

STIHL HT 100, 101, 130, 131

Instruction Manual Manual de instrucciones



Warning!

Read and follow all safety precautions in Instruction Manual – improper use can cause serious or fatal injury.

Advertencia!

Lea y siga todas las precauciones de seguridad dadas en el manual de instrucciones – el uso incorrecto puede causar lesiones graves o mortales.



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Allow only persons who understand this manual to operate your pole pruner.

To receive maximum performance and satisfaction from your STIHL pole pruner, it is important that you read and understand the maintenance and safety precautions, starting on page 3, before using your pole pruner.

Contact your STIHL dealer or the STIHL distributor for your area if you do not understand any of the instructions in this manual.

Warning!

Because a pole pruner is a high-speed cutting tool with a very long reach some special safety precautions must be observed to reduce the risk of personal injury.

Careless or improper use may cause serious or even fatal injury.

STIHL's philosophy is to continually improve all of its products. As a result, engineering changes and improvements are made from time to time. If the operating characteristics or the appearance of your pole pruner differ from those described in this manual, please contact your STIHL dealer for information and assistance.

STIHL®

Guide to Using this Manual

Pictograms

All the pictograms attached to the machine are shown and explained in this manual.

The operating and handling instructions are supported by illustrations.

Symbols in text

The individual steps or procedures described in the manual may be marked in different ways:

- A bullet marks a step or procedure without direct reference to an illustration.


A description of a step or procedure that refers directly to an illustration may contain item numbers that appear in the illustration.


Example:


Loosen the screw (1)


Lever (2) ...

In addition to the operating instructions, this manual may contain paragraphs that require your special attention. Such paragraphs are marked with the symbols described below:

 Warning where there is a risk of an accident or personal injury or serious damage to property.

 Caution where there is a risk of damaging the machine or its individual components.

 Note or hint which is not essential for using the machine, but may improve the operator's understanding of the situation and result in better use of the machine.

 Note or hint on correct procedure in order to avoid damage to the environment.

* Equipment and features

This instruction manual may refer to several models with different features. Components that are not installed on all models and related applications are marked with an asterisk (*). Such components may be available as special accessories from your STIHL dealer.

Engineering improvements

STIHL's philosophy is to continually improve all of its products. As a result, engineering changes and improvements are made from time to time. If the operating characteristics or the appearance of your machine differ from those described in this manual, please contact your STIHL dealer for assistance.

Therefore some changes, modifications and improvements may not be covered in this manual.

Safety Precautions and Working Techniques



Because a pole pruner is a high-speed, fast-cutting power tool with a very long reach, special safety precautions must be observed to reduce the risk of personal injury.



It is important that you read, fully understand and observe the following safety precautions and warnings. Read the instruction manual and

the safety precautions periodically. Careless or improper use may cause serious or fatal injury.

Have your STIHL dealer show you how to operate your power tool. Observe all applicable local safety regulations, standards and ordinances.



Warning!

Do not lend or rent your power tool without the instruction manual. Be sure that anyone using it understands the information contained in this manual.



Warning!

The use of this machine may be hazardous. The pole pruner chain has many sharp cutters. If the cutters contact your flesh, they will cut you, even if the chain is not moving.

Do not cut any material other than wood or wooden objects. Use your pole pruner for limbing only. It must not be used for any other purposes, since such misuse may result in an accident or damage to the machine.



Warning!

Minors should never be allowed to use this power tool. Bystanders, especially children, and animals should not be allowed in the area where it is in use.



Warning!

To reduce the risk of injury to bystanders and damage to property, never let your power tool run unattended. When it is not in use (e.g. during a work break), shut it off and make sure that unauthorized persons do not use it.

Most of these safety precautions and warnings apply to the use of all STIHL pole pruners. Different models may have different parts and controls. See the appropriate section of your instruction manual for a description of the controls and the function of the parts of your model.

Safe use of a pole pruner involves

1. the operator
2. the pole pruner
3. the use of the pole pruner.

THE OPERATOR

Physical Condition

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



Warning!

Be alert – if you get tired, take a break. Tiredness may result in loss of control. Working with any power tool can be strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating this machine.

⚠ Warning!

Prolonged use of a power tool (or other machines) exposing the operator to vibrations may produce whitefinger disease (Raynaud's phenomenon) or carpal tunnel syndrome.

These conditions reduce the hand's ability to feel and regulate temperature, produce numbness and burning sensations and may cause nerve and circulation damage and tissue necrosis.

All factors which contribute to whitefinger disease are not known, but cold weather, smoking and diseases or physical conditions that affect blood vessels and blood transport, as well as high vibration levels and long periods of exposure to vibration are mentioned as factors in the development of whitefinger disease. In order to reduce the risk of whitefinger disease and carpal tunnel syndrome, please note the following:

Most STIHL power tools are available with an anti-vibration ("AV") system designed to reduce the transmission of vibrations created by the machine to the operator's hands. An AV system is recommended for those persons using power tools on a regular or sustained basis.

Wear gloves and keep your hands warm.

Keep the AV system well maintained. A power tool with loose components or with damaged or worn AV buffers will tend to have higher vibration levels.

Maintain a firm grip at all times, but do not squeeze the handles with constant, excessive pressure. Take frequent breaks.

All the above-mentioned precautions do not guarantee that you will not sustain whitefinger disease or carpal tunnel syndrome. Therefore, continual and regular users should closely monitor the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

⚠ Warning!

The ignition system of the STIHL unit produces an electromagnetic field of a very low intensity. This field may interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with a pacemaker should consult their physician and the pacemaker manufacturer before operating this tool.

Proper Clothing

⚠ Warning!

To reduce the risk of injury, the operator should wear proper protective apparel.

⚠ Warning!



To reduce the risk of injury to your eyes never operate your power tool unless wearing goggles or properly fitted protective glasses with adequate top

and side protection complying with ANSI Z 87.1 (or your applicable national standard). To reduce the risk of injury to your face STIHL recommends that you also wear a face shield or face screen over your goggles or protective glasses.

Wear an approved safety hard hat to reduce the risk of injury to your head.

Power tool noise may damage your hearing. Wear sound barriers (ear plugs or ear muffers) to protect your hearing. Continual and regular users should have their hearing checked regularly.

Be particularly alert and cautious when wearing hearing protection because your ability to hear warnings (shouts, alarms, etc.) is restricted.



Always wear gloves when handling the machine and the cutting tool. Heavy-duty, nonslip gloves improve your grip and help to protect your hands.



Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Wear long pants made of heavy material to help protect your legs. Do not wear shorts, sandals or go barefoot.

Avoid loose-fitting jackets, scarfs, neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become caught on branches, brush or the moving parts of the unit. Secure hair so it is above shoulder level.



Good footing is very important. Wear sturdy boots with nonslip soles. Steel-toed safety boots with cut retardant inserts are recommended.

THE POWER TOOL

For illustrations and definitions of the power tool parts see the chapter on "Main Parts and Controls."

Warning!

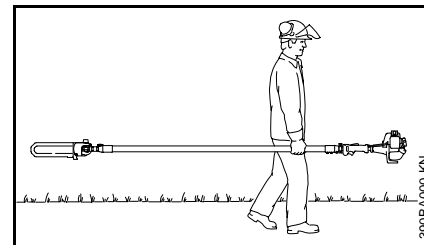
Never modify this power tool in any way. Only attachments supplied by STIHL or expressly approved by STIHL for use with the specific STIHL model are authorized. Although certain unauthorized attachments are useable with STIHL power tools, their use may, in fact, be extremely dangerous.

If this 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 in particular that the fuel system is tight (no leaks) and that the controls and safety devices are working properly. Do not continue operating this machine if it is damaged. In case of doubt, have it checked by your STIHL servicing dealer.

THE USE OF THE POWER TOOL

Transporting the Power Tool

Warning!



This power tool should be carried only in a horizontal position. Grip the shaft in a manner that the machine is balanced horizontally. Keep the hot muffler away from your body and the cutting attachment behind you. Accidental acceleration of the engine can cause the chain to rotate and cause serious injuries.

Warning!

Always switch off the engine and fit the scabbard over the cutting attachment before transporting the power tool over long distances. When transporting it in a vehicle, properly secure it to prevent turnover, fuel spillage and damage to the unit.

Fuel

Your STIHL power tool uses an oil-gasoline mixture for fuel (see the chapter on “Fuel” of your instruction manual).

Warning!



Gasoline is an extremely flammable fuel. If spilled and ignited by a spark or other ignition source, it can cause fire and serious burn injury or property

damage. Use extreme caution when handling gasoline or fuel mix. Do not smoke or bring any fire or flame near the fuel or the power tool. Note that combustible fuel vapor may escape from the fuel system.

Fueling Instructions

Warning!

Fuel your power tool in well-ventilated areas, outdoors. Always shut off the engine and allow it to cool before refueling. Gasoline vapor pressure may build up inside the fuel tank depending on the fuel used, the weather conditions and the tank venting system.

In order to reduce the risk of burns and other personal injury from escaping gas vapor and fumes, remove the fuel filler cap on your power tool carefully so as to allow any pressure build-up in the tank to release slowly. Never remove the fuel filler cap while the engine is running.

Select bare ground for fueling and move at least 10 feet (3 m) from the fueling spot before starting the engine. Wipe off any spilled fuel before starting your machine.

Warning!

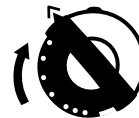
Check for fuel leakage while refueling and during operation. If fuel leakage is found, do not start or run the engine until the leak is fixed and any spilled fuel has been wiped away. Take care not to get fuel on your clothing. If this happens, change your clothing immediately.

Different models may be equipped with different fuel caps.

Cap with grip

Warning!

In order to reduce the risk of fuel spillage and fire from an improperly tightened fuel cap, correctly position and tighten the fuel cap in the fuel tank opening.



To do this with this STIHL cap, raise the grip on the top of the cap until it is upright at a 90° angle. Insert the cap in the fuel tank opening with the triangular marks on the grip of the cap and on the fuel tank opening lining up. Using the grip, turn the cap firmly clockwise as far as it will go (approx. a quarter turn).



Fold the grip flush with the top of the cap. If the grip does not lie completely flush with the cap and the detent on the grip does not fit in the corresponding recess in the filler neck, the cap is not properly seated and tightened and you must repeat the above steps.

Screw cap

Warning!



Unit vibrations can cause an improperly tightened fuel filler cap to loosen or come off and spill quantities of fuel. In order to reduce the risk of fuel spillage and fire, tighten the fuel filler cap by hand as securely as possible.

Before Starting

Take off the chain guard (scabbard) and inspect the pole pruner for proper condition and operation. (See the maintenance chart near the end of the instruction manual.)

⚠ Warning!

Always check your power tool for proper condition and operation before starting, particularly the throttle trigger, throttle trigger interlock, stop switch and cutting attachment. The throttle trigger must move freely and always spring back to the idle position. Never attempt to modify the controls or safety devices.

⚠ Warning!

Never operate your power tool if it is damaged, improperly adjusted or maintained, or not completely or securely assembled.

⚠ Warning!

Check that the spark plug boot is securely mounted on the spark plug – a loose boot may cause arcing that could ignite combustible fumes and cause a fire.

Keep the handles clean and dry at all times; it is particularly important to keep them free of moisture, pitch, oil, fuel mix, grease or resin in order for you to maintain a firm grip and properly control your power tool.

For proper assembly of the bar and chain follow the procedure described in the chapter “Mounting the Bar and Chain” of your instruction manual.

STIHL Oilomatic chain, guide bar and sprocket must match each other in gauge and pitch.

⚠ Warning!

Proper chain tension is extremely important. In order to avoid improper setting, the tensioning procedure must be followed as described in your manual. Always make sure the hex nut(s) for the sprocket cover is (are) tightened securely after tensioning the chain. Check chain tension once more after having tightened the nut(s). Never start the pole pruner with the sprocket cover loose.

Adjust carrying harness and hand grip to suit your size before starting work.

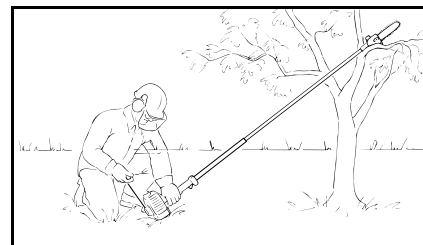
Starting

⚠ Warning!

To reduce the risk of fire and burn injuries, start the engine at least 10 feet (3 meters) from the fueling spot, outdoors only.

Start and operate your pole pruner without assistance.

For specific starting instructions, see the appropriate section of your manual. Proper starting methods reduce the risk of injury.



Place the pole pruner on firm ground or other solid surface in an open area or, in the alternative, as shown in the above picture. Maintain good balance and secure footing.

⚠ Warning!

To reduce the risk of injury from loss of control, do not attempt to “drop start” your power tool.

⚠ Warning!

To reduce the risk of injury from loss of control be absolutely sure that the guide bar and chain are clear of you and all other obstructions and objects, including the ground, because when the engine starts at starting-throttle, engine speed will be fast enough for the clutch to engage the sprocket and turn the chain.

Once the engine has started, immediately blip the throttle trigger, which should release the starting throttle and allow the engine to slow down to idle

With the engine running only at idle, attach the power tool to the spring hook of your harness (see appropriate chapter of this manual).

⚠ Warning!

When you pull the starter grip, do not wrap the starter rope around your hand. Do not let the grip snap back, but guide the starter rope to rewind it properly. Failure to follow this procedure may result in injury to your hand or fingers and may damage the starter mechanism.

Important Adjustments

⚠ Warning!

To reduce the risk of personal injury from loss of control or contact with the running cutting tool, do not use your unit with incorrect idle adjustment. At correct idle speed, the saw chain should not move. For directions on how to adjust idle speed, see the appropriate section of your instruction manual.

If you cannot set the correct idle speed, have your STIHL dealer check your power tool and make proper adjustments and repairs.

Proper chain tension is very important at all times. Check it at regular intervals (whenever the pole pruner is shut off). If the chain becomes loose while cutting, switch off the engine and then tighten. Never try to tighten the chain while the engine is running.

During Operation

Holding and controlling the power tool

Always hold the unit 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 should follow these instructions too. Keep your hands in this position to have your pole pruner under control at all times.

⚠ Warning!

Never attempt to operate your power tool with one hand. Loss of control of the power tool resulting in serious or fatal injury may result.

⚠ Warning!

In order to properly control your pole pruner, always maintain good balance and a firm foothold. Never work on a ladder, in a tree or on any other insecure support. Never hold the machine above shoulder height. Do not overreach.

When working at a height above 15 feet (4.5 m) use a lift bucket. For pole pruner with adjustable shaft, expand the shaft only as far as necessary for the intended application.

⚠ Warning!

Special care must be taken in slippery conditions (wet ground, snow) and in difficult, overgrown terrain. Watch for hidden obstacles such as tree stumps, roots, rocks, holes and ditches to avoid stumbling. For better footing, clear away fallen branches, scrub and cuttings. Be extremely cautious when working on slopes or uneven ground.

⚠ Warning!

Take extreme care in wet and freezing weather (rain, snow, ice). Put off the work when the weather is windy, stormy or rainfall is heavy.

Working conditions

Operate and start your power tool only outdoors in a well ventilated area. Operate it under good visibility and daylight conditions only. Work carefully.

⚠ Warning!

As soon as the engine is running, this product generates toxic exhaust fumes containing chemicals, such as unburned hydrocarbons (including benzene) and carbon monoxide, that are known to cause respiratory problems, cancer, birth defects, or other reproductive harm. Some of the gases (e.g. carbon monoxide) may be colorless and odorless. To reduce the risk of serious or fatal injury/illness from inhaling toxic fumes, never run the machine indoors or in poorly ventilated locations. If exhaust fumes become concentrated due to insufficient ventilation, clear obstructions from work area to permit proper ventilation before proceeding and/or take frequent breaks to allow fumes to dissipate before they become concentrated.

⚠ Warning!

Inhalation of certain dusts, especially organic dusts such as mold or pollen, can cause susceptible persons to have an allergic or asthmatic reaction. Substantial or repeated inhalation of dust and other airborne contaminants, in particular those with a smaller particle size, may cause respiratory or other illnesses. This includes wood dust, especially from hardwoods, but also from some softwoods such as Western Red Cedar. Control dust at the source where possible. Use good work practices, such as always cutting with a properly sharpened chain (which produces wood chips rather than fine dust) and operating the unit so that the wind or operating process directs any dust raised by the power tool away from the operator. Follow the recommendations of EPA/OSHA/NIOSH and occupational and trade associations with respect to dust ("particulate matter"). When the inhalation of dust cannot be substantially controlled, i.e., kept at or near the ambient (background) level, the operator and any bystanders should wear a respirator approved by NIOSH/MSHA for the type of dust encountered.

⚠ Warning!

Breathing asbestos dust is dangerous and can cause severe or fatal injury, respiratory illness or cancer. The use and disposal of asbestos-containing products have been strictly regulated by OSHA and the Environmental Protection Agency. If you have any reason to believe that you might be cutting asbestos, immediately contact your employer or a local OSHA representative.

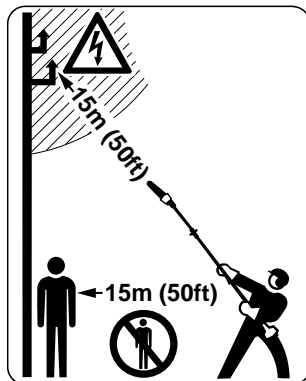
⚠ Warning!

This power tool has a large range. In order to reduce the risk of personal or even fatal injury to bystanders from falling objects or inadvertent contact with the moving chain of your power tool always keep bystanders at least 50 feet (15m) away when the power tool is running.

⚠ Warning!

Even though bystanders should be kept away from the running saw, never work alone. Keep within calling distance of others in case help is needed.

Stop the engine immediately if you are approached.



Danger!

Your power tool is not insulated against electric shock. To reduce the risk of electrocution, never operate this power tool in the vicinity of any wires or cables (power, etc.) which may be carrying electric current.

Electricity can jump from one point to another by means of arcing. Higher voltage increases the distance electricity can arc. Electricity can also move through branches, especially if they are wet. Maintain a clearance of at least 50 feet (15 m) between the pole pruner (including any branches it is contacting) and any electrical line carrying live current. Before working with less clearance, contact your electric utility and make sure the current is turned off.

Operating instructions

⚠ Warning!

Do not operate your power tool using the starting throttle lock, as you do not have control of the engine speed.

In the event of an emergency, switch off the engine immediately – move the slide control / stop switch to **0** or **STOP**.

⚠ Warning!

To reduce the risk of cut injuries, keep hands and feet away from the saw chain. Never touch a moving chain with your hand or any other part of your body. The saw chain continues to move for a short period after the throttle trigger is released (inertia effect).

Accelerating the engine while the chain is blocked increases the load and will cause the clutch to slip continuously. This may result in overheating and damage to important components (e.g. clutch, polymer housing components) – which can then increase the risk of injury from the chain moving while the engine is idling.

⚠ Warning!

If the chain becomes clogged, always turn off the engine and make sure the chain has stopped before cleaning.

Make sure that the saw chain does not touch any foreign materials such as rocks, fences, nails and the like. Such objects may be flung off and injure the operator or bystanders, or damage the saw chain.

⚠ Warning!

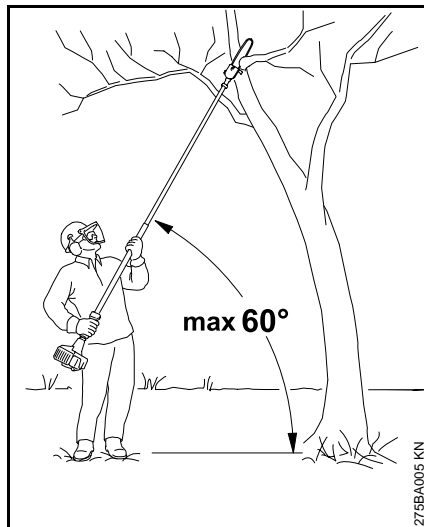
Prior to limbing, clear the working area from interfering limbs and brush. Then, establish an escape area away from where the cut limbs can fall, and remove all obstacles.

Keep work area clear – move away fallen limbs. Place all tools and equipment at a safe distance from the branches being limbed, but not in the escape area.

⚠ Warning!

Always observe the general condition of the tree. Look for decay and rot in the trunk and branches. If it is rotted inside, it could snap and fall toward the operator while being cut. Also look for broken or dead branches which could vibrate loose and fall on the operator.

If branch is thick or heavy, make a shallow relief cut on the bottom of the branch before cutting down from the top to help prevent splitting of the branch.



⚠ Warning!

To reduce the risk of severe or even fatal injury from falling objects do not cut vertically above your body. Hold the pole pruner at an angle of not more than 60° from the horizontal level (see picture). Objects may fall in unexpected directions. Do not stand directly underneath the limb being cut!

Watch for falling wood! As soon as the limbed branch starts to fall, step aside and keep a sufficient distance away from the falling wood.

⚠ Warning

Always pull the unit out of the cut with the chain running to reduce the possibility of pinching the cutting attachment. Don't put pressure on the pole pruner when reaching the end of a cut. The pressure may cause the bar and rotating chain to pop out of the cut or kerf, go out of control and strike some other object.

If the bar becomes pinched and caught in the branch so that the chain can no longer move, shut off the pole pruner and carefully move the branch to open the pinch and release the bar.

⚠ Warning!

The muffler and other parts of the engine (e.g. fins of the cylinder, spark plug) become hot during operation and remain hot for a while after stopping the engine. To reduce risk of burns do not touch the muffler and other parts while they are hot.

⚠ Warning!

To reduce the risk of fire and burn injury, keep the area around the muffler clean. Remove excess lubricant and all debris such as pine needles, branches or leaves. Let the engine cool down sitting on concrete, metal, bare ground or solid wood (e.g. the trunk of a felled tree) away from any combustible substances.

⚠ Warning!

Never modify your muffler. The muffler could be damaged and cause an increase in heat radiation or sparks, thereby increasing the risk of fire and burn injury. You may also permanently damage the engine. Have your muffler serviced and repaired by your STIHL servicing dealer only.

Catalytic converter

⚠ Warning!



Some STIHL power tools are equipped with a catalytic converter, which is designed to reduce the exhaust emissions of the engine by a chemical process in the muffler. Due to this process, the muffler does not cool down as rapidly as conventional mufflers when the engine returns to idle or is shut off. To reduce the risk of fire and burn injuries, the following specific safety precautions must be observed.

⚠ Warning!

Since a muffler with a catalytic converter cools down less rapidly than conventional mufflers, always set your power tool down in the upright position and never locate it where the muffler is near dry brush, grass, wood chips or other combustible materials while it is still hot.

⚠ Warning!

An improperly mounted or damaged cylinder housing or a damaged/deformed muffler shell may interfere with the cooling process of the catalytic converter. To reduce the risk of fire or burn injury, do not continue work with a damaged or improperly mounted cylinder housing or a damaged/deformed muffler shell.

Your catalytic converter is furnished with screens designed to reduce the risk of fire from the emission of hot particles. Due to the heat from the catalytic reaction, these screens will normally stay clean and need no service or maintenance. If you experience loss of performance and you suspect a clogged screen, have your muffler maintained by a STIHL servicing dealer.

Reactive forces

⚠ Warning!

Reactive forces may occur any time the chain is rotating. The force used to cut wood can be reversed and work against the operator. If the rotating chain is suddenly stopped by contact with any solid object such as a branch or is pinched, the reactive forces may occur instantly. These reactive forces may result in loss of control, which, in turn, may cause personal injury. An understanding of the causes of these reactive forces may help you avoid the element of surprise and loss of control.

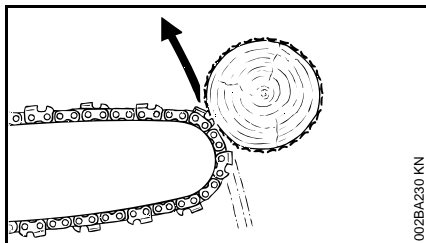
Because of the design of the pole pruner, the reactive forces experienced when working with it are generally not as severe as those encountered with a chainsaw. Nevertheless, you should always maintain a proper grip and good footing to control the power tool when you experience such forces.

The most common reactive forces are:

- kickback,
- pushback,
- pull-in.

Kickback

Kickback may occur when the moving saw chain near the upper quadrant of the bar nose contacts a solid object or is pinched.



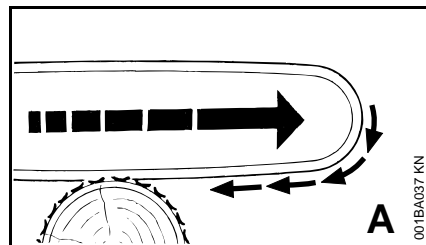
The reaction of the cutting force of the chain causes a rotational force on the chainsaw in the direction opposite to the chain movement. This may cause the bar to move upward.

To avoid kickback

The best protection from kickback is to avoid kickback situations:

1. Be aware of the location of the guide bar nose at all times.
2. Never let the nose of the guide bar contact any object. Do not cut limbs with the nose of the guide bar. Be especially careful near wire fences and when cutting small, tough limbs, which may easily catch the chain.
3. Cut only one limb at a time.

A = Pull-in



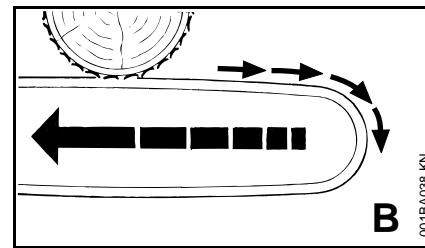
Pull-in occurs when the chain on the bottom of the bar is suddenly stopped when it is pinched, caught or encounters a foreign object in the wood. The reaction of the chain pulls the saw forward.

Pull-in frequently occurs when the chain is not rotating at full speed before it contacts the wood.

To avoid pull-in

1. Be alert to forces or situations that may cause material to pinch the chain at the bottom of the bar.
2. Always start a cut with the chain rotating at full speed

B = Pushback



Pushback occurs when the chain on the top of the bar is suddenly stopped when it is pinched, caught or encounters a foreign object in the wood. The reaction of the chain may drive the saw rapidly straight back toward the operator. Pushback frequently occurs when the top of the bar is used for cutting.

To avoid pushback

1. Be alert to forces or situations that may cause material to pinch the chain at the top of the bar.
2. Do not cut more than one limb at a time.
3. Do not twist the bar when withdrawing it from an underbuck cut because the chain can pinch.

MAINTENANCE, REPAIR AND STORING

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any nonroad engine repair establishment or individual. However, if you make a warranty claim for a component which has not been serviced or maintained properly or if nonapproved replacement parts were used, STIHL may deny coverage.

Warning!

Use only identical STIHL replacement parts for maintenance and repair. Use of non-STIHL parts may cause serious or fatal injury.

Strictly follow the maintenance and repair instructions in the appropriate sections of your instruction manual. Please refer to the maintenance chart in this manual.

Warning!

Always stop the engine and make sure that the chain is stopped before doing any maintenance or repair work or cleaning the power tool. Do not attempt any maintenance or repair work not described in your instruction manual. Have such work performed by your STIHL servicing dealer only.

Wear gloves when handling or performing maintenance on the cutting attachment.

Warning!

Use the specified spark plug and make sure it and the ignition lead are always clean and in good condition. Always press spark plug boot snugly onto spark plug terminal of the proper size. (Note: If terminal has detachable SAE adapter nut, it must be securely attached.) A loose connection between spark plug terminal and the ignition wire connector in the boot may create arcing that could ignite combustible fumes and cause a fire.

Warning!

Never test the ignition system with the ignition wire boot removed from the spark plug or with a removed spark plug, since uncontained sparking may cause a fire.

Warning!

Do not operate your power tool if the muffler is damaged, missing or modified. An improperly maintained muffler will increase the risk of fire and hearing loss. If your muffler was equipped with a spark-arresting screen to reduce the risk of fire, never operate your power tool if the screen is missing or damaged. Remember that the risk of forest fires is greater in hot or dry weather.

Warning!

Keep the chain, bar and sprocket clean; replace worn sprockets or chains. Keep the chain sharp. You can spot a dull chain when easy-to-cut wood becomes hard to cut or burn marks appear on the wood.

Tighten all nuts, bolts and screws except the carburetor adjustment screws after each use.

For maintenance items please also refer to the maintenance chart in this manual.

Store the power tool in a dry and high or locked location out of reach of children.


Before storing for longer than a few days, always empty the fuel tank. See chapter "Storing the machine" in this manual.


Store fuel and chain oil in approved and properly labeled safety-type canisters only. Take care when handling gasoline! Avoid direct contact with the skin and avoid inhaling fuel vapor!

Using the Pole Pruner

Preparations

- Wear suitable protective clothing and equipment – see "Safety Precautions".
- Adjust telescopic shaft to the required length (HT 101, HT 131 only)
- Start the engine.
- Put on the shoulder strap.

 Never throw cuttings into the household garbage can – cutting can be composted.

 Never stand directly underneath the branch you are cutting – be wary of falling branches. Note that a branch may spring back at you after it hits the ground.

Cutting sequence

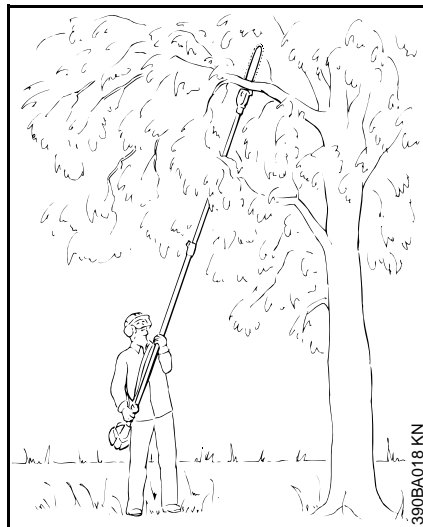
To allow branches a free fall, always cut the lower branches first. Prune heavy branches (large diameter) in several controllable pieces.

Working techniques

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.

HT 100, HT 130:

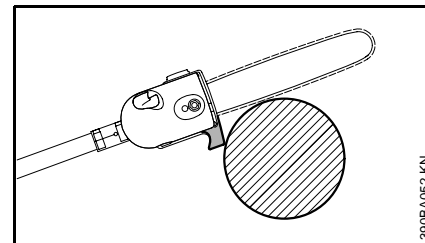
Always hold the shaft with your left hand in the area of the handle hose.



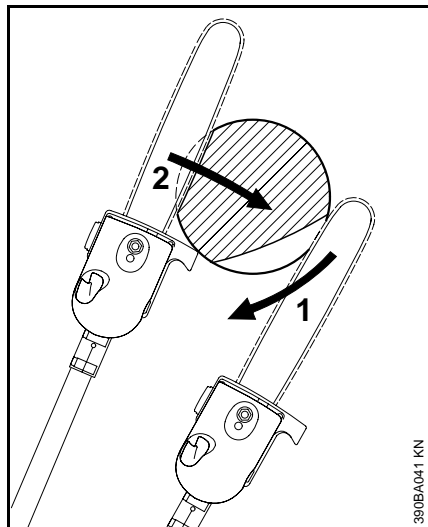
The shaft should always be held at an angle of **60° or less**.

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

Cross-cut

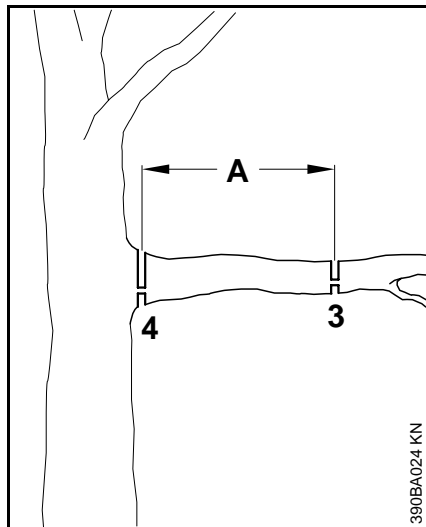


To avoid pinching the bar in the cut, position the cutting attachment with the hook against the branch and then perform the cross-cut from the top downwards.



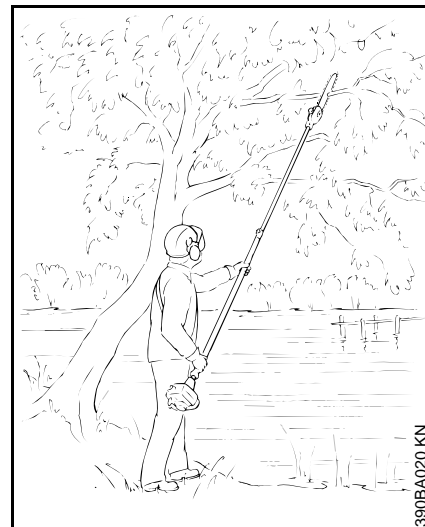
Relieving cut

- To avoid tearing the bark on 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.
- Locate the hook against the branch and then perform the cross-cut (2).



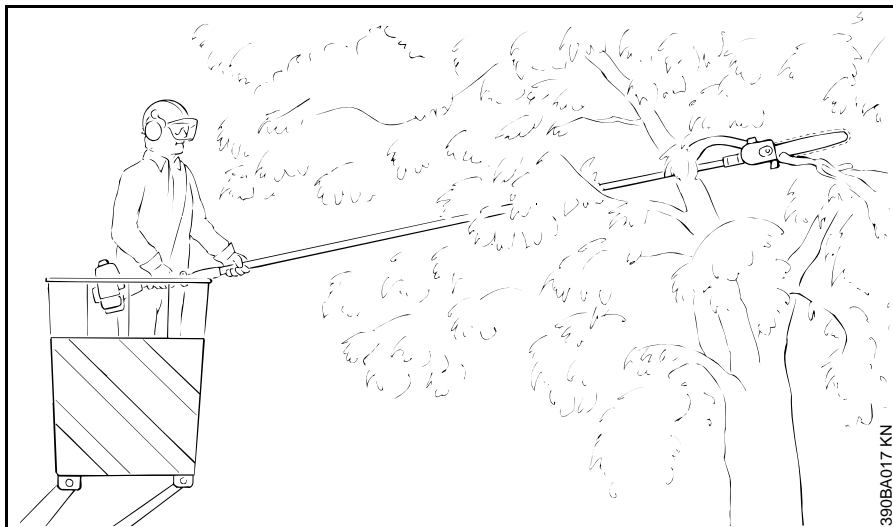
Flush-cutting thick branches

- If branch diameter is more than 4" (10 cm), first perform undercut (3) and then cross-cut at a distance of about 8" (20 cm) (A) from the final cut. Then carry out the flush-cut (4), starting with a relieving cut and finishing with a cross-cut.

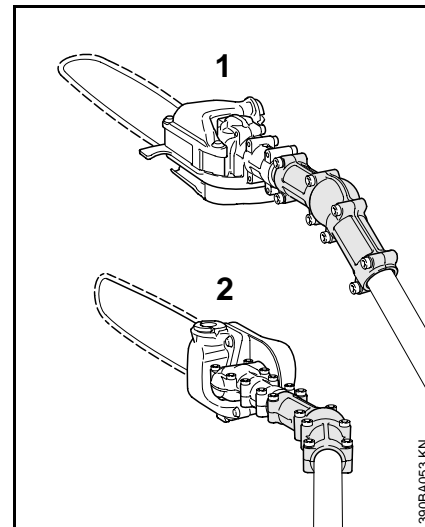


Cutting above obstacles

The unit's long reach makes it 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.



390BA017 KN



390BA053 KN

Cutting from a lift bucket

The unit's long reach enables cutting to be performed next to the trunk without the risk of the lift bucket damaging other branches. The tool angle depends on the position of the branch.

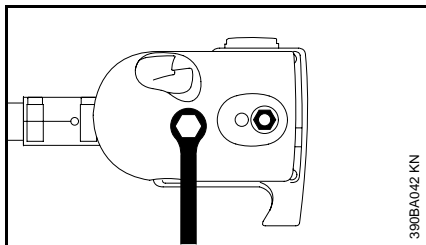
30° angle drive

The angle drive keeps the cutting attachment at an angle of 30° to the drive tube.

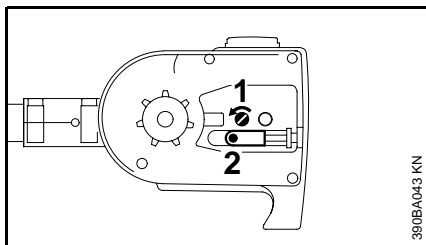
The angle drive may be adjusted on the drive tube to the following positions only:

- 1 = For cross-cutting vertical branches and bushes.
- 2 = For a better view of the cutting attachment.

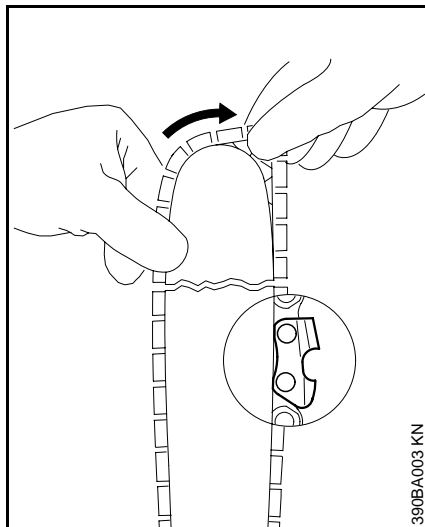
Mounting the Bar and Chain



- Unscrew nut and take off cover.

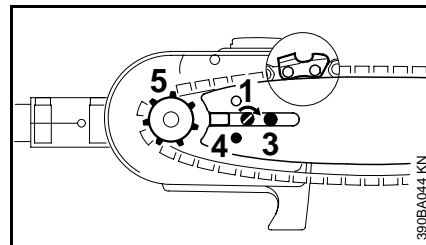


- Turn tensioning screw (1) counterclockwise until the tensioning nut (2) butts against the left end of the housing slot, then back it off 5 full turns.



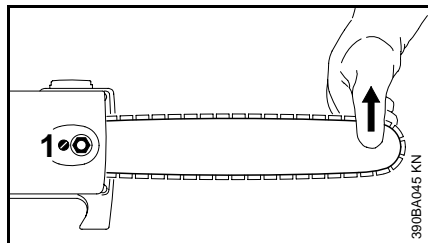
⚠ The chain is very sharp – wear work gloves to protect hands from cuts.

- Fit the chain – start at the bar nose.



- Fit guide bar over the stud (3). Engage peg of tensioner slide in locating hole (4) – place the chain over sprocket (5) at the same time.
- Now turn tensioning screw (1) clockwise until there is very little chain sag on the underside of the bar – and the drive link tangs are located in the bar groove.
- Refit the sprocket cover and screw on the nut only fingertight.
- Now refer to "Tensioning the Saw Chain".

Tensioning the Saw Chain



Retensioning during cutting work:

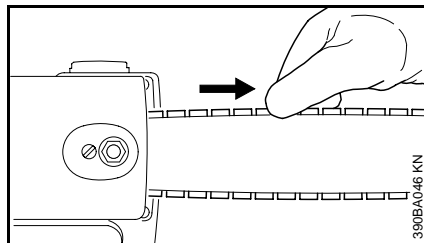
- Shut off the engine and then slacken the nut.
- Hold the bar nose up.
- Use screwdriver to turn the tensioning screw (1) clockwise until chain fits snugly against the underside of the bar.

Tighten down the nut **firmly**.

A new chain has to be retensioned more often than one that has been in use for some time – check chain tension frequently – see chapter "Operating Instructions / During Operation".

- Check chain tension.

Checking Chain Tension



- Shut down the engine.
- Wear work gloves to protect hands.
- Chain must fit snugly against the underside of the bar and it must still be possible to pull the chain along the bar by hand.
- If necessary, retension the chain.

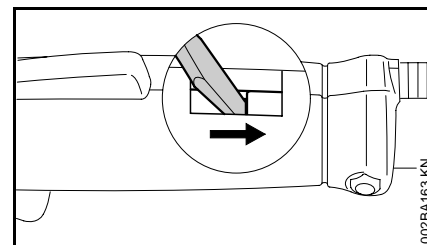
A new chain has to be retensioned more often than one that has been in use for some time.

Check chain tension frequently – see chapter "Operating Instructions / During Operation".

Adjusting the Throttle Cable*

💡 A properly adjusted throttle cable is the precondition for correct operation in the full throttle, starting throttle and idle positions.

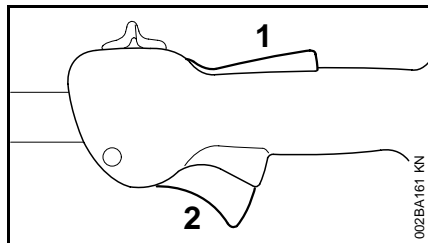
Adjust the throttle cable only after the unit is fully assembled.



- Use a suitable tool to push the slide to the bottom of the slot (see illustration).

* see "Guide to Using this Manual"

4-MIX Engine



- Press down the trigger interlock (1) and squeeze the throttle trigger (2) (full throttle) – this sets the throttle cable correctly.

The **STIHL 4-MIX engine** features gas oil lubrication and must be run on a **fuel mixture** of gasoline and engine oil.

It operates otherwise on the 4-stroke principle.

Fuel

This engine is certified to operate on unleaded gasoline and the STIHL two-stroke engine oil at a mix ratio of 50:1.

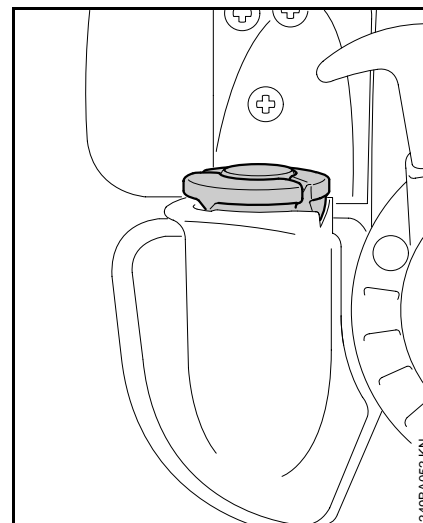
Your engine requires a mixture of high-quality gasoline and quality two-stroke air cooled engine oil.

Use mid-grade unleaded gasoline with a minimum octane rating of 89 (R+M/2). If the octane rating of the mid-grade gasoline in your area is lower, use premium unleaded fuel.

Fuel with a lower octane rating may increase engine temperatures. This, in turn, increases the risk of piston seizure and damage to the engine.

The chemical composition of the fuel is also important. Some fuel additives not only detrimentally affect elastomers (carburetor diaphragms, oil seals, fuel lines, etc.), but magnesium castings and catalytic converters as well. This could cause running problems or even damage the engine. For this reason STIHL recommends that you use only nationally recognized high-quality unleaded gasoline!

Fueling



Use only STIHL two-stroke engine oil or equivalent high-quality two-stroke engine oils that are designed for use only in air cooled two-cycle engines.

We recommend STIHL 50:1 two-stroke engine oil since it is specially formulated for use in STIHL engines.

Do not use BIA or TCW rated (two-stroke water cooled) mix oils or other mix oils that state they are for use in both water cooled and air cooled engines (e.g., outboard motors, snowmobiles, chainsaws, mopeds, etc.).

Take care when handling gasoline. Avoid direct contact with the skin and avoid inhaling fuel vapor. When filling at the pump, first remove the canister from your vehicle and place the canister on the ground before filling. Do not fill fuel canisters that are sitting in or on a vehicle.

The canister should be kept tightly closed in order to avoid any moisture getting into the mixture.

The machine's fuel tank and the canister in which fuel mix is stored should be cleaned as necessary.

Fuel mix ages

Only mix sufficient fuel for a few days work, not to exceed 3 months of storage. Store in approved fuel-canisters only. When mixing, pour oil into the canister first, and then add gasoline. Close the canister and shake it vigorously by hand to ensure proper mixing of the oil with the fuel.

Gasoline	Oil (STIHL 50:1 or equivalent high-quality oils)
US gal.	US fl.oz
1	2.6
2 1/2	6.4
5	12.8

Dispose of empty mixing-oil canisters only at authorized disposal locations.

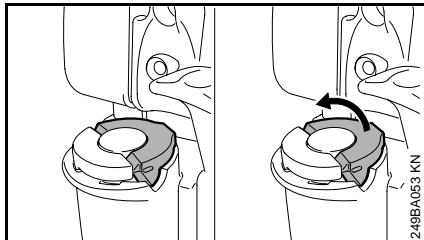
Before fueling, clean the filler cap and the area around it to ensure that no dirt falls into the tank.

Always thoroughly shake the mixture in the canister before fueling your machine.

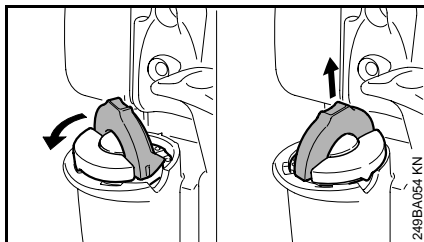
⚠ In order to reduce the risk of burns or other personal injury from escaping gas vapor and fumes, remove the fuel filler cap carefully so as to allow any pressure build-up in the tank to release slowly.

Chain Lubricant

Opening the cap

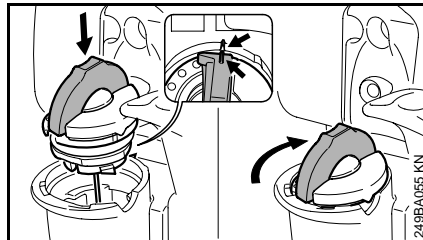


- Raise the grip until it is upright.



- Turn the cap counterclockwise (approx. a quarter turn).
- Remove the filler cap.

Closing the cap





- Fit the cap – grip upright –marks must line up.
- Turn the cap clockwise as far as stop (approx. a quarter turn).



- Fold the grip flush with the top of the cap.

If the grip does not lie completely flush with the cap and the detent on the grip does not engage the recess in the filler neck, the cap is not properly seated and tightened and you must repeat the above steps.

 For automatic and reliable lubrication of the chain and guide bar – **use only an environmentally compatible quality chain and bar lubricant with non-fling additive or the rapidly biodegradable STIHL BioPlus is recommended.**

 Biological chain oil must be resistant to aging (e.g. STIHL BioPlus) since it will otherwise quickly turn to resin. This results in hard deposits that are difficult to remove, especially in the area of the chain drive and chain. It may even cause the oil pump to seize.

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.

Filling Chain Oil Tank

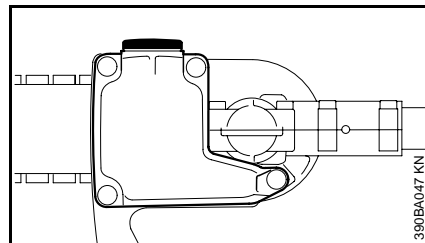


If special chain lubricant is not available, you may – in an emergency – use an HD single grade or multigrade engine oil with a viscosity that suits the prevailing outside temperature.

⚠ Do not use waste oil!

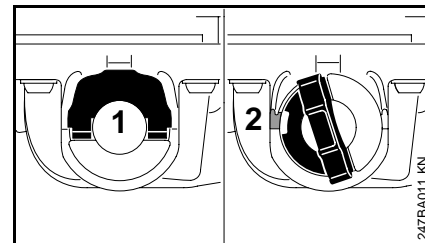
Medical studies have shown that renewed contact with waste oil can cause skin cancer. Moreover, waste is environmentally harmful!

⚙ Waste oil does not have the necessary lubricating properties and is unsuitable for chain lubrication.



- **A full chain oil tank is sufficient for only half a tankful of fuel. Check the oil level regularly during cutting work. Never allow the oil tank to run dry!**
- Thoroughly clean the filler cap and area around it so that no dirt can fall into the tank.
- Position the unit so that the filler cap faces up.

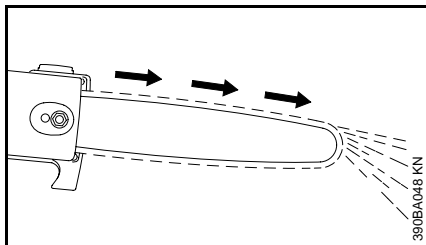
If the oil level in the tank does not go down, the reason may be a problem in the oil supply system: Check chain lubrication, clean the oilways, contact your servicing dealer for assistance if necessary. STIHL recommends that you have maintenance and repair work performed only by a STIHL servicing dealer.



The bayonet-type oil tank filler cap with its hinged grip can be opened and closed without tools.

- To open the tank, swing the grip (1) to the vertical position.
- Turn the filler cap counterclockwise as far as stop and remove.
- Fill up with chain oil.
- To close the oil tank, place the filler cap in position with the grip upright, making sure the recesses (2) are in alignment.
- Turn the filler cap clockwise as far as stop.
- Fold the grip down so that it is flush with the top of the cap.

Checking Chain Lubrication



The saw chain must always throw off a small amount of oil.

- Always check chain lubrication and the oil level in the tank before starting work.



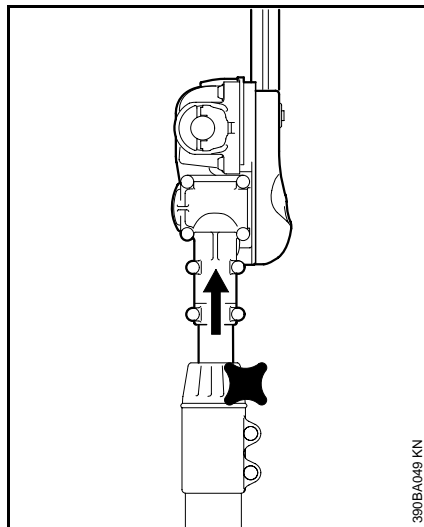
Never operate your pruner without chain lubrication. If the chain is run dry, the whole cutting attachment will be irretrievably damaged within a very short time.

Inadequate lubrication can be caused by a dirty oil strainer: Have the oil strainer cleaned or replaced by your servicing dealer.



Every new chain has to be broken in for about 2 to 3 minutes. After breaking in the chain, check chain tension and adjust if necessary – see chapter "Checking Chain Tension".

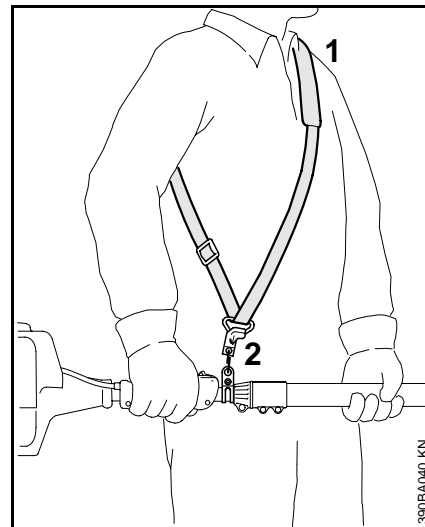
Adjusting the Telescopic Shaft (HT 101, HT 131)



Always shut off the engine and fit the chain guard

- Loosen the screw.
- Adjust shaft to the required length.
- Tighten the screw firmly.

Fitting the Harness

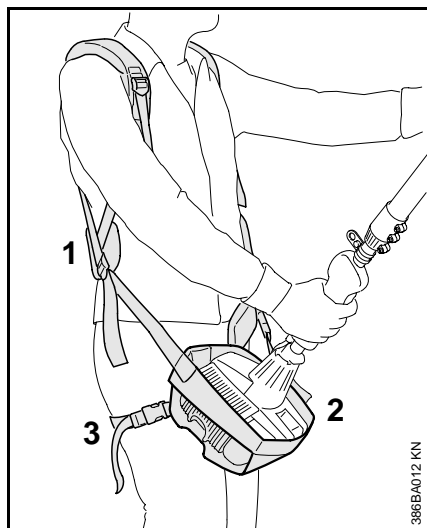


Shoulder strap*

- Put on the shoulder strap (1).
- Adjust length of strap so that the spring hook (2), with the unit attached, is at about the same height as your right hip.

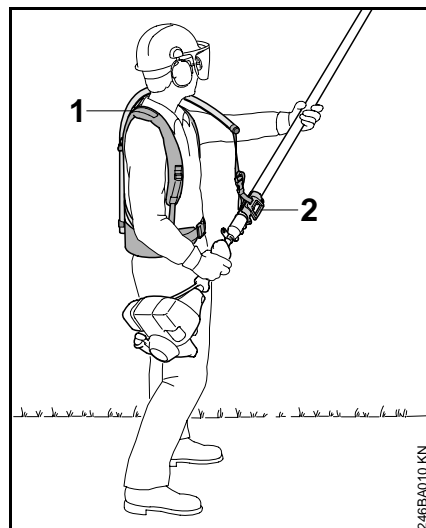
* see "Guide to Using this Manual"

Backpack Carrying System



Full harness*

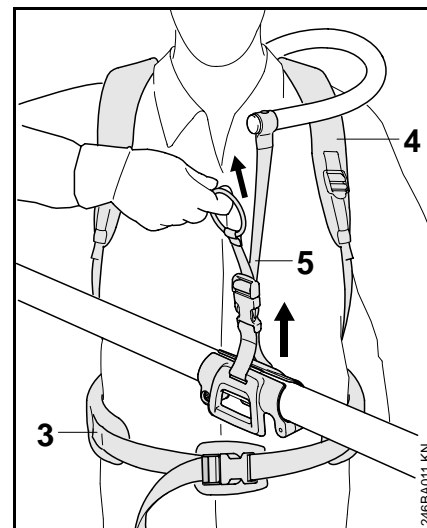
- Put on the full harness (1) and sling (2) as shown on the instruction sheet supplied.
- Adjust the harness and thigh belt (3) as required.
- Rest the powerhead in the sling during cutting work.



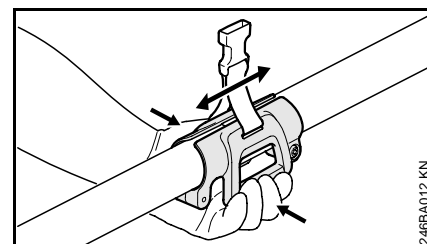
Backpack carrying system

For pole pruners with a telescopic shaft.

- Adjust the backpack carrying system (1) and put it on your back as described in the instructions provided with the system.
- Secure the sliding adjuster (2) to the shaft.
- Attach the pole pruner to the carrying strap when cutting.



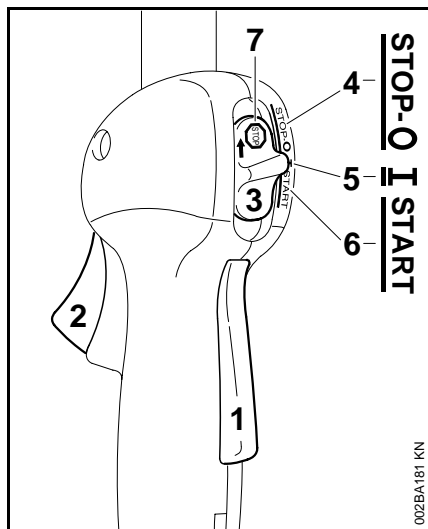
- Adjust the hip belt (3), both shoulder straps (4) and the carrying strap (5).



- Squeeze the grips to move the sliding adjuster up or down the shaft.

* see "Guide to Using this Manual"

Starting / Stopping the Engine





Controls

- 1 Throttle trigger interlock
- 2 Throttle trigger
- 3 Slide control

Positions of slide control

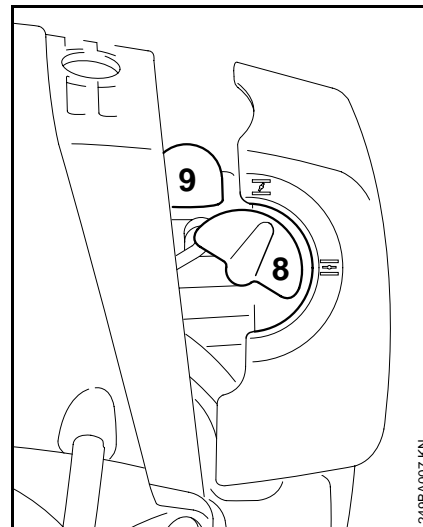
- **STOP – 0** (4) – engine off – the ignition is switched off.
- **I** – normal run position (5) – the engine is running or can start.
- **START** (6) – the ignition is switched on – the engine can start.

Symbol on slide control

-  (7) – stop symbol and arrow. To stop the engine, move the slide control in direction of arrow () to **STOP – 0**

Starting

- Hold down the throttle trigger interlock and squeeze the throttle trigger.
- Keep both levers in that position.
- Move the slide control to **START**. and hold it there.
- Now release the throttle trigger, slide control and throttle trigger interlock in that order. This is the **starting throttle position**.



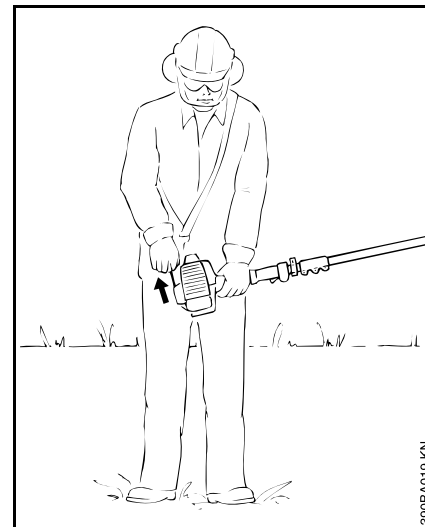
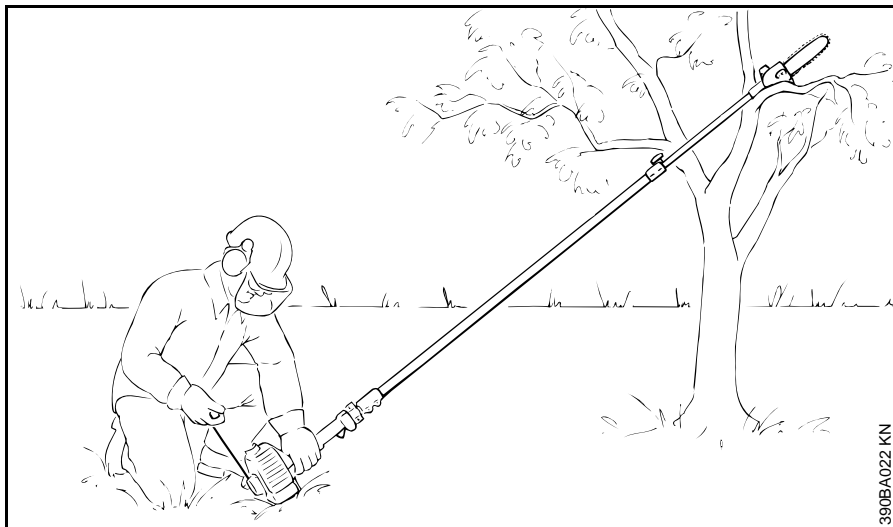
- Set the choke knob (8):

For cold start to: 

Form warm start to: 

also use this setting if the engine has been running but is still cold

- Press fuel pump bulb (9) at least 5 times – even if bulb is filled with fuel.




- Place the unit on the ground:
It must rest securely on the engine support and the hook.
If necessary, rest the hook on a raised support (e.g. a branch, mound or something similar).
- Remove the chain guard.
Check that chain is not touching any object or the ground.


⚠ Check that nobody is standing within the working range of the pruner.

- Make sure you have a firm footing.
Press the unit **firmly** against the ground with your left hand on the fan housing. Your thumb should be under the fan housing.


⚙ Do not stand or kneel on the drive tube. This will bend the tube and result in permanent damage to the telescopic shaft.


- Alternative method:
- Remove the chain guard.
Position the shaft on a branch so that it is held by the hook.
 - Hold the unit **firmly** with your left hand around the fan housing – your thumb under the fan housing.
 - Pull the starter grip slowly with your right hand until you feel it engage - and then give it a brisk strong pull. Do not pull out starter rope at full length - it might break.

 Do not let the starter grip snap back. Guide it slowly back into the housing so that the starter rope can rewind properly.

- Crank engine until it begins to fire – **after no more than five pulls:** Set the choke knob to .
- Continue cranking.



As soon as engine runs:

- Blip the throttle trigger – the slide control moves to the run position  – and the engine returns to idling speed

 Make sure carburetor is correctly adjusted – chain must not run when engine is idling.


Your pruner is ready for operation.

To shut down the engine

- Move the slide control in direction of arrow  to **STOP – **.


At very low temperatures


As soon as engine runs:

- Blip the throttle trigger to disengage the starting throttle position. The slide control moves to the normal run position  and the engine settles down to idle speed.
- Open the throttle slightly.
- Warm up engine for brief period.

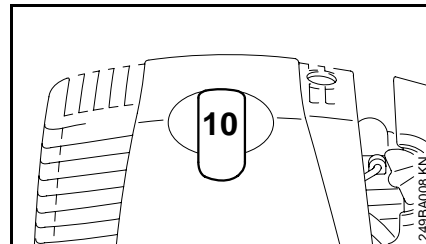
If the engine does not start:



Choke knob

If you did not turn the choke knob to  quickly enough after the engine began to fire, the combustion chamber has flooded.

- Choke knob to .
- Set slide control, interlock lever and throttle trigger to starting throttle position
- Start the engine by pulling the starter rope firmly. 10 to 20 pulls may be necessary.

If the engine still does not start:



- Move the slide control to **STOP – **.
- Pull off the spark plug boot (**10**).
- Unscrew and dry off the spark plug.
- Open the throttle wide.
- Crank the engine several times with the starter to clear the combustion chamber.
- Refit the spark plug.
- Connect the spark plug boot (press it down firmly).
- Move the slide control to **START**.
- Set the choke knob to  – even if engine is cold.
- Now start the engine.

Operating Instructions

Throttle cable adjustment


- Check adjustment of throttle cable – see "Adjusting the Throttle Cable".

Tank run until dry

- After refueling, press the fuel pump bulb at least five times – even if bulb is filled with fuel.
- Set choke knob according to engine temperature.
- Now start the engine.

During break-in period

A factory new machine should not be run at high revs (full throttle off load) for the first three tank fillings. This avoids unnecessary high loads during the break-in period. As all moving parts have to bed in during the break-in period, the frictional resistances in the engine are greater during this period. The engine develops its maximum power after about 5 to 15 tank fillings.

 Do not make the mixture leaner to achieve an apparent increase in power – this could damage the engine – see chapter "Adjusting the Carburetor".

During operation

Check chain tension frequently!

A new chain has to be tensioned more often than one that has been in use for some time.

Cold chain


Tension is correct when the chain fits snugly against the underside of the bar and can still be pulled along the bar by hand.

Retension if necessary – see chapter "Tensioning the Saw Chain".

Chain at operating temperature

The chain stretches and begins to sag. The drive links on the underside of the bar must not come out of the bar groove – the chain may otherwise jump off the bar.

Retension the chain – see chapter "Tensioning the Saw Chain".

 Always slacken off the chain again after finishing work. The chain contracts as it cools down. If it is not slackened off, it may damage the crankshaft and bearings.