esté seguro; un capuchón flojo puede provocar un arco que podría encender los gases combustibles y provocar un incendio.
- Accesorios de corte montados de forma segura y en buenas condiciones (limpios, que se muevan libremente, no deformados, correctamente afilados).
- Revise el protector del cortador para ver si está dañado.
- Nunca intente modificar los controles o dispositivos de seguridad de ninguna manera.
- Mantenga todos los mangos secos y limpios, libres de aceite y suciedad, para un control seguro de la máquina.
- Para reducir el riesgo de accidentes, no opere su máquina si está dañada o no está ensamblada correctamente.
- Antes de arrancar el motor, asegúrese de que la cadena de la sierra no esté en contacto con nada.

Al arrancar el motor



ADVERTENCIA

Tenga en cuenta que la cadena de la sierra continúa funcionando durante un breve período después de soltar el gatillo del acelerador, debido al efecto del volante.

- Mueva siempre la máquina a un lugar alejado de un área de almacenamiento de combustible o de materiales fácilmente inflamables antes de arrancar el motor. Nunca haga funcionar el motor sin la pantalla del parachispas en su lugar. Arranque el motor a por lo menos 10 pies (3 m) del punto de abastecimiento de combustible, solo al aire libre.
- Mantenga a los transeúntes, especialmente niños y animales, a una distancia mínima de 50 pies (15 m) del punto de operación. Si se le acercan, pare inmediatamente el motor.
- Esta máquina está equipada con un mecanismo de embrague centrífugo, por lo que los accesorios de corte comienzan a moverse tan pronto como se enciende el motor apretando el gatillo del acelerador en la posición de inicio.

- Coloque la máquina sobre suelo firme en un área abierta y bien ventilada. Asegúrese de tener un buen equilibrio y un punto de apoyo seguro. Sostenga la máquina de forma segura. Los accesorios de corte no deben hacer contacto con el suelo ni con otras obstrucciones porque pueden comenzar a funcionar cuando el motor arranca.
- Su máquina está diseñada para ser operada por una sola persona. No permita que otras personas estén en el área de trabajo, incluso cuando esté arrancando.
- Para reducir el riesgo de lesiones, evite el contacto con los accesorios de corte.
- No deje caer la herramienta eléctrica, simplemente siga el camino y arranque el motor como se describe en este manual.
- Nunca coloque el gatillo del acelerador en la posición de alta velocidad al arrancar el motor.
- Nunca arranque el motor parándose del lado de los accesorios de corte.
- Verifique el ajuste de la velocidad de ralentí: los accesorios de corte no deben moverse cuando el motor está en ralentí con el gatillo del acelerador liberado. Si continúa moviéndose incluso después de haber soltado completamente el gatillo del acelerador, apague el motor y lleve la máquina a su distribuidor autorizado o centro de servicio para que la inspeccionen y/o reparen.

Información

Cuando se opera por primera vez una máquina nueva, en los primeros minutos puede salir grasa de la caja de engranajes. Pero, dado que se trata de un exceso de grasa, no hay motivo de alarma. Simplemente límpiela con el motor parado para el próximo uso.

Durante la operación

ADVERTENCIA

Las piezas móviles pueden amputar los dedos o causar lesiones graves. Mantenga las manos, la ropa y los objetos sueltos alejados de todas las piezas móviles. Pare siempre el motor, desconecte la bujía y asegúrese de que todas las piezas móviles se hayan detenido por completo antes de retirar obstrucciones, limpiar escombros o reparar la unidad.

No toque ninguna pieza móvil, especialmente los accesorios de corte, mientras el motor está en marcha. Si los accesorios de corte se atascan con ramas gruesas u otras obstrucciones, apague el motor inmediatamente antes de intentar liberar la cadena de la sierra; de lo contrario, existe el riesgo de lesiones.



Para evitar el riesgo de electrocución, no toque las líneas de energía eléctrica; nunca corte las líneas de energía eléctrica.



Superficie caliente.
No tocar



En caso de peligro inminente o en caso de emergencia, apague el motor inmediatamente presionando el interruptor de parada del motor hacia atrás hasta la posición STOP

- Lleve siempre consigo las herramientas, los equipos, las piezas de repuesto y los consumibles relacionados:
 - Herramientas adjuntas en el paquete del producto.
 - Equipos de protección personal.
 - Combustible adecuadamente reservado
 - Piezas de repuesto (cadena de sierra de repuesto, etc.).
 - Cosas para notificar su trabajo son (cuerda, señales de advertencia, etc.).
 - Silbato (para colaboración o emergencia).
 - Hacha o sierra (para la eliminación de obstáculos).
- Verifique que no haya transeúntes, niños y animales en el área general de trabajo. Si alguien viene:
 - Protéjase contra situaciones peligrosas en todo momento. Advierta a los adultos que mantengan a los niños y las mascotas alejados de su área de trabajo. Tenga cuidado si se le acerca. Se pueden producir lesiones por escombros voladores.
 - Si alguien le grita o le interrumpe mientras trabaja, asegúrese siempre de apagar el motor antes de dar la vuelta. Evite operar con personas, especialmente niños, cerca.
- Esté siempre atento a los alrededores y manténgase alerta ante posibles peligros que quizás no escuche debido al ruido de la máquina.
- Asegúrese de que siempre haya buena ventilación cuando opere la sierra de pértiga. Los gases del escape del motor pueden causar lesiones graves o la muerte. ¡Nunca haga funcionar el motor en interiores!
- Asegúrese de tener siempre un buen equilibrio y una posición segura. Coloque los pies ligeramente separados (ligeramente más separados que el ancho de los hombros), de modo que su peso se distribuya uniformemente entre ambas piernas, y siempre asegúrese de mantener una postura estable y uniforme mientras trabaja.
- Tenga especial cuidado en condiciones resbaladizas (hielo, suelo húmedo, nieve), en pendientes o terreno irregular.
- Retire las ramas caídas, los matorrales y los esquejes.
- Tenga cuidado con los obstáculos (raíces, tocones de árboles o agujeros) que podrían hacer que tropiece o tropiece.
- Al trabajar en alturas:

- Utilice siempre un cangilón elevador.
- Nunca trabaje en una escalera o en un árbol.
- Nunca trabaje sobre un soporte inseguro.
- Nunca opere su máquina con una sola mano.
- Vigile los accesorios de corte en todo momento. No corte áreas del árbol que no pueda ver con claridad. Verifique las condiciones del área de trabajo para evitar cualquier accidente al golpear obstáculos ocultos, como tocones, piedras, latas o vidrios rotos.

ADVERTENCIA

Para reducir el riesgo de lesiones por corte, mantenga las manos y los pies alejados de la herramienta de corte. Nunca toque una herramienta en movimiento con la mano o cualquier otra parte de su cuerpo.

- Nunca se pare directamente debajo de la rama que está cortando; tenga cuidado con las ramas que caen. Las ramas cortadas pueden golpearlo y causarle lesiones graves. Tenga en cuenta que una rama puede saltar hacia usted después de tocar el suelo.
- Nunca opere la sierra de pértiga en un ángulo superior a 60° para reducir el riesgo de ser golpeado por objetos que caen durante la operación.
- Al cortar una rama que está bajo tensión, esté atento a la recuperación elástica para que la rama en movimiento no lo golpee.
- Detenga la máquina inmediatamente si de repente comienza a vibrar o sacudirse. Inspeccione si hay piezas o accesorios rotos, faltantes o mal instalados.
- Asegúrese de que la configuración de la velocidad de ralentí sea correcta. Los accesorios de corte no deben funcionar cuando el motor está al ralentí con el gatillo del acelerador soltado. Si los accesorios de corte aún funcionan, haga que un distribuidor autorizado o un centro de servicio revisen su máquina para realizar los ajustes o reparaciones adecuados. Verifique y corrija la configuración de la velocidad de ralentí con regularidad.
- Tenga en cuenta que la cadena de la sierra continúa funcionando durante un breve período después de soltar el gatillo del acelerador, debido al efecto del volante.
- La caja de cambios se calienta durante el funcionamiento. Para reducir el riesgo de lesiones por quemaduras, no toque la carcasa de la caja de cambios.
- Esté particularmente alerta y cauteloso cuando use protección auditiva porque su capacidad para escuchar advertencias (gritos, alarmas, etc.) está restringida.
- Para reducir el riesgo de accidentes, tome suficientes descansos con tiempo suficiente para evitar el cansancio o el agotamiento.
- Trabaje con calma y cuidado en condiciones de luz diurna y solo cuando la visibilidad sea buena. Manténgase alerta para no poner en peligro a los demás.
- Para reducir el riesgo de lesiones graves o fatales por respirar gases tóxicos, asegúrese de que haya una ventilación adecuada cuando trabaje en zanjas, huecos u otros lugares confinados.
- Para reducir el riesgo de accidentes, interrumpa el trabajo inmediatamente en caso de náuseas, dolor de cabeza, alteraciones visuales (p. ej., campo de visión reducido), problemas de audición, mareos, deterioro de la capacidad de concentración. Aparte de otras posibilidades, estos síntomas pueden ser causados por una concentración excesivamente alta de gases de escape en el área de trabajo.
- Opere su máquina de manera que produzca un mínimo de ruido y emisiones. No haga funcionar el motor innecesariamente, acelere el motor solo cuando esté funcionando. Para evitar quejas por el ruido, en general, opere la máquina entre las 8 a. m. y las 5 p. m. los días de semana, y entre las 9 a. m. y las 5 p. m. los fines de semana; consulte los detalles de las regulaciones locales.
- No opere su máquina en la posición de aceleración de arranque porque la velocidad del motor no se puede controlar en esta posición.
- Nunca permita que el motor funcione a altas RPM sin carga. Hacerlo podría dañar el motor.
- Para reducir el riesgo de incendio, no fume mientras opera o se para cerca de su máquina. Tenga en cuenta que el vapor de combustible combustible puede escapar del sistema de combustible. Limpie siempre los residuos de plantas, virutas, escombros, hojas y el exceso de lubricante del motor y el silenciador. Tenga en cuenta que pare el motor antes de realizar el trabajo de limpieza.
- Si su herramienta eléctrica está sujeta a cargas inusualmente altas para las que no fue diseñada (por ejemplo, un fuerte impacto o una caída), siempre verifique que esté en buenas condiciones antes de continuar con el trabajo. Verifique el sistema de combustible en particular en busca de fugas y asegúrese de que los dispositivos de seguridad funcionen correctamente. No continúe operando su máquina si está dañada. En caso de duda, consulte con su distribuidor local autorizado o centro de servicio.
- Abrir el acelerador mientras la cadena de la sierra está bloqueada aumenta la carga y reduce la velocidad del motor. Luego, el embrague patina continuamente y esto provoca un sobrecalentamiento y daños en componentes importantes (p. ej., embrague, componentes de la carcasa de polímero)—y esto puede aumentar el riesgo de lesiones por el movimiento de los accesorios de corte mientras el motor está al ralentí.
- No opere la sierra de pértiga con el silenciador retirado.
- El polvo que se genera durante el funcionamiento puede ser nocivo para la salud. Si los niveles de polvo son muy altos, use un respirador adecuado.
- Antes de dejar la herramienta eléctrica desatendida: Apague el motor.
- Compruebe los accesorios de corte a intervalos cortos regulares durante el funcionamiento o inmediatamente si hay un cambio notable en el comportamiento de corte:
 - Apague el motor.
 - Espere hasta que los accesorios de corte se hayan detenido por completo.

- Compruebe el estado y la estanqueidad, busque grietas.
- Compruebe la nitidez.

Después de terminar su trabajo

- Nunca transporte la sierra de pértiga ni la deposite con el motor en marcha. Un motor en marcha podría acelerarse accidentalmente y hacer que la cadena gire.
- Limpie siempre el polvo y la suciedad de la máquina. No utilice disolventes de grasa para este fin.
- No use una lavadora a presión para limpiar la sierra de pértiga. El chorro sólido de agua a alta presión puede dañar partes de la máquina.
- Asegúrese de que la cubierta de la cadena esté en su lugar cuando guarde la sierra de pértiga.

Montaje

Este modelo viene ensamblado de fábrica.

Su sierra de pértiga requiere un poco de montaje. Esta máquina sale de nuestra fábrica sin mezcla de combustible ni aceite lubricante para cadenas de sierra. Debe ser debidamente reparado con combustible y aceite antes de la operación. Si tiene alguna pregunta sobre el ensamblaje de su máquina, comuníquese con el distribuidor local autorizado o el centro de servicio.

Se requiere EPP adecuado cuando desembala la caja y realiza el trabajo de montaje.

ADVERTENCIA

Apague siempre el motor y deje que se enfríe antes de realizar cualquier trabajo en la sierra de pértiga.

ADVERTENCIA

No realice modificaciones o alteraciones no autorizadas en su sierra de pértiga o sus componentes.



Siempre use guantes apropiados cuando manipule la sierra de pértiga, para proteger sus manos de lesiones. ¡Los accesorios de corte son afilados y pueden cortarlo incluso cuando no se está moviendo!

Si recibió la sierra de pértiga completamente ensamblada, repita todos los pasos para asegurarse de que la sierra de pértiga esté correctamente ensamblada y que todos los sujetadores estén asegurados.

Preparación para el montaje

Desembale la caja, saque la máquina y todos los accesorios, familiarícese con la sierra de pértiga y sus diversos componentes.

Comprender su máquina ayuda a garantizar un rendimiento superior, una vida útil más prolongada y un funcionamiento más seguro.

Antes del montaje, consulte la lista de piezas del paquete para asegurarse de que tiene todos los componentes necesarios para una unidad completa.

Instale el cabezal de potencia

1. Coloque el cabezal de potencia sobre una superficie limpia, rígida y plana, con la bujía hacia arriba.

PRECAUCIÓN

¡No quite la arandela de cuña en forma de D! La arandela de cuña evita que se dañe si se aprieta demasiado el tornillo de la abrazadera del tubo.

2. Inspeccione cuidadosamente todos los componentes en busca de daños.

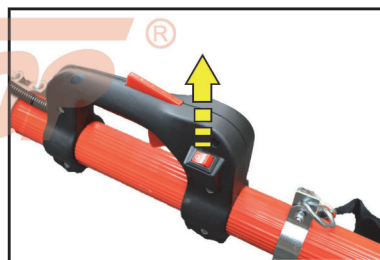
Información

Los términos "izquierda", "mano izquierda" y "LH"; "derecha", "mano derecha" y "RH"; "delantero" y "trasero" se refieren a las direcciones vistas por el operador durante el funcionamiento normal

AVISO AVISO

¡No fuerce el tubo inferior en el cabezal de potencia! Una fuerza excesiva puede dañar los componentes.

3. Coloque el tubo inferior de modo que el interruptor de parada quede hacia arriba.



4. Apriete firmemente el tornillo de la abrazadera.



Conexión del cable del acelerador

1. Retire la tapa de la bujía.



2. Gire la perilla de la tapa del filtro de aire en sentido antihorario y luego retire la tapa del filtro de aire.



3. Enrolle el conjunto de cables acanalados en el lado superior izquierdo del motor.

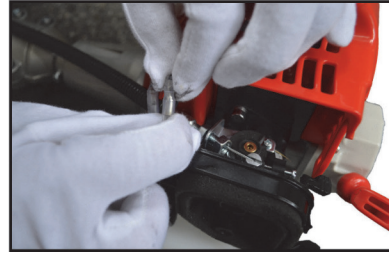


AVISO
El cable de tierra negro (con un anillo en el extremo) está ubicado entre las dos tuercas de ajuste del cable).

4. Conecte el extremo en forma de S del cable del acelerador a la palanca del acelerador en la parte superior del carburador.



5. Gire las tuercas de ajuste del cable lo suficiente para que el cable del acelerador encaje en la muesca de la cubierta del ventilador. Asegúrese de que el cable de conexión a tierra del encendido esté ubicado en el lado posterior de la muesca.
6. Conecte el conector macho del cable de encendido rojo al conector hembra del cable rojo conectado al motor.

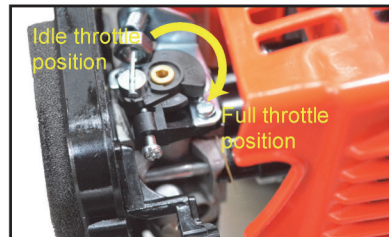


Ajuste del cable del acelerador

1. Tuercas sueltas del cable del acelerador (M10, dos piezas) en la cubierta del ventilador.



2. Ajuste las tuercas de ajuste del cable del acelerador hasta que logre un juego libre en el gatillo del acelerador de unos 6 mm.
3. Cuando se logre un juego libre de 6 mm, apriete estas dos tuercas del cable del acelerador M10. Cuando el cable del acelerador está ajustado correctamente y el gatillo del acelerador está completamente presionado (aceleración máxima), el acelerador hará contacto con el tope en el cuerpo del acelerador.



4. Vuelva a colocar la tapa del filtro de aire.
5. Vuelva a colocar la tapa de la bujía.

Montaje de las secciones de tubo

1. Coloque el cabezal de potencia, el conjunto del tubo inferior y el conjunto del tubo superior sobre una superficie limpia y plana de modo que ambos conjuntos se alineen de extremo a extremo. El conjunto del cabezal de potencia y el tubo inferior deben mirar hacia arriba, y el conjunto del tubo inferior debe colocarse con el orificio de bloqueo en el extremo del tubo hacia arriba.

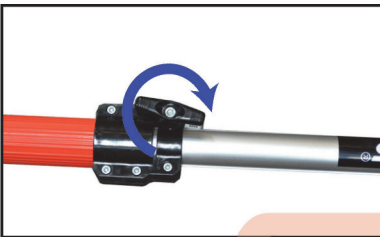
AVISO
¡Mantenga los extremos abiertos de los tubos limpios y libres de impurezas!

2. Deslice las cubiertas protectoras de los extremos de ambos tubos y afloje la perilla del tornillo del acoplador.

3. Inserte el conjunto del tubo superior en el acoplador, con la flecha en la calcomanía del tubo superior hacia arriba, hasta que la línea de la calcomanía quede al ras con el extremo del acoplador. Mueva el tubo superior hacia adelante y hacia atrás hasta que esté seguro de que encaja en su lugar con el seguro del acoplador.



4. Cuando estos dos tubos estén bloqueados juntos, presione hacia abajo el protector de pestillo accionado por resorte y apriete el tornillo del acoplador.



Desmontaje de las secciones del poste

1. Con la sierra de pértiga sobre una superficie limpia y plana, afloje el tornillo del acoplador. El protector del acoplador accionado por resorte debería aparecer.
2. Presione el pestillo hacia abajo con el dedo o el pulgar.
3. Saque el conjunto del tubo superior del acoplador.



Instalación de la cadena

⚠ ADVERTENCIA

Nunca intente instalar, reemplazar o ajustar la cadena con el motor en marcha.

⚠ ADVERTENCIA

La cadena de la sierra está muy afilada. Use guantes para proteger sus manos cuando lo manipule.

ⓘ AVISO

Para prolongar la vida útil de la cadena, deje que los bucles de cadena nuevos o de repuesto se llenen de aceite durante la noche antes de la instalación.

1. Usando el extremo pequeño de la llave para bujías, quite la tuerca de la cubierta de la rueda dentada (gire en sentido contrario a las agujas del reloj para quitarla) y retire la cubierta de la rueda dentada.



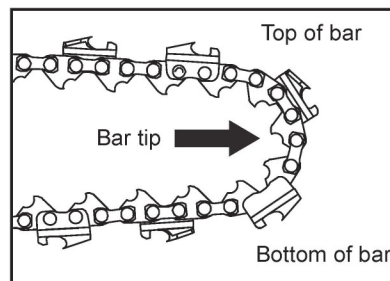
⚠ PRECAUCIÓN

La cubierta de la cadena se utiliza para el transporte y almacenamiento. Retire la cubierta de la cadena antes de usar la máquina.

2. Coloque la barra guía sobre el perno de ajuste de la barra guía en el conjunto del cabezal de corte. Alinee el pasador tensor de la cadena con el orificio de la barra guía.



3. Instale el lazo de la cadena sobre los eslabones impulsores dentro de la ranura de la barra guía y luego alinee la cadena sobre la rueda dentada impulsora. Asegúrese de que el cortador esté correctamente orientado.



ⓘ Información

Si la instalación de la cadena es difícil o si la cadena parece demasiado apretada, consulte la sección "Ajuste de la cadena".

⚠ ADVERTENCIA

Nunca opere la podadora de pértiga sin la cubierta de la rueda dentada instalada.

4. Instale la cubierta de la rueda dentada sobre el perno de la barra. Usando solo la presión de los dedos, instale la tuerca de la cubierta de la rueda dentada.
5. Consulte la siguiente sección para conocer los procedimientos de ajuste de la cadena.

Ajuste de la cadena

⚠ ADVERTENCIA

Nunca intente instalar, reemplazar o ajustar la cadena con el motor en marcha.

⚠ ADVERTENCIA

La cadena de la sierra está muy afilada. Use guantes para proteger sus manos cuando lo manipule.

⚠ PRECAUCIÓN

Una cadena suelta puede saltar de la barra guía y dañar la cadena y el equipo asociado. Asegúrese siempre de que la cadena esté correctamente ajustada; verifique con más frecuencia cuando esté rompiendo una nueva cadena.

ⓘ AVISO

El ajuste adecuado de la cadena es esencial para obtener el máximo rendimiento, una larga vida útil de la cadena y la seguridad del operador. Siempre inspeccione la tensión de la cadena antes de operar la sierra de pértiga.

1. Coloque la podadora de altura sobre una superficie limpia y plana. (Para el reajuste durante la operación, apague el motor, luego deje que la barra guía y la cadena se enfríen antes de continuar con el procedimiento de ajuste.
2. Afloje la tuerca de la cubierta de la rueda dentada con una llave de tuercas.



3. Levante la punta de la barra guía mientras gira el tornillo tensor de la cadena.
 - Gire el tornillo en el sentido de las agujas del reloj para apretar la cadena.
 - Gire el tornillo en sentido anti horario para aflojar la cadena.



4. Tire de la cadena con la mano a lo largo de la parte superior de la barra guía varias veces desde el motor hasta la punta de la barra. La cadena debe sentirse ajustada pero aun así tirar libremente.



5. Apriete firmemente la tuerca de la cubierta de la rueda dentada mientras levanta la punta de la barra guía.
6. Inspeccione la cadena para el ajuste correcto (más frecuentemente con una cadena nueva). La cadena debe sentirse ajustada pero aun así tirar libremente.

Chain lubricant

The chain bar and saw chain require continuous lubrication. Lubrication is provided by the automatic lubrication system when the oil tank is kept filled. Lack of oil will quickly ruin the bar and chain. Insufficient oil will cause overheating shown by smoke coming from the saw chain and/or discoloration of the chain bar.

The sizes of the chain oil tank and fuel tank have been chosen so that the saw will run out of fuel before running out of oil. This means that you should never run with a dry chain.

However, this safety feature requires that you use the right sort of chain oil (if the oil is too thin it will run out before the fuel), and that you adjust the carburetor as recommended (a weak mixture may mean that the fuel lasts longer than the oil). You should also use the recommended cutting equipment (a bar that is too long will use more chain oil). The above conditions also apply to models with an adjustable oil pump.

ⓘ NOTICE

Never operate your chain saw without chain lubrication. If the chain runs dry, the whole cutting attachments will be irretrievably damaged within a very short time. Always check chain lubrication and the oil level in the tank before starting work.

For automatic and reliable lubrication of the chain and bar, always use an environmentally compatible quality

chain and bar lubricant with good adhesive characteristics.

! NOTICE

The service life of the chain and guide bar depends on the quality of the lubricant. It is therefore essential to use only a specially formulated chain lubricant.

! NOTICE

Never use waste oil. Waste oil does not have the necessary lubricating properties, and it can result in damage to the oil pump, the bar and the chain. Renewed contact with waste oil can cause skin cancer. Moreover, waste oil is environmentally harmful.

It is important to use oil of the right viscosity according to the air temperature.

In temperatures below 0°C (32°F) some oils become too viscous. This can overload the oil pump and result in damage to the oil pump components.

Contact your authorized dealer or service center when choosing chain oil.

! WARNING

Never fill the oil reservoir nor adjust the oiler with the engine running.

! NOTICE

The service life of the chain and guide bar is affected by the quality of the lubricant. Using superior lubricant Bar and Chain Oil will help ensure a long service life. For cold weather operation, mix bar and chain oil with an equal part of kerosene.

1. Carefully and thoroughly clean the oil filler cap and the area around it to make sure that no dirt falls into the oil tank.

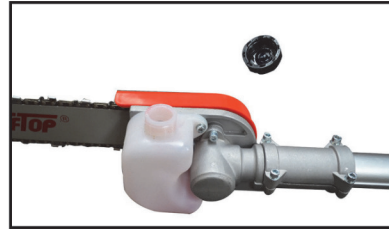
! NOTICE

The oil reservoir has a capacity sufficient to provide about 40 minutes of cutting time (when set to deliver the minimum flow rate, or about as long as you'll get from a tank of fuel).

2. Place the pole pruner on a clean, flat surface with the oil filler cap facing up.



3. Wipe off any debris from the oil cap and from around the oil filler neck.
4. Remove the oil filler cap and fill the oil tank with bar and chain oil.



! NOTICE

Refill the oil tank every time you refuel. Take care not to spill chain oil while refilling, and do not overfill the tank.

5. Wipe up spilled oil from the unit before restarting the pole saw.
6. Replace the oil filler cap.

! NOTICE

The volume of chain oil and fuel tanks are adjusted to each other. Therefore, always fill chain oil and fuel at the same time.

There must still be a small amount of oil in the oil tank when the fuel tank is empty.

If the oil level in the tank does not go down, the reason may be a fault in the oil supply system, please check chain lubrication, clean the oil pipes, and contact authorized dealer or service center for assistance if necessary.

Adjusting oil flow rate

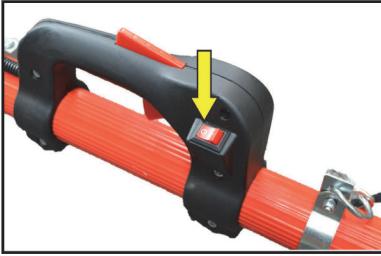
! CAUTION

An increase in bar oil flow rate will speed oil consumption, requiring more frequent checks on the oil reservoir. To ensure sufficient lubrication, it may be necessary to check the oil level more frequently than at fuel tank refills.

The guide bar and chain are lubricated automatically by a pump that operates whenever the chain rotates. The pump is set at the factory to deliver a minimum flow rate, but it can be adjusted in the field. A temporary increase in oil flow is often desirable when cutting things like hardwood or wood with a lot of pitch.

Adjust the pump as follows:

1. Stop the engine and make sure the stop switch is in the STOP position.



2. Place the unit on its side with the oil tank up.

CAUTION

The oil flow adjusting screw must be pressed in slightly in order to turn. Failure to do so could damage the pump and screw.

3. With a screwdriver, push in on the oil flow rate adjusting screw and turn in the desired direction:

- Clockwise → decrease lubrication.
- Counterclockwise → increase lubrication.

Fuel and fueling

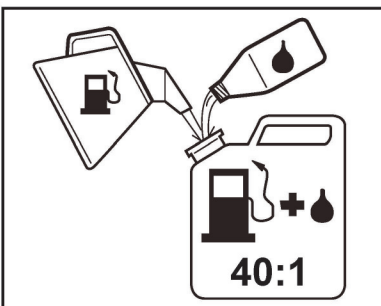
Fuel

WARNING

Gasoline is very flammable. Avoid smoking or bringing any flame or sparks near fuel. Make sure to stop the engine and allow it cool down before refueling the machine. Select well-ventilated outdoor bare ground for fueling and move at least 3 m (10 ft) away from the fuming point before starting the engine.

NOTICE

The pole saw is equipped with a two-stroke engine, and it is certified to operate on unleaded gasoline and two-stroke air cooled engine oil at a recommended mix ratio of 40:1. It is important to accurately measure the amount of oil to be mixed to ensure that the correct mixture is obtained. When mixing small amount of fuel, even small inaccuracies can drastically affect the ratio of the mixture.



Gasoline: Use good quality unleaded gasoline. Some gasoline contain alcohol as an oxygenate. Oxygenated fuels may cause increased operating temperatures. Under certain conditions, alcohol-based fuels may also reduce the lubricating qualities of some mixing oils.

Never use any fuel containing more than 10% alcohol by volume! When an oxygenated fuel must be used, fuel containing an oxygenate such as MTBE is preferred over an alcohol based fuel. Gasoline containing methanol (wood alcohol) is NOT approved.

- Poor quality gasoline or oil may damage sealing rings, fuel lines or fuel tank of the engine.
- Unleaded gasoline is recommended to reduce the contamination of the air for the sake of your health and the environment.
- The lowest octane recommended is 92. If you run the engine on a lower octane grade than 92 so-called, knocking can occur. This gives rise to a high engine temperature, which can result in serious engine damage.
- If you use a gasoline of an lower octane value than prescribed, there is a danger that the engine temperature may rise and an engine problem such as piston seizing may consequently occur.
- When working with continuous high speed (e.g. delimiting), a higher octane grade is recommended.
- Exhaust emission are controlled by the fundamental engine parameters and components (for example, carburetion, ignition timing and port timing) without addition of any major hardware or the introduction of an inert material during combustion.
- Take care when handling gasoline. Avoid direct contact with the skin and avoid inhaling fuel vapor

Two-stroke oil: Two-stroke air-cooled engine oil must be used. Generic oils and some outboard motor oils may not be intended for use in high-performance air cooled 2-cycle engines, and should never be used in the engine!

- Never use two-stroke oil intended for water cooled outboard motors, so-called, outboard oil.
- Never use oil intended for four-stroke engines.

Mixing

1. Measure out the quantities of gasoline and oil to be mixed.
2. Put half of the gasoline into a clean container approved for fuel use.
3. Pour in entire amount of oil and agitate well.
4. Pour in the remaining amount of gasoline and agitate again for at least one minute. As some oil may be difficult to agitate depending on oil ingredients, sufficient agitation is necessary for the engine to last long. Be careful that, if the agitation is insufficient, there is an increase danger of early piston seizing due to abnormal lean mixture.



- Put a clear indication on the outside of the container to avoid mixing up with gasoline or other containers.
- Indicate the contents on outside of container for easy identification.

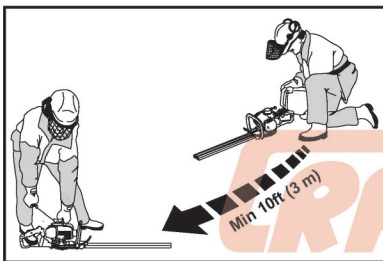
! NOTICE

Mix only enough fuel for your immediate needs! If fuel must be stored longer than 30 days, it should first be treated with a stabilizer

Fueling

! WARNING

- Do not smoke or place warm objects in the vicinity of the fuel.
- Select bare ground for fueling.
- Always shut off the engine and allow it cool down completely before refueling the machine.
- Move at least 10 feet (3 meters) away from the fueling point before starting the engine.
- Never smoke or light any fires near the pruner or fuels!



- Place the machine on a flat, level surface.
- Before fueling, clean the filler cap and the area around it to ensure that no dirt falls into the tank.
- Loose a bit of the fuel cap carefully so as to allow any pressure build-up in the fuel tank to release slowly. Never remove the fuel cap when engine is running!



- Put mixed fuel into the fuel tank to 80% of the full capacity. Make sure the fuel is well mixed by shaking the container before fuelling. Take care not to spill fuel while fueling and do not overfill the tank.



- Tighten the fuel cap securely after fuelling.
- Wipe up any fuel spillage around the fuel cap and fuel tank.

! CAUTION

Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, empty the fuel system before storage for 30 days or longer, drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. Never use engine or carburetor cleaner products in the fuel tank, otherwise permanent damage may occur.

- If fuel without mixing of oil (raw gasoline), it will cause severe damage to the internal engine parts very quickly.
- Do not use gasohol, otherwise it can cause deterioration of rubber and/or plastic parts and disruption of engine lubrication.
- Do not use 4-cycle engine oil, otherwise it can cause spark plug fouling, exhaust port blocking, or piston ring sticking.
- Mixed fuels which have been left unused for a period of one month or more may clog the carburetor and result in the engine failing to operate properly.
- In the case of storing the product for a long period of time, clean the fuel tank after rendering it empty. Next, activate the engine and empty the carburetor of the composite fuel.
- In the case of scrapping the used mixed oil container, scrap it only at an authorized repository site.

! NOTICE

If your fuel cap cannot be tightened properly, it may be damaged or broken. Stop using the pole saw and take it to your authorized dealer or service center for repair.

Start and stop the engine

! WARNING

It is very dangerous to run a pole saw that equipped with broken parts or lacks of any parts. Before starting the engine, make sure that all the parts including cutting attachments and chain guard are installed properly.

! WARNING

The saw chain has very sharp cutters and they will start moving upon the engine starts. Touching them may

lead to severe personal injury. Avoid touching saw chain whenever possible, and always wear gloves to protect hands.

! WARNING

- To reduce the risk of serious or even fatal injury:
- Do not allow children or other unauthorized persons to attempt to start or otherwise use the machine.
 - Never allow children or unauthorized persons access to the machine.
 - Never leave the machine unattended while working or during work breaks
 - After work, store the machine in a safe, secure location out of the reach of children and other unauthorized persons
 - Observe safety precautions and instructions.

! WARNING

When starting the engine, make sure that your body does not contact with the muffler. A hot muffler can cause serious burns.

! WARNING

When starting the engine, make sure the cutting attachment is well clear of bystanders, pets or objects. The attachment may rotate during start-up.

! CAUTION

Never operate the pole pruner unless a cutting attachment is installed.

Start the engine

! WARNING

Before you start the engine, make sure that the cutting attachments are not touching ground or any other obstacles.

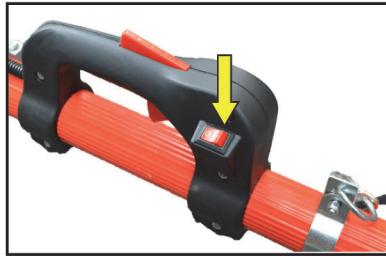
! CAUTION

The saw chain cover is used for transportation and storage. Remove chain cover before starting and using the machine.

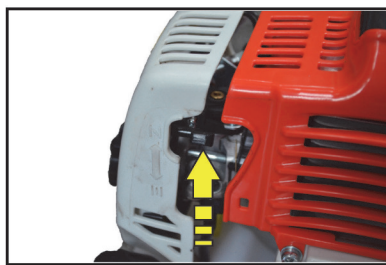
1. Fill mixed fuel into the fuel tank and tighten the fuel cap securely.



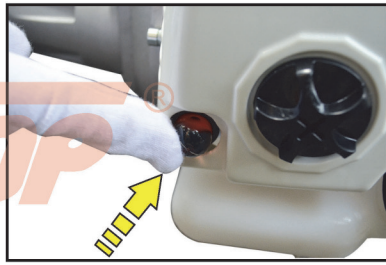
2. Move stop switch to "ON" position.



3. Move choke control lever upwards to "CLOSE" position.



4. Pump purge bulb until fuel is visible and flows freely in the clear fuel tank return line. Pump bulb an additional 4 or 5 times.



5. Place the machine on a flat and firm ground in a clear area.
6. Place the unit firmly on the ground, making sure it is stable and that the cutting attachment is free and clear of any bystanders or objects.
7. Hold onto the top of engine outer cover with your left hand.



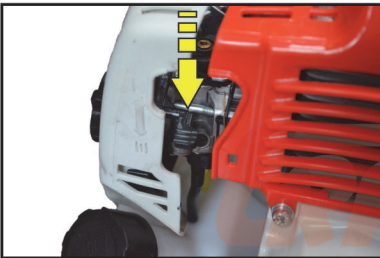
8. Grip the starter rope handle securely with right hand, and pull it slowly until you feel the starter engage.



NOTICE

The recoil starter can be damaged by abuse. Always engage the starter before attempting to crank the engine. Do not pull out the starter rope all the way, otherwise it might break. Do not let the starter rope snap back by itself. Guide it slowly back into the housing, so that the starter rope can rewind properly.

- 9. Pull the starter handle quickly to start the engine.
- 10. When the engine starts or fires, move choke control lever downwards to "OPEN" ↓ position.



WARNING

The cutting attachment will engage and rotate as the engine starts and accelerates.

- 11. If the engine did not continue to run, repeat the appropriate cranking procedure (warm or cold engine).

NOTICE

When the engine starts, clear excess fuel from the combustion chamber by revving the engine several times with the throttle trigger (operating the trigger will automatically disengage the "fast idle" setting).

- 12. Restart engine if necessary and allow the machine to warm up at idle engine speed for several minutes.

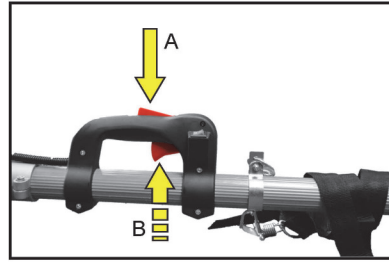
WARNING

The saw chain must not move at idle speed, otherwise serious personal injury may result. Periodic carburetor adjustment may be necessary to assure saw chain does not move at idle speed. If saw chain moves, have the carburetor readjusted by your local authorized dealer or service center.

NOTICE

When restarting the engine immediately after stopping it, leave the choke control lever in "OPEN" position.

- 13. After engine warm-up, grip the front handle and rear handle firmly. Depress the throttle trigger safety lockout (A), and gradually depress throttle trigger (B) to increase engine RPM to operating speed.



information

The WARM starting procedure is almost same as COLD starting except the choke control lever position, instead it is starting from "OPEN" position.

NOTICE

When restarting the engine immediately after stopping it, leave the choke control lever in "OPEN" position.

Start a flooded engine

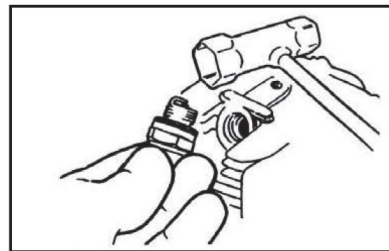
Repeat the appropriate cranking procedure (warm or cold engine). If the engine fails to start after repeated attempts; the engine is likely flooded.

Proceed to the following procedure.

- 1. Pull and remove the spark plug cable.




- 2. Disconnect the spark plug lead, and then use the spark plug wrench to remove the spark plug (turn counterclockwise to remove).

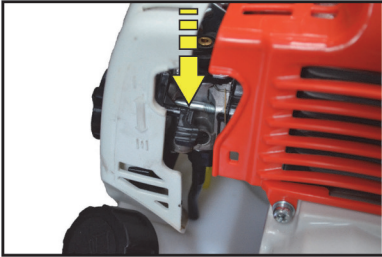


- 3. Open the choke and fully depress the throttle trigger with your left hand, then pull the starter handle rapidly with your right hand to clear excess fuel from the combustion chamber.

NOTICE

Incorrect spark plug installation can result in serious engine damage.

- Reinstall the spark plug and tighten it firmly. If a torque wrench is available, torque the spark plug to 16.7~18.6 Nm.
- Repeat the starting procedure for a warm engine (set the choke lever to "OPEN"  position).



- If the engine still fails to start, refer to the troubleshooting section of this manual.

Stop the engine

WARNING

The cutting attachment can continue rotating after the engine is switched off!

- Release throttle trigger and allow engine to return to idle speed for two or three minutes.
- Move the stop switch backwards to "OFF" position.



WARNING

If engine does not stop when engine stop switch is moved to "STOP" position, move choke control lever to "CLOSE" position to stall engine. Have your local authorized dealer or service center to repair engine stop switch before using the machine again.

Operation

This section describes basic operation instructions with safety rules for using a pole saw to perform your cutting work. This information is no substitute for professional skills and experience. If you get into a situation where you feel unsafe, stop and seek expert advice. Do not attempt any task that you feel unsure of!

WARNING

Engine exhaust is hot, and it can cause serious burns. Engine exhaust contains Carbon Monoxide (CO), a poison gas. Breathing CO can cause unconsciousness, serious injury, or death. Always position your machine

so that exhaust is directed away from your face and body.

WARNING

Pole saw chain is very sharp. Touching them may lead to severe personal injury. Avoid touching saw chain whenever the cutting attachments are moving, and always wear gloves to protect your hands.

WARNING

Never remove hands from unit when saw chain are moving.

WARNING

The engine continues running even when saw chain has stopped due to an obstruction. If this occurs, stop the engine, disconnect ignition cable and remove the obstruction.

information

Observe all country-specific or municipal rules and regulations for using this pole saw.

Do not use your machine during other people's normal rest periods.

information

Any working position above head height is tiring. To minimize the risk of accidents, work in such positions for short periods only.

Wearing the harness

- Hook the harness hook to the hanger on the outer pipe.



- Wear the harness so that the hook stays at your right hand side.



- Adjust the length of the strap so that you can hold and operate the machine comfortably.



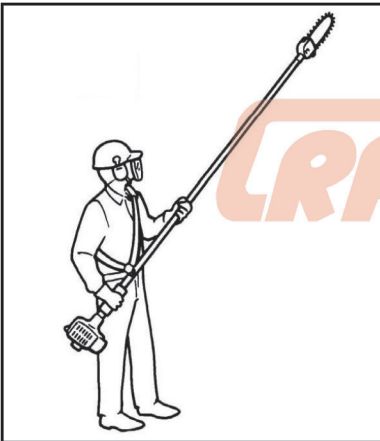
Holding and controlling the machine

! WARNING

Never attempt to operate your power tool with one hand. Loose of control of the power tool could result in serious or even fatal injury.

Always hold the machine firmly with both hands on the handles while you are working. Wrap your fingers and thumbs around the handles.

Place your left hand on the shaft and your right hand on rear grip and throttle trigger. Left-handers must follow these instructions too. Keep your hands in this position to help maintain control of your pole saw while working at all times.

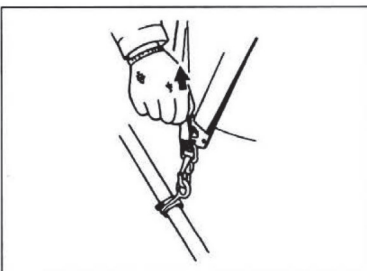


! WARNING

Most pole saw accidents happen when the saw chain touches the operator. You must wear proper clothing and approved personal protective equipments (PPE) whenever you use a pole saw.

Emergency release

In case of emergency, strongly pull the white tab at the hook, the machine will be release from the strap.



Working position

Hold the control handle with your right hand, and the shaft with your left hand. Your left arm should be extended to the most comfortable position.

! WARNING

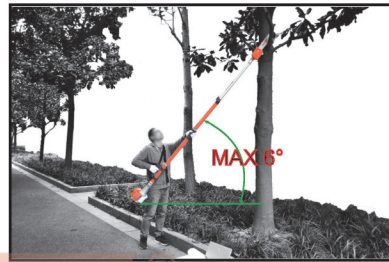
The shaft should always be held at an angle of 60° or less.

Cutting sequence

To allow branches a free fall, always cut the lower branches first. Prune heavy branches (large diameter) in several controllable pieces.

Typical application - Standard cut

The most convenient working position is a tool angel of 60°, but any other angle may be used to suit the situation concerned.



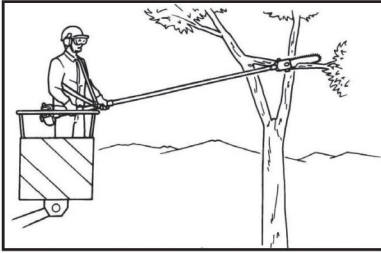
Typical application - Cutting above obstacles

Thanks to the unit's long reach it is possible to prune branches that are overhanging obstacles, such as rivers or lakes. The tool angle in this case depends on the position of the branch.



Typical application - Cutting on a work platform

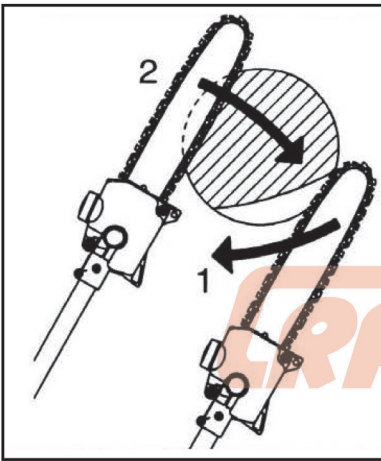
The unit's long reach enables cutting to be performed next to the trunk without the risk of the work platform damaging other branches. The tool angle in this case depends on the position of the branch.



Relieving cut

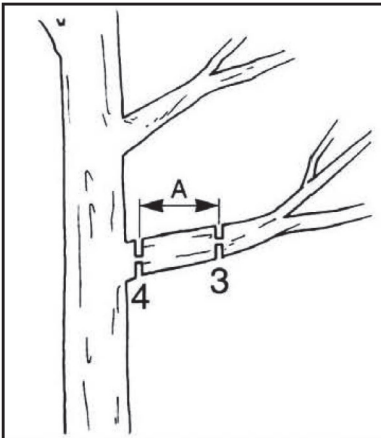
To avoid tearing the bark, kickback or pinching the bar when pruning thick branches, always start by performing a relieving cut (1) on the underside of the branch.

To do this, apply the cutting attachment and pull it across the bottom of the branch as far as the bar nose. Perform the cross-cut (2).



Flush-cutting thick branches

If branch diameter is more than 10 cm (4"), first perform undercut (3) and cross-cut at a distance (A) of about 25cm (10") from the final cut. Then carry out the flush-cut (4), starting with a relieving cut and finishing with a cross-cut.



Maintenance and care

⚠ WARNING

Moving parts can amputate fingers or cause severe injuries. Keep hands, clothing and loose objects away from all moving attachments.

Always stop engine, disconnect spark plug, and make sure all moving parts have come to a complete stop before performing any maintenance, repair, or cleaning work on the machine.

Allow the machine to cool down before performing maintenance service. Wear gloves to protect hands from sharp edges and hot surfaces.

Before cleaning, inspecting or repairing the machine, make sure that engine has been stopped and cooled down. Disconnect the spark plug to prevent accidental starting.

⚠ WARNING

Non-standard parts may not operate properly with your unit and may cause damage and lead to personal injury.

Muffler

⚠ WARNING

Operating the engine without a muffler or with a muffler that is damaged or improperly installed can increase engine noise sufficiently to lead to hearing loss.

This machine must never be operated with a faulty or missing spark arrestor or muffler. Make sure the muffler is well secured and in good condition. A worn or damaged muffler is a fire hazard and may also cause hearing loss.

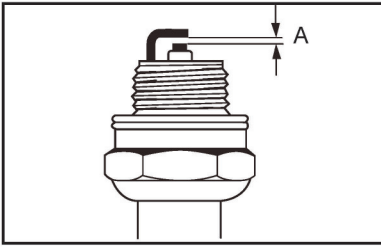
Spark plug

Starting failure and misfiring are often caused by a fouled spark plug. Clean the spark plug and check that the plug gap is in the correct range.

1. Remove spark plug and check for fouling, worn and rounded center electrode.




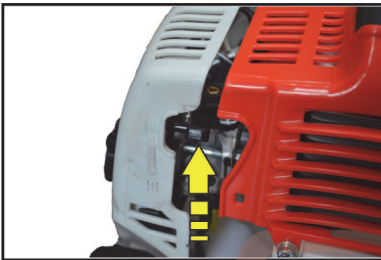
2. Clean the plug or replace with a new one. Do not clean it with sand blast. Remaining sand will damage the engine.
3. According to Technical Specification, adjust spark plug gap (A) by bending outer electrode.
4. Tighten spark plug with a torque of 5.5~6 Nm.
5. Check and make sure the spark plug and wire connections are tight and clean.



NOTICE
Using any spark plug other than those designated in this manual may result in the engine failing to operate properly, or in the engine becoming overheated and damaged.

Air filter

1. Move choke control lever to "CLOSE"  position. This prevents dirt from entering into the carburetor throat when the air filter is removed.



2. Brush accumulated dirt from air filter area.
3. Rotate the air filter cover knob counterclockwise, and then remove the air filter cover.



4. Brush dirt from inside cover.



5. Replace air filter if it is damaged, fuel soaked, very dirty, or the rubber sealing edges are deformed.
 - Lightly brush debris from filter.
 - Soak heavily soiled filters in warm, soapy water/detergent solution to loosen dirt, and then brush lightly.

6. Dry the air filter completely before re-installing.
7. Install air filter in air filter case.
8. Insert air filter cover onto the air filter case, then fix it with the knob.

Fuel filter

DANGER
 Fuel is very flammable. Use extreme care when mixing, storing or handling, or serious personal injury may result.

1. Use a clean rag to remove loose dirt from around fuel cap and empty fuel tank.



2. Use a fuel line hook to pull the fuel line and filter from the tank.



3. Remove the used fuel filter from the line, replace it with a new fuel filter.
4. Install the new fuel filter.

Carburetor adjustment

The carburetor has been adjusted at the factory with a standard setting.

This setting provides an optimal fuel-air mixture under most operating conditions.

WARNING
 The cutting attachment must not move at idle speed, otherwise serious personal injury may result. Periodic carburetor adjustment may be necessary to ensure cutting attachments do not move at idle speed.

The engine must return to idle speed whenever the throttle trigger is released. Idle speed is adjustable and must be set low enough to permit the engine clutch to disengage the chain saw when throttle trigger is released.

NOTICE
 Carburetor adjustments, other than idle speed, must be performed by an authorized dealer or service center.

1. Start the engine and allow it running at idle speed about two or three minutes, or until it warms up.
2. If the cutting attachment rotates at engine idle speed, reduce the idle speed by turning the idle speed adjusting screw counterclockwise as necessary.



3. If the engine is stalling at idle speed, increase idle speed by turning the idle speed adjustment screw clockwise.

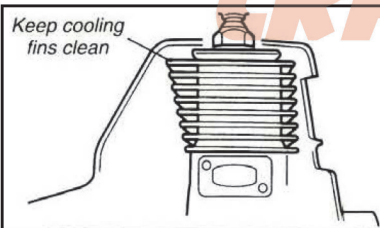
WARNING

When carburetor adjustment is completed properly, the cutting attachment should not move at idle speed, otherwise serious personal injury may result.

Daily maintenance

Prior to each work day, perform the following:

- Remove all dirt and debris from the engine, check the cooling fins and air filter for clogging, and dean as necessary.



- Carefully remove any accumulating of dirt or debris from the muffler and fuel tank. Dirt build-up in these areas can lead to engine overheating, fire, or premature wear.

- Check for loose or missing screws or components. Make sure the cutting attachment is free of debris and securely fastened.
- Check the entire machine for leaking fuel or grease.
- Make sure nuts, bolts, and except carburetor adjusting screws) are tight.

10-hour maintenance

CAUTION
Do not operate the machine if the air cleaner or element is damaged, or if the element is wet or water-soaked.

Every 10 hours of operation, (more frequently in dusty or dirty conditions):

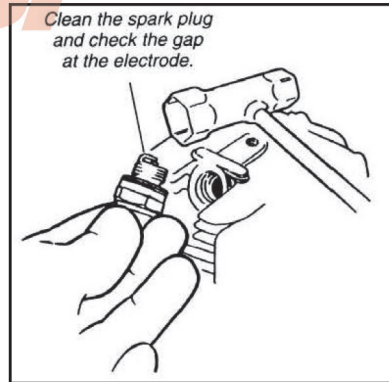
- Remove the air cleaner element from the air filter housing and clean it thoroughly with soap and water.
- Rinse and dry thoroughly.
- Add a few drops of oil and work it in, then reassemble the element.

10/15-hour maintenance

CAUTION
Before removing the spark plug, clean the area around the plug to prevent dirt and dust from getting into the engine's internal parts.

Every 10 to 15 hours of operation:

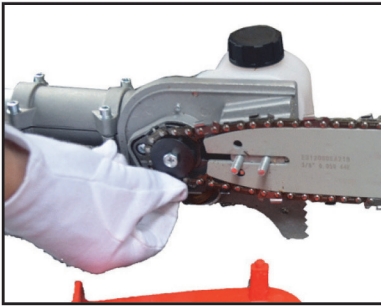
- Remove and clean the spark plug.
- Adjust the spark plug electrode gap to 0.6 ~ 0.7 mm.



50-hour maintenance

Every 50 hours of operation (more frequently in dusty or dirty conditions):

- Remove and clean the cylinder cover and clean dirt and debris from the cylinder cooling fins.
- Remove the sprocket cover and inspect the sprocket for excessive dirt, debris, or wear. Remove the guide bar and clean out the guide bar groove. If the sprocket is excessively worn, replace it with a new one.



- Lubricate the gear case. To perform this operation, first remove the gear case from the upper outer tube as follows

! NOTICE

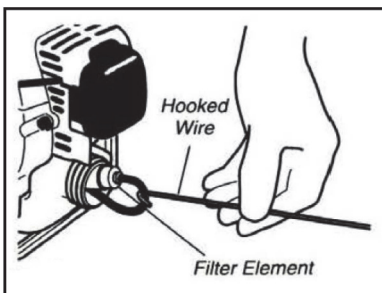
Do not remove the D-shaped shim washer from the gearcase clamp! The shim washer prevents damage from over-tightening the tube clamp screw.

- Loosen the gear case clamp bolt.
- Remove the index bolt from the gear case.
- Slide the gear case out of the tube. Using a lever-type grease gun, pump lithium-base grease (about 10 grams) into the grease fitting until you see old grease being purged from the gear case, this can be seen in the outer tube cavity. Clean up excess grease, and then reassemble the gear case onto the outer tube.

! CAUTION

Make sure you do not pierce the fuel line with the end of the hooked wire. The line is delicate and can be damaged easily.

- Use a wire hook to extract the fuel filter from inside the fuel tank. Inspect the fuel filter element for signs of contamination. Replace it with a new one if required. Before reinstalling the filter, inspect the fuel line. If you find damage or deterioration, remove the unit from service until it can be inspected by trained service technician.



Sharpening the Chain

When the cutting edges of the cutter become dull, they can be re-sharpened with a few strokes of a file.

In order to keep the saw chain in balance, all cutting edges must be sharpened equally.

In addition, inspect the chain for correct adjustment (more frequently with a new chain). The chain should feel snug but still pull freely.



! NOTICE

File all cutters to the same angle and depth! Unequal filing may cause the saw to vibrate or cut erratically.

1. Using a 4.5 mm round file, sharpen all cutters to a 30° angle. Make sure that one fifth (20%) of the file's diameter is always held above the cutter's top plate.

! NOTICE

For consistent filing angles, use a filing guide such as Oregon P/N 31692 or equivalent.

2. After all cutters are sharpened, use a depth gauge joiner to measure the height of each depth gauge.
3. As required, lower the depth gauges to a height of 0.5mm. Use a flat file.
4. After all depth gauges have been adjusted, use a flat file to round each depth gauge leading edge to its original curvature and angle.

Storage

! DANGER

Do not store the machine in enclosure where fuel fumes may accumulate or reach an open flame or spark, otherwise serious personal injury may result.

! WARNING

The muffler and surrounding covers become hot during operation. Always keep exhaust area clear of flammable debris during transportation or when storing, otherwise serious property damage or personal injury may result.

! WARNING

Pole saw chain is very sharp. Touching them may lead to severe personal injury. Avoid touching moving saw chain, and always wear gloves to protect hands.

! CAUTION

Make sure you do not pierce the fuel line with the end of the hooked wire. The line is delicate and can be damaged easily.

! NOTICE

Gasoline stored in the carburetor for extended periods can cause hard starting, and could also lead to increased service and maintenance costs.

Do not store your machine for periods of time 30 days or longer without performing protective storage maintenance which includes the following procedure:

1. Remove accumulation of grease, oil, dirt and debris from exterior of unit.
2. Clean external parts thoroughly and apply a light coating of oil to all metal surfaces.
3. Place the engine stop switch in the "STOP" position.
4. Perform all periodic lubrication and services that are required.
5. Apply clean oil to the entire length of the saw chain. Be certain the chain bar bolts and nuts are lubricated as well.
6. Install the chain guard (scabbard) to saw chain and guide bar.
7. Securely tighten all the screws and nuts.
8. Drain all fuel from the carburetor and the fuel tank.
9. Remove the spark plug and pour about 3crn3 of oil into the cylinder through the spark plug hole. Slowly pull the recoiled starter 2 or 3 times so oil will evenly coat the interior of the engine. Reinstall the spark plug.
10. Repair or replace any worn or dan1aged parts.
11. Remove the air cleaner element from the carburetor and clean it thoroughly with soap and water. Rinse and dry thoroughly, then add a few drops of oil and wok it in. Reassemble.
12. Store your machine in a dry, dust-free place, out of the reach of children.



NOTICE

Always store and transport pole saws in a stable, horizontal position. Always install chain guard when transporting or storing unit.

Disposal

Observe all country-specific and local waste disposal rules and regulations.

CRAFTOP products must not be thrown in the garbage bin. Take the product, accessories and packaging to an approved disposal site for environment friendly recycling.

Do not throw the cuttings that you cut down in the garbage bin, as they can be composted!

Contact your local authorized dealer or service center for the latest information on waste disposal.

Troubleshooting guide

DANGER

Fuel vapors are extremely flammable and may cause fire and/or explosion. Never test for ignition spark by grounding spark plug near cylinder plug hole, otherwise serious personal injury may result.

Problem	Cause	Solution
Engine starts hard OR Engine does not start	No fuel at carburetor - Fuel filter or fuel line obstructed - Carburetor issue	- Clean or replace - Contact authorized dealer or service center
	No fuel at cylinder - Carburetor issue	Contact authorized dealer or service center
	Muffler wet with fuel - Fuel mixture is too rich	Open choke lever Clean or replace air filter Adjust carburetor Contact authorized dealer or service center
	No spark at end of plug wire - Engine switch at OFF position - Electrical problem - Interlock switch issue	- Set engine switch to ON position - Contact authorized dealer or service center - Contact authorized dealer or service center
	No spark - Incorrect spark plug gap - Electrode covered with carbon - Fouled with fuel - Spark plug defective	- Adjust electrode gap to specification - Clean or replace spark plug - Clean or replace spark plug - Replace spark plug
Engine runs, but dies OR Engine does not accelerate properly	Air filter is dirty	Clean or replace air filter
	Fuel filter dirty	Replace fuel filter or replace fuel
	Fuel vent blocked	Clean
	Spark plug dirty or worn	Clean , adjust or replace
	Improper carburetor adjustment	Contact authorized dealer or service center
	Cooling system dirty or blocked	Clean cooling system
Engine does not crank	Internal engine problem	Contact authorized dealer or service center

Problem	Cause	Solution
Engine does not start OR Runs only a few seconds after starting.	<ul style="list-style-type: none"> - Engine switch OFF - Engine flooded - Fuel tank empty - Spark plug has no spark - Fuel not reaching carburetor 	<ul style="list-style-type: none"> - Move engine switch to ON - Follow start warm engine procedure - Fill fuel tank with correct fuel mixture - Replace with new spark plug - Check for dirty fuel filter; replace. Check for kinked or split fuel line; repair or replace.
Engine idle speed not set properly	<ul style="list-style-type: none"> - Carburetor adjustment. requires - Crankshaft seals worn 	Contact authorized dealer or service center
Engine does not accelerate, lacks power, or dies under a load.	<ul style="list-style-type: none"> - Air filter dirty. - Spark plug fouled. - Chain brake engaged. - Carburetor adjustment. requires 	<ul style="list-style-type: none"> - Clean or replace air filter. - Clean or replace plug and adjust the gap. - Disengage chain brake. - Contact authorized dealer or service center
Engine smokes excessively.	Too much oil mixed with gasoline.	Empty fuel tank completely and refill with correct fuel mixture.
Chain moves at idle speed.	<ul style="list-style-type: none"> - Idle speed adjustment. requires - Clutch requires repair 	Contact an authorized dealer or service center.

 **information**

If your pole saw seems to need further service, please consult with your local authorized dealer or service center.

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