

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 in addition to those that generally apply when working with an axe or hand saw.



It is important that you read and understand the instruction manual before using your pole pruner for the first time. Keep it in a safe place for later reference. Non-observance of the following safety precautions may cause serious or even fatal injury.

Observe all applicable local safety regulations, standards and ordinances.

If you have never used this pole pruner model before: Have your dealer or other experienced user show you how to operate your pole pruner or attend a special course of training in its operation.

Minors should never be allowed to use a pole pruner.

Bystanders, especially children, and animals should not be allowed in the area where a pole pruner is in use.

When the machine is not in use (work break), shut it off so that it does not endanger others and secure it against unauthorized use.

The operator is responsible for avoiding injury to third parties and damage to their property.

Do not lend or rent your pole pruner without the instruction manual. Be sure that anyone using your pole pruner reads and understands the information contained in this manual.

You must be fit to work with a power tool. Rested, healthy and in good physical and mental condition

If you have any condition that might be aggravated by strenuous work, check with your doctor before operating a power tool.

Persons with pacemakers only: The ignition system of your unit produces an electromagnetic field of a very low intensity. This field may interfere with some pacemakers. To reduce health risks of serious, STIHL recommends that persons with pacemaker consult their physician and the pacemaker manufacturer before operating this tool.

Do not operate this power tool while under the influence of any substance (drugs, alcohol) which might impair vision, dexterity or judgment.

Use your pole pruner for limbing and pruning only. Use it only for cutting wood and wooden objects.

Do not use your pole pruner for any other purpose since it may result in accidents or damage to the machine. Never attempt to modify your power tool in any way since this may result in accidents or damage to the machine.

Only chains and guide bars or attachments expressly approved by STIHL for use with your specific model are authorized.

Only mount guide bars and chains or attachments that are explicitly approved for this power tool model by STIHL or are technically identical. If you have any questions in this respect, consult a specialist dealer.

To reduce the risk of accidents or damage to the machine, use only high quality tools and replacement parts.

STIHL recommends the use of STIHL original tools and accessories. The characteristics of these components are specifically designed to match your machine and meet your performance requirements.

Clothing and Equipment

Wear proper protective clothing and equipment.



Clothing must be sturdy but allow complete freedom of movement. Wear snug-fitting clothing with cut retardant inserts, e.g. an overall and jacket combination, do not wear

a coat.

Avoid loose-fitting jackets, scarves, neckties, jewellery or anything that could get caught on branches or brush. Tie up and confine long hair (e.g. with a hair net, cap, hard hat, etc.).



Wear steel-toed **safety boots** with cut retardant inserts and non-slip soles.



Wear a **safety hard hat** where there is a danger of head injuries.

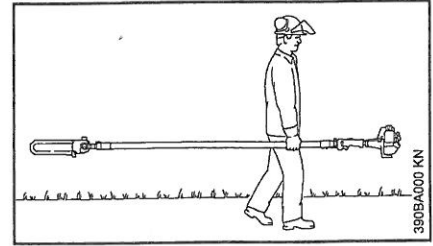
Wear and hearing protection, e.g. earplugs or ear muffs.



Wear **heavy-duty gloves**, preferably made of leather.

STIHL offers a comprehensive range of safety clothing and equipment.

Transporting the Unit



Always stop the engine.

Always fit the chain guard (scabbard) over the chain and guard bar – even when you carry the unit for short distances.

Carry the unit properly balanced by the drive tube. Avoid touching hot parts of the machine, especially the muffler – you could suffer serious burns.

Transporting in a vehicle: Properly secure your unit to prevent turnover, fuel spillage and damage.

Fueling



Gasoline is an extremely flammable fuel.

Do not smoke or bring any fire or flame near the fuel.

Always **shut off the engine** and allow it to cool before fueling.

Do not fuel a hot engine – fuel may spill and cause a fire.

Open the fuel cap carefully to allow any pressure build-up in the tank to release slowly and avoid fuel spillage.

Fuel your machine in well-ventilated areas, outdoors only. Wipe off any spilled fuel before starting and check for leakage. Take care not to get fuel on your clothing. If this happens, change immediately.

Power tools come standard with either a screw-type or bayonet-type fuel cap.



After fueling, tighten the screw-type cap by hand with as much force as necessary.



Insert the fuel cap with hinged grip (bayonet-type cap) correctly in the opening, turn it clockwise as far as stop and fold the grip down.

This reduces the risk of unit vibrations causing the fuel cap to loosen or come off and spill quantities of fuel.

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.

Before Starting

Check that your power tool is properly assembled and in good condition – refer to appropriate chapters in the owner's manual:

- Correctly mounted guide bar.
- Correctly tensioned chain.
- Slide control / stop switch must move easily to **STOP** or **0**
- Smooth action of throttle trigger and throttle trigger interlock (if fitted) – throttle trigger must return automatically to idle position.
- Check that spark plug boot is secure – a loose boot may cause arcing that could ignite combustible fumes and cause a fire.
- Never attempt to modify the controls or safety devices.
- Keep the handles dry and clean, free from oil and pitch, for safe control.
- Adjust harness to suit your height and reach. See chapter on "Fitting the Harness".

To avoid the risk of accidents and personal injury, do not operate your unit if it is not in a safe operating condition.

Be prepared for an emergency when wearing a harness: Practise quickly setting down the unit. To avoid damage, do not throw the machine to the ground when practising.

Starting the Engine

Start the engine at least 3 meters (10 feet) from the fueling spot, outdoors only.

Hold the machine firmly – be sure that the guide bar and chain are clear of all obstructions and objects, including the ground, because the chain may begin to rotate when the engine starts.

Your pole pruner is a one-person unit. Do not allow other persons within a radius of 15 meters (50 ft) of your own position, even when starting.

For the correct starting procedure see the appropriate section in this manual.

Note that the chain continues to rotate for a short period after you let go of the throttle trigger (flywheel effect).

Check the idle speed setting at regular intervals. The chain must not rotate when the engine is idling with the throttle trigger released.

To reduce the risk of fire, keep hot exhaust gases and hot muffler away from easily combustible materials (e.g. wood chips, bark, dry grass, fuel).


Holding and Controlling the Unit



Always hold the unit **firmly with both hands** on the handles. Put your right hand on control handle, left hand on the drive tube. Left handers should follow these instructions too. Wrap your fingers around the control handle and drive tube. Make sure you always have good balance and secure footing.

Only extend the telescopic shaft as far as necessary for the cutting work that needs to be done.

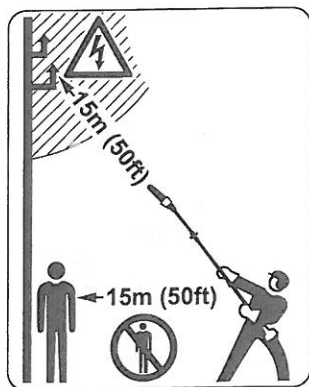
During Operation

In the event of imminent danger or in an emergency, switch off the engine immediately – move the slide control / stop switch to 0 or 

Warning!



This pole pruner is not insulated against electric shock. To avoid the **risk of electrocution**, maintain a minimum clearance of 15 m (50ft) from electric power lines.



In order to reduce the risk of personal injury to bystanders from falling objects and thrown pieces of wood, always keep bystanders **at least 15 m (50 ft)** away from your own position.

To reduce the risk of damage to property, also maintain this distance from other objects (vehicles, windows).

Maintain a **minimum clearance of 15 m (50 ft)** between the bar nose and electric power lines. Electricity can jump considerable distances by means of arcing. Higher voltage increases the distance electricity can arc. Before working with less clearance, contact your electric utility and make sure current is turned off.

Make sure the idle speed setting is correct. The chain must not rotate when the engine is idling with the throttle trigger released.

Check and correct the idle speed setting at regular intervals. If the chain still rotates, have your dealer check your pole pruner and make proper adjustments or repairs.

Take special care in slippery conditions – damp, snow, ice, on slopes, uneven ground, etc.

Watch out for obstacles: Roots, ditches, holes or rubbish which could cause your to trip or stumble.

Make sure you always have firm and secure footing.

When working at a height that exceeds the unit's reach use a lift bucket. Never work on a ladder, in a tree or on any other insecure support. Never attempt to operate your pole pruner with one hand.

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 a break in good time to avoid tiredness or exhaustion.

Work calmly and carefully – in daylight conditions and only when visibility is good – ensure you do not endanger others – stay alert at all times.



Your power tool produces toxic exhaust fumes as soon as the engine is running. These fumes may be colorless and odorless. Never run the engine indoors or in poorly ventilated locations, even if your model is equipped with a catalytic converter.

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.

Operate your power tool so that it produces a minimum of noise and emissions – do not run engine unnecessarily, accelerate the engine only for cutting.

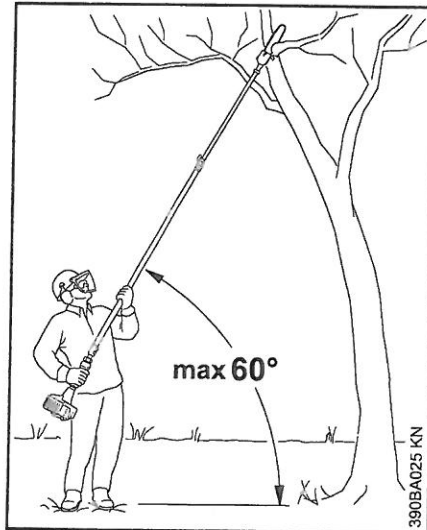
To reduce risk of fire, **do not smoke** while operating or standing near your power tool. Note that combustible fuel vapor may escape from the fuel system.

The dust that occurs during operation of this machine (wood dust) may be harmful to health. If dust levels are very high, wear a respirator.

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 – see also "Before Starting".

Check the fuel system for leaks and make sure the safety devices are working properly. Do not continue operating your power tool if it is damaged. In case of doubt, have the machine checked by your servicing dealer.

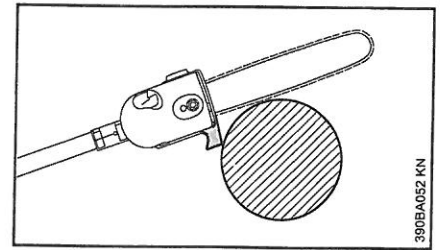
Limbing



Hold the pole pruner at an angle of not more than 60° from the horizontal. Do not stand directly underneath the limb being cut. Watch for falling wood.

Keep the work area clear – remove interfering limbs and brush.

Before limbing, establish a path of escape and remove all obstacles.



Position the cutting attachment with the hook against the branch and then perform the cross-cut. This reduces the risk of the pruner being jerked forward as you start the cross-cut.

Always start the cut with the engine at full throttle.

Work only with a properly sharpened and tensioned chain – the depth gauge setting should not be too wide.

Do not operate your pole pruner with the starting throttle lock engaged. Cutting with the starting throttle lock engaged does not permit proper control of the engine speed.

Perform cross-cut from the top downward to avoid the chain pinching in the cut.

If branch is thick or heavy, make a relieving cut (see chapter on "Using the Pole Pruner").

To reduce the risk of injury, take special care when cutting branches under tension.

Always make a relieving cut on the compression side first and then perform the bucking cut at the tension side. This helps avoid the saw chain pinching in the cut.

Take special care when cutting shattered wood – sharp slivers of wood may be caught and flung in your direction.

If on a slope, stand on the uphill side or to one side of the branch to be cut. Watch out for rolling branches.

When you come to the end of a cut, note that the unit is no longer supported by the guide bar in the cut. Hold the unit firmly to take its weight at the end of the cut and avoid loss of control.

Always pull the unit out of the cut with the chain running.

To avoid the risk of accidents, use your pole pruner for limbing and pruning only. It is not designed for felling.

Make sure your saw chain does not touch any foreign materials: Stones, nails, etc. may be flung off and damage the saw chain.

Always shut off the engine before leaving the unit unattended.

Take special care when cutting through a limb. Hold the machine firmly to control and counteract the feed force. There is an increased risk of accidents because the saw may "drop" at the end of the cut

Vibrations

Prolonged use of the unit may result in vibration-induced circulation problems in the hands (whitefinger disease).

No general recommendation can be given for the length of usage because it depends on several factors.

The period of usage is prolonged by:

- Hand protection (wearing warm gloves)
- breaks

The period of usage is shortened by:

- Any personal tendency to suffer from poor circulation (symptoms: frequently cold fingers, itching).
- Low outside temperatures.
- Gripping force (a tight grip hinders circulation).

Continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice.

Using the Pole Pruner

Preparations

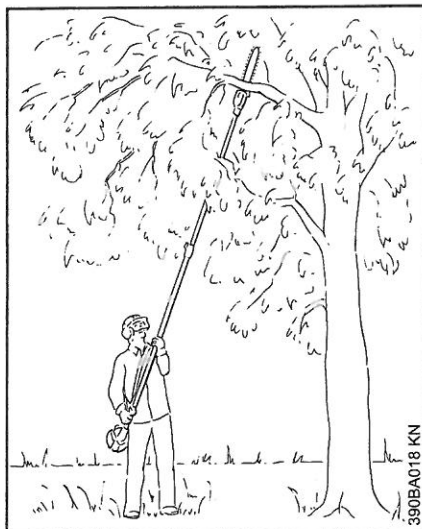
- Wear suitable protective clothing and equipment – see "Safety Precautions".
 - Adjust telescopic shaft to the required length.
 - Start the engine.
 - Put on the shoulder strap.
- ✿ Never throw cuttings into the household garbage can – cuttings can be composted.
- ⚠ Never stand directly underneath 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

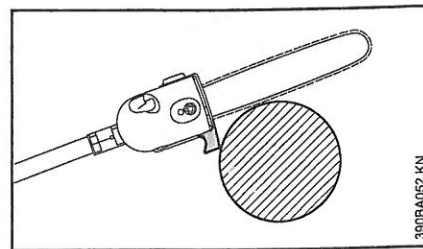
Hold the control handle with your right hand, and the shaft with your left hand. Your left arm should be extended to the most comfortable position.



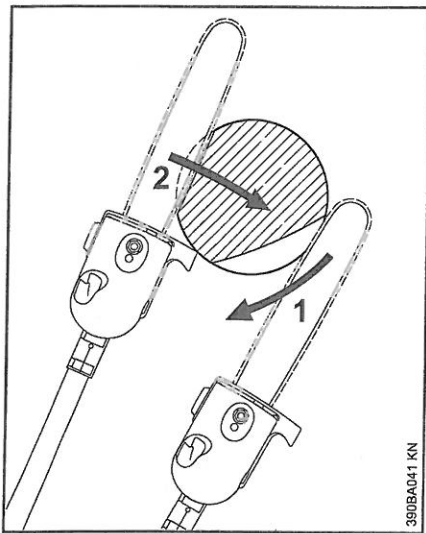
The shaft should always be held at an angle of **60° or less**.

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

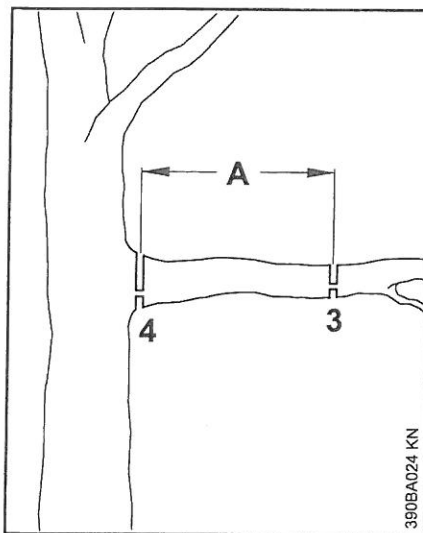


To avoid pinching the bar in the cut, position the cutting attachment with the hook against the branch and then perform the cross-cut from the top downwards.



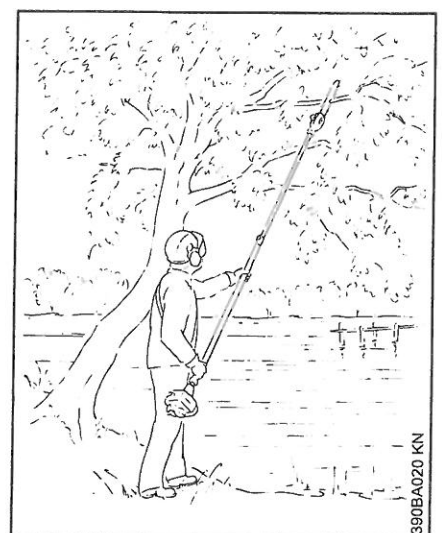
Relieving cut

- 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) from the top downwards.



Flush-cutting thick branches

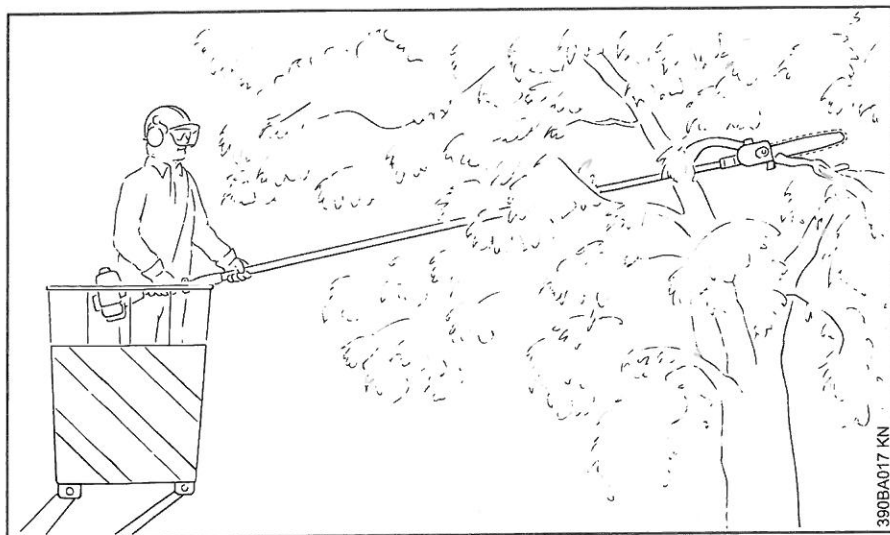
- If branch diameter is more than 10 cm, first perform undercut (3) and then cross-cut at a distance of about 20 cm (A) from the final cut. Then carry out the flush-cut (4), starting with a relieving cut and finishing with a cross-cut.



Cutting above obstacles

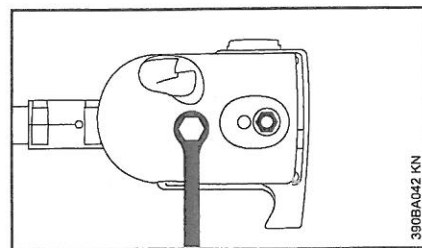
The unit's long reach makes it possible to prune branches that are overhanging obstacles, such as rivers or lakes. The tool angle in this case depends on the position of the branch.

Mounting the Bar and Chain

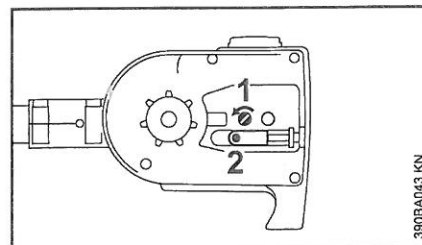


Cutting from a lift bucket

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.

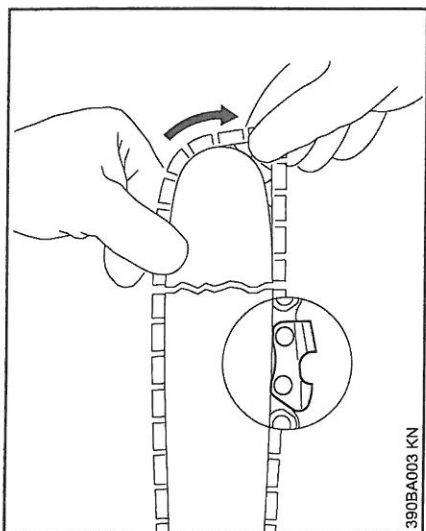


- Unscrew nut and take off cover.



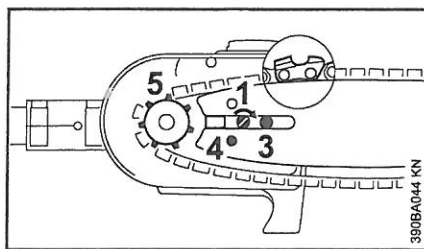
- Turn tensioning screw (1) counterclockwise until the tensioning nut (2) butts against the left end of the housing slot, then back it off 5 full turns.

Tensioning the Saw Chain

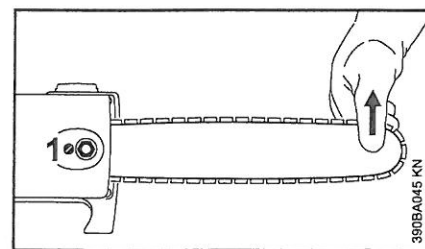


⚠ The chain is very sharp – wear work gloves to protect hands from cuts.

- 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".



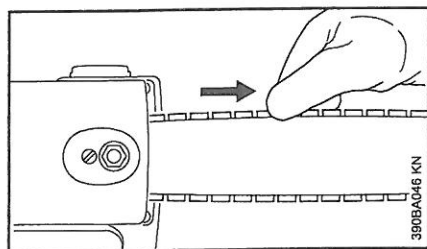
Retensioning during cutting work:

- 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".

Fuel

Your engine requires a mixture of gasoline and engine oil.

For health reasons, avoid direct skin contact with gasoline and avoid inhaling gasoline vapor.


STIHL MotoMix

STIHL recommends the use of STIHL MotoMix. This ready-to-use fuel mix contains no benzol or lead, has a high octane rating and ensures that you always use the right mix ratio.

STIHL MotoMix is specially formulated for use in STIHL engines and guarantees a long engine life.

MotoMix is not available in all markets.


Mixing Fuel

 Unsuitable fuels or lubricants or mix ratios other than those specified may result in serious damage to the engine. Poor quality gasoline or engine oil may damage the engine, sealing rings, hoses and the fuel tank.

Gasoline

Use only high-quality brand-name gasoline with a minimum octane rating of 90 – leaded or unleaded.

If your machine is equipped with a catalytic converter, you must use unleaded gasoline.

 A few tankfuls of leaded gasoline will greatly reduce the efficiency of the catalytic converter.

Engine Oil

Use only quality two-stroke engine oil. We recommend **STIHL two-stroke engine oil since it is specially formulated for use in STIHL engines and guarantees a long engine life.**

If STIHL two-stroke engine oil is not available, use only quality two-stroke oil designed for use in air cooled engines. Do not use oils designed for water cooled engines or engines with a separate lubricating system (e.g. conventional four-stroke engines).

Use only **STIHL 50:1 two-stroke engine oil** for the fuel mix in models with a catalytic converter.

Mix Ratio

STIHL 50:1 two-stroke engine oil:
50 parts gasoline to 1 part oil

Other high-quality two-stroke engine oils:

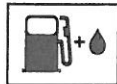
25 parts gasoline to 1 part oil

Examples

Gasoline	STIHL engine oil 50:1	Other high-quality two-stroke engine oils: 25:1
Liters	Liters (cc)	Liters (cc)
1	0.02 (20)	0.04 (40)
5	0.10 (100)	0.20 (200)
10	0.20 (200)	0.40 (400)
15	0.30 (300)	0.60 (600)
20	0.40 (400)	0.80 (800)
25	0.50 (500)	1.00 (1000)

- Use a canister approved for storing fuel. Pour oil into the canister first, then add gasoline and mix thoroughly.

Fueling



Storing Fuel

Store fuel only in approved safety-type fuel canisters in a dry, cool and safe location protected from light and the sun.

Fuel mix ages:

Only mix sufficient fuel for a few weeks work. Do not store fuel mix for longer than 3 months.

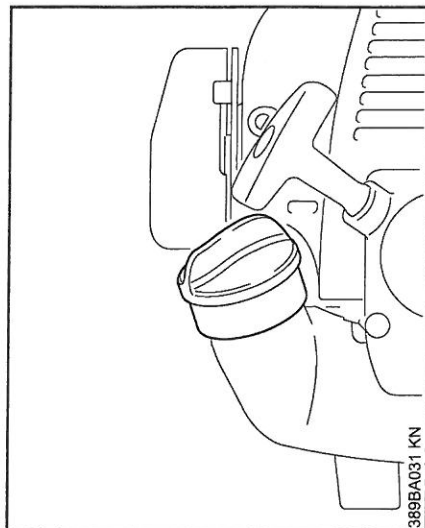
Exposure to light, the sun, low or high temperatures can quickly make the fuel mix unusable.

- Thoroughly shake the mixture in the canister before fueling your machine.

⚠ Pressure may build up in the canister – open it carefully.

- Clean the fuel tank and canister from time to time.

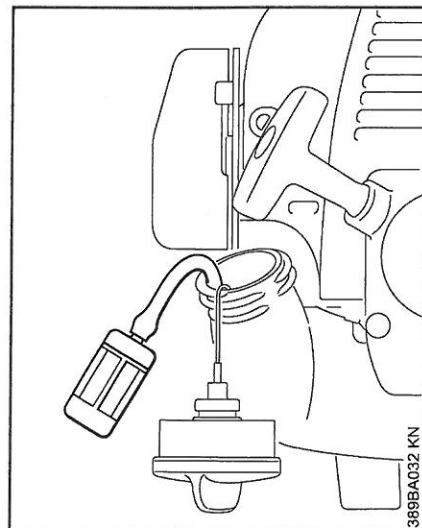
- 🗑 Dispose of remaining fuel and cleaning fluid properly in accordance with local regulations and environment requirements.



- Before fueling, clean the filler cap and the area around it to ensure that no dirt falls into the tank.
- Position the unit so that the filler cap is facing up.

Take care not to spill fuel while fueling and do not overfill the tank. STIHL recommends the STIHL filler nozzle for this purpose.

- ⚠ After fueling, tighten down the filler cap by hand **as securely as possible**.




Replacing the Fuel Pickup Body


- Install a new pickup body every 12 months:
- Drain the fuel tank.
- Use a hook to pull the fuel pickup body out of the tank and take it off the hose.
- Push the new pickup body into the hose.
- Place the pickup body in the tank.

Checking oil level

- ⚙ Always check level in chain oil tank and top it up as necessary.


Chain Oil


 For automatic and reliable lubrication of the chain and guide bar: **Use only a quality, environmentally compatible chain and bar lubricant. STIHL chain 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.

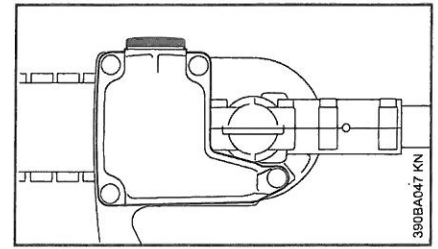
The service life of the chain and guide bar depends on the quality of the lubricant. It is therefore essential to use only a specially formulated chain lubricant!

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. It also harms the environment!

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

Filling Chain Oil Tank

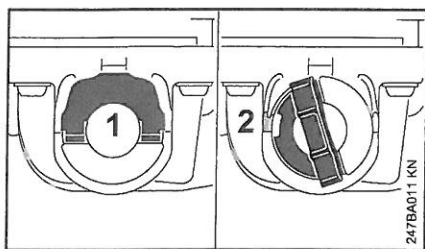


- **A full chain oil tank is sufficient for only half a tankful of fuel. Check the oil level regularly during cutting work. Never allow the oil tank to run dry!**
- Thoroughly clean the filler cap and area around it so that no dirt can fall into the tank.
- Position the unit so that the filler cap faces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

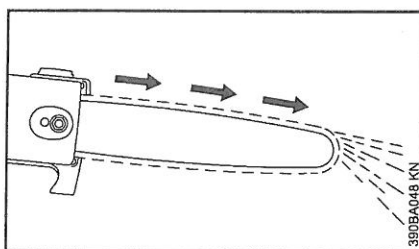
Checking Chain Lubrication

Adjusting Telescopic Shaft




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.




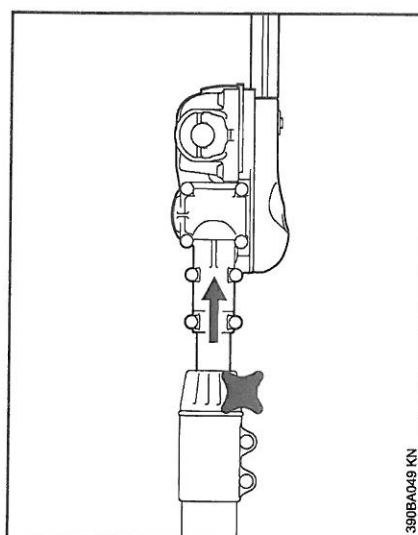
The saw chain must always throw off a small amount of oil.

- 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.

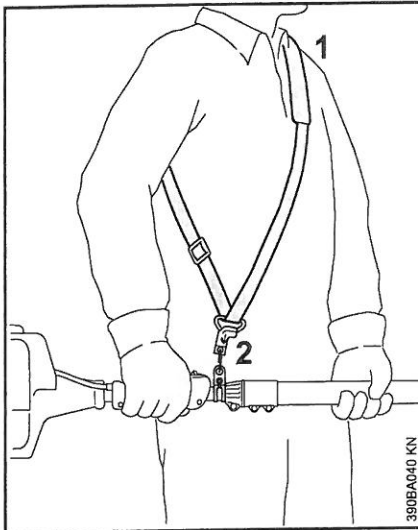
 Every new chain has to be broken in for about 2 to 3 minutes. After breaking in the chain, check chain tension and adjust if necessary – see chapter "Checking Chain Tension".



Always shut down the engine and put on the chain guard!

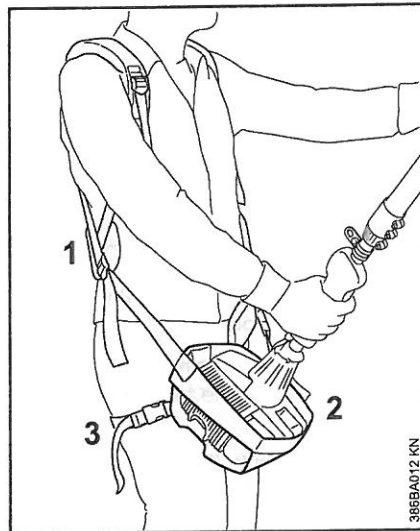
- Slacken off the screw.
- Adjust shaft to required length.
- Tighten the screw firmly.

Fitting the Harness



Shoulder strap*

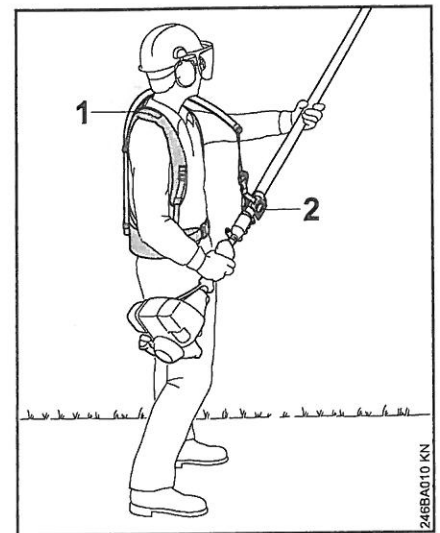
- Put on the shoulder strap (1).
- Adjust length of strap so that the spring hook (2), with the unit attached, is at about the same height as your right hip.



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



Backpack carrying system

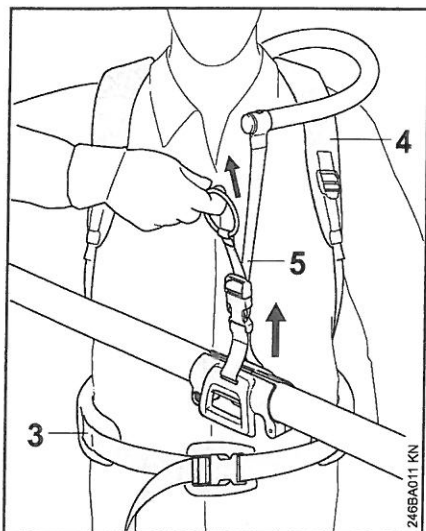
For pole pruners with a telescopic shaft.

- 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.

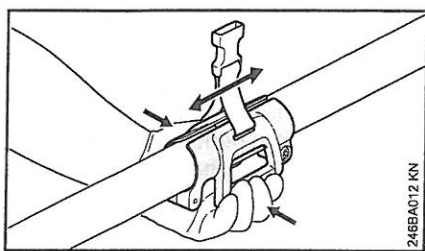
* see "Guide to Using this Manual"

* see "Guide to Using this Manual"

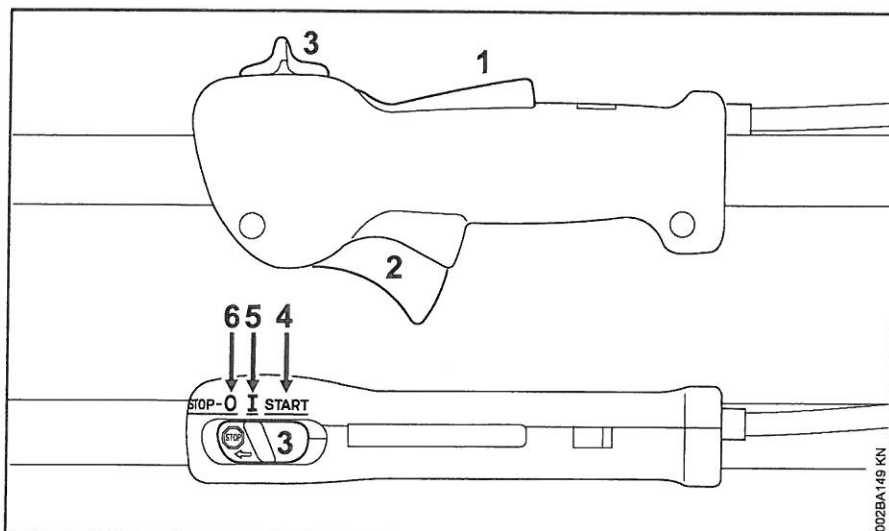
Starting / Stopping the Engine



- 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.



Controls

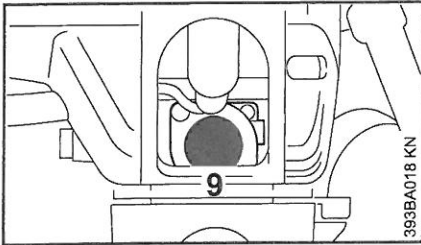
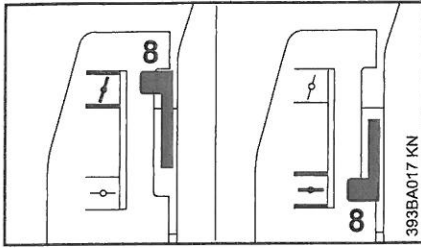
Throttle trigger interlock (1), throttle trigger (2) and slide control (3) with the positions:

START (4)


The normal run position I (5) and
 0 – STOP (6) for stopping the engine.

Starting


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



If engine is cold:

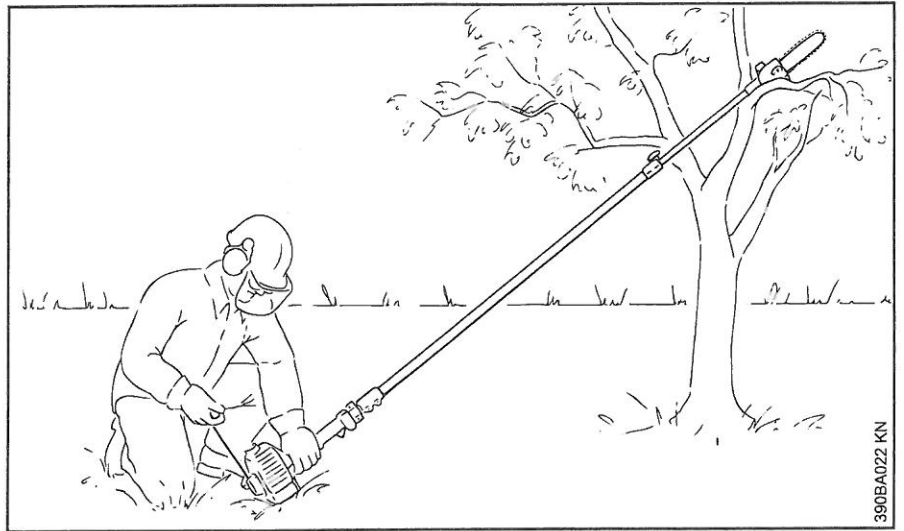
Set the choke lever (8) to 



If engine is warm:

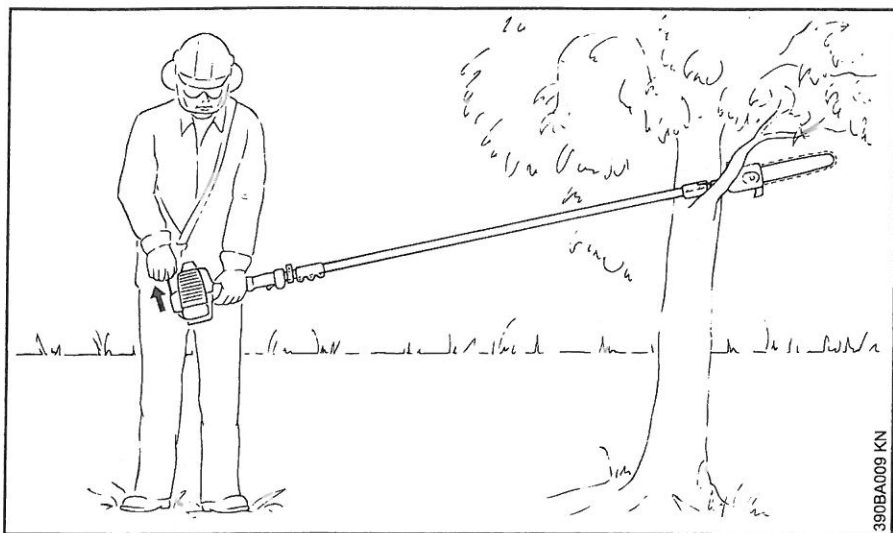
Set the choke lever (8) to 

Also use this setting if engine has been running but is still cold.

- Press the fuel pump bulb (9) at least five times, even if the bulb is still filled with fuel.



- Place the unit on the ground: It must rest securely on the engine support and the hook.
 - Remove the chain guard. Check that chain is not touching any object or the ground. If necessary, rest the hook on a raised support (e.g. a branch, mound or something similar).
 - 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.
-  Check that nobody is standing within the working range of the pruner.
-  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 to full length – it might break.
- Do not let the starter grip snap back – guide it slowly into the housing so that the starter rope can rewind properly.

When engine begins to fire:

- Move choke lever 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 engine:

- Move the slide control in direction of  to .