

HT 56 C

STIHL



2 - 31 **Instruction Manual**



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Dear Customer,

Thank you for choosing a quality engineered STIHL product.

It has been built using modern production techniques and comprehensive quality assurance. Every effort has been made to ensure your satisfaction and trouble-free use of the product.

Please contact your dealer or our sales company if you have any queries concerning this product.

Your



Dr. Nikolas Stihl

1 Guide to Using this Manual

1.1 Pictograms

The meanings of the pictograms attached to the machine are explained in this manual.

Depending on the model concerned, the following pictograms may be attached to your machine.



Fuel tank; fuel mixture of gasoline and engine oil



Chain oil tank; chain oil



Direction of chain rotation



Operate manual fuel pump



Manual fuel pump

1.2 Symbols in text



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

NOTICE

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

1.3 Engineering improvements

STIHL's philosophy is to continually improve all of its products. For this reason we may modify the design, engineering and appearance of our products periodically.

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

2 Safety Precautions and Working Techniques



Special safety precautions must be observed when working with the pole pruner because it operates at a very high chain speed, has very sharp cutters and a long reach.



Before commissioning, it is important to read and understand the User Manual and to keep it in a safe place for future reference. Failure to observe the User Manual may lead to serious or even fatal injury.

Observe all applicable local safety regulations, e.g., by employers' liability insurance associations, social insurance systems, occupational safety authorities, etc.

If you have never used a power tool before: Have your dealer or other experienced user show you how to operate your machine – or attend a special course to learn how to operate it.

Minors are not allowed to work with the power tool – except adolescents above 16 years of age who are instructed under supervision.

Children, animals and onlookers must remain at a safe distance.

When not using the machine, it must be laid down in such a way that it does not endanger anyone. Ensure that the machine cannot be used without authorization.

The user is responsible for accidents or risks involving third parties or their property.

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

The use of machines that emit noise may be limited to certain hours of the day as specified by national and/or regional or local regulations.

Anyone operating the machine must be well rested, in good physical health and in a good state of mind.

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

If you have a pacemaker: The ignition system of your machine produces an electromagnetic field of very low intensity. This field may interfere with some pacemakers. STIHL recommends that persons with pacemakers consult their physician

and the pacemaker manufacturer to minimize any health risk.

Anyone who has consumed alcohol, medications or drugs that impair their ability to react must not operate a power tool.

Use your pole pruner for limbing only (removing or pruning branches). Saw wood and wooden objects only.

The machine must not be used for any other purposes – **risk of accident!**

Only use guide bars, saw chains, chain sprockets and accessories that are explicitly approved for this power tool model by STIHL or are technically identical. If you have any questions in this respect, consult your dealer. Use only high-quality parts and accessories. Otherwise, there may be a risk of accidents and damage to the power tool.

STIHL recommends the use of STIHL original tools, guide bars, saw chains, chain sprockets and accessories. They are specifically designed to match the product and meet your performance requirements.

Never attempt to modify your power tool in any way since this may increase the risk of personal injury. STIHL excludes all liability for personal injury and damage to property caused while using unauthorized attachments.

Do not use a high-pressure washer to clean the power tool. The solid jet of water may damage parts of the unit.

2.1 Clothing and Equipment

Wear proper protective clothing and equipment.



Clothing must be sturdy but allow complete freedom of movement. Wear close-fitting clothes such as a boiler suit, not a loose jacket.

Do not wear clothing which could become trapped in wood, brush or moving parts of the machine. Do not wear a scarf, necktie or jewelry. Tie up and secure long hair above your shoulders.



Wear cut protection safety boots with non-slip soles and steel toe caps.


WARNING


To reduce the risk of eye injuries, wear close-fitting safety glasses in accordance with European Standard EN 166. Make sure the safety glasses are a snug fit.

Wear "personal" sound protection, e.g. ear defenders.

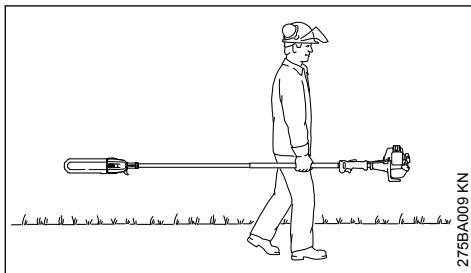
Wear a safety hard hat where there is a danger of head injuries from falling objects.



Wear sturdy protective gloves made of a resistant material (e. g. leather).

STIHL offers a comprehensive range of personal protective equipment.

2.2 Transporting the machine



Always stop the engine.

Always fit the chain scabbard – even when you carry the power tool for short distances.

Ensure that the power tool is always well balanced and hold it by the shaft for carrying. Do not touch hot parts of the machine, especially the surface of the muffler – **Risk of burns!**

By vehicle: When transporting in a vehicle, properly secure your machine to prevent turnover, damage and fuel spillage.

2.3 Refueling



Gasoline is highly flammable – keep away from fire or flame – do not spill any fuel – no smoking.

Always shut off the engine before refueling.

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 to prevent fuel spraying out.

Only refuel the machine in a well ventilated place. If fuel has been spilled, immediately clean the machine – do not allow your clothes to be splashed with fuel. If that happens, change your clothes at once.



After fueling, tighten down the screw-type fuel cap as securely as possible.

This helps reduce the risk of unit vibrations causing an incorrectly tightened fuel cap to loosen or come off and spill quantities of fuel.

Check for leaks. Do not start the engine if there is a fuel leak – **serious or fatal burns could result!**

2.4 Before starting

Check that your power tool is properly assembled and in good condition – refer to appropriate chapters in the User Manual.

- Check the fuel system for leaks, especially the visible parts, e. g., fuel cap, hose connections, manual fuel pump (only in machines with a manual fuel pump). In case of leakage and damage, do not start the engine – **risk of fire!** Have the machine serviced by a dealer before using it
- Correctly mounted guide bar
- Correctly tensioned saw chain
- Slide control / stop switch must move easily to **STOP** or **0**
- Throttle trigger lockout (if installed) and throttle trigger must move easily – the throttle trigger must return to the idle position automatically
- Check that the spark plug boot is secure – a loose boot may cause sparking 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 dirt – this is important for safe control of the machine.
- Adjust the harness to suit your height and reach. Observe the chapter "Fitting the Harness"

The power tool must only be operated when it is in good operating condition – **Risk of accident!**

If you use a harness: Practice setting down the machine quickly by removing the harness or by unhooking the machine as you would in an emergency. To avoid damage, do not throw the machine to the ground when practicing.

2.5 Starting the engine

Start the engine at least 3 meters from the refueling spot and only outdoors.

Place the power tool on level ground in an open area. Make sure you have good balance and secure footing. Hold the power tool securely. The chain must be clear of the ground and all other obstructions because it may begin to run when the engine starts.

Your power tool is designed to be operated by one person only. Do not allow other persons within a radius of 15 m of your own position – even when starting the power tool – **Risk of injury!**

Start the engine as described in the User Manual.

The saw chain continues running for a short period when you release the throttle trigger – **fly-wheel effect!**

Check engine idling speed: The saw chain must not move when the engine is idling – with the throttle trigger released.

Keep easily flammable materials (e.g. wood chips, bark, dry grass, fuel) away from the hot exhaust gas flow and the hot muffler surface – **Risk of fire!**

2.6 Holding and Guiding the Tool



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Always hold the power tool **firmly with both hands** – right hand on the control handle, left hand on the drive tube – even if you are left-handed. Wrap your thumbs firmly around the control handle and shaft.

Machines with telescopic shaft: Extend the telescopic shaft only as far as the working height.

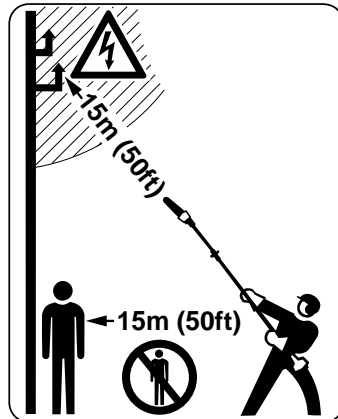
2.7 While Working

Make sure you always have a firm and secure footing.

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



This power tool is not insulated. Keep at least 15 m away from electric power lines – **danger of fatal electric shock!**



Do not allow other persons within a radius of 15 m of your own position due to falling branches and ejected wood particles – **Risk of injury!**

This distance must also be maintained in relation to objects (vehicles, window panes) – **risk of property damage!**

Keep the bar nose at least 15 m away from electric power lines. Electric current may also arc over from high-voltage cables at a greater distance. Have the power switched off before starting work in the immediate vicinity of power lines.

To reduce the risk of injury, switch off the engine before changing the saw chain!

Ensure that the engine idling speed is correct. The saw chain must not move when the throttle trigger has been released.

If the saw chain continues moving, have the machine repaired by your specialist dealer. Check and correct the idle speed setting at regular intervals.

Never leave a running machine unattended.

Take special care in **slippery conditions** – damp, snow, ice, on slopes or uneven ground!

Watch out for obstacles: tree stumps, roots – **risk of tripping or stumbling!**

2.7.1 When Working at Height:

- Always use a lift bucket
- Never use the machine while standing on a ladder or in a tree
- never work on an unstable surface
- Never use the machine with just one hand

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

Take breaks when you start getting tired or feeling fatigue – **risk of accidents!**

Work calmly and carefully – in daylight conditions and only when visibility is good. Proceed with caution, do not put others in danger.



As soon as the engine starts running, the power tool generates toxic exhaust gas. These gases may be odorless and invisible and may contain unburned hydrocarbons and benzene. 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.

Stop work immediately if you start suffering from nausea, headaches, impaired vision (e.g. your field of vision gets smaller), impaired hearing, dizziness, or impaired concentration – these symptoms may possibly be the result of too-high exhaust gas concentration – **risk of accidents!**

Operate your power tool in such a way that it produces a minimum of noise and emissions – do not run the engine unnecessarily, accelerate the engine only when working.

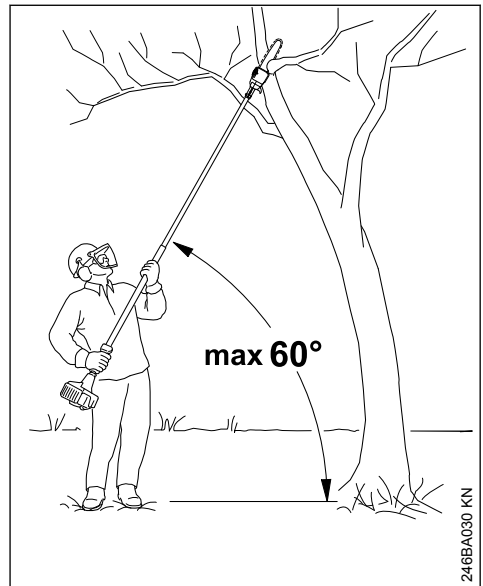
To reduce the risk of fire, **do not smoke** while operating or standing near your power tool. Combustible fuel vapor may escape from the fuel system.

Dust (e.g. sawdust), fumes and smoke, generated while using the machine, may be hazardous to health. Wear a dust mask in case of dust production.

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 in particular that the fuel system has no leaks and the safety equipment is fully operative. Never use a power tool that is no longer safe to operate. In case of doubt, contact a dealer.

If you use a harness, ensure that the exhaust gas flow is diverted away from your body – **Risk of fire!**

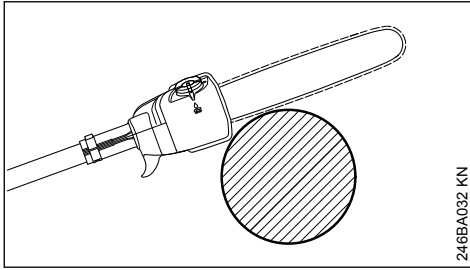
2.7.2 Delimiting



Hold the power tool at an angle. Do not stand directly underneath the limb being cut. Do not exceed an angle of 60° from the horizontal. Watch for falling wood.

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

Before sawing branches, establish an escape route and remove all obstacles.



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Position the housing against the branch and then perform the cross-cut. This will prevent the power tool from making jolting movements when you start the separating cut.

Start the cut with the saw chain at full throttle.

Always cut with a correctly sharpened, properly tensioned saw chain – the depth gauge setting must not be too large.

Do not operate your power tool in the starting throttle position – engine speed cannot be controlled in this position.

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

If branches are thick or heavy, make a relief cut – see "Using the Pole Pruner".

Exercise extreme caution when sawing branches under tension – **Risk of injury!** Always make a relieving cut on the compression side first and then perform the bucking cut at the tension side.

Be careful when cutting splintered wood – **Risk of injury from ejected pieces of wood!**

If working on a slope, always stand uphill or to the side of the branch which is to be sawn. Watch out for rolling branches.

Note when reaching the end of a cut that the power tool is no longer supported by the guide bar in the cut. The user must bear the weight of the machine – **risk of loss of control!**

Always pull the power tool out of the cut with the saw chain running.

Use the power tool for limbing and pruning only, not for felling – **Risk of accidents!**

Keep the saw chain away from any foreign objects: Stones, nails, etc. may be ejected and damage the saw chain.

If a rotating saw chain hits a stone or another hard object, sparks may be generated which may ignite easily flammable materials under certain

conditions. Dried-out plants and undergrowth are combustible, especially in hot and dry weather. If there is a risk of fire, do not use your pole pruner near easily flammable materials, dry plants or scrub. It is mandatory that you ask the responsible forestry office about current fire hazards.

Before you leave the machine: Shut the engine off.

2.8 Vibrations

Prolonged use of the power tool 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)
- Work breaks

The period of usage is shortened by:

- Any personal tendency to suffer from poor circulation (symptoms: frequently cold fingers, tingling sensations).
- Low outside temperatures.
- The force with which the handles are held (a tight grip restricts circulation).

Continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear (e.g. tingling sensation in fingers), seek medical advice.

2.9 Maintenance and Repairs

Service the machine regularly. Do not attempt any maintenance or repair work not described in the instruction manual. Have all other work performed by a servicing dealer.

STIHL recommends that you have servicing and repair work carried out exclusively by an authorized STIHL servicing dealer. STIHL dealers are regularly given the opportunity to attend training courses and are supplied with the necessary technical information.

Only use high-quality replacement parts in order to avoid the risk of accidents and damage to the machine. If you have any questions in this respect, consult a servicing dealer.

STIHL recommends the use of genuine STIHL replacement parts. They are specifically designed to match your model and meet your performance requirements.

To reduce the risk of injury, **always shut off the engine** before carrying out any maintenance or repairs or cleaning the machine. – Exception: Carburetor and idle speed adjustments.

Do not turn the engine over on the starter with the spark plug boot or spark plug removed unless the slide control / stop switch is on **STOP** or **0** since there is otherwise a **risk of fire** from uncontained sparking.

To reduce the **risk of fire**, do not service or store your machine near open flames.

Check the fuel filler cap for leaks at regular intervals.

Use only a spark plug of the type approved by STIHL and make sure it is in good condition – see "Specifications".

Inspect the ignition lead (insulation in good condition, secure connection).

Check the condition of the muffler.

To reduce the **risk of fire and damage to hearing**, do not operate your machine if the muffler is damaged or missing.

Do not touch a hot muffler since **burn injury** will result.

Stopping the engine

- before checking chain tension.
- before retensioning the chain.
- before replacing the chain.
- before rectifying problems.

Observe sharpening instructions – keep the chain and guide bar in good condition at all times for safe and correct handling of the saw. The chain must be properly sharpened, tensioned and well lubricated.

Always change the chain, guide bar and sprocket in good time.

Store fuel and chain lubricant in properly labelled, safety-type canisters only. When handling gasoline, avoid direct contact with the skin and avoid inhaling fuel vapour – **health risk**.

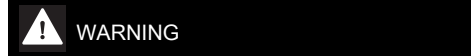
3 Using the Unit

3.1 Preparation

- ▶ Wear suitable protective clothing, observe safety precautions
- ▶ Starting the engine
- ▶ Fitting the harness

3.2 Cutting sequence

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



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 – risk of injury.

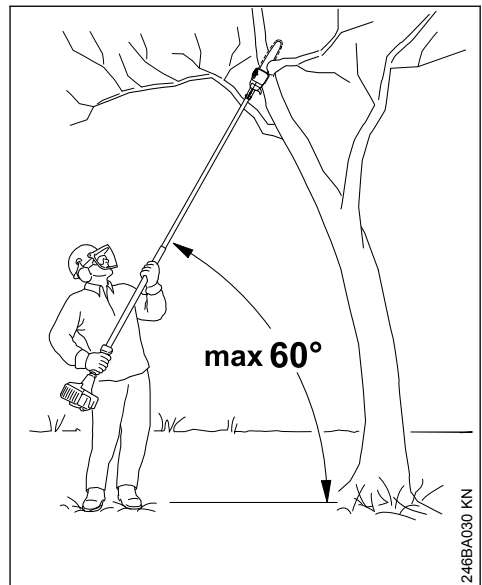
3.3 Disposal

Do not throw cuttings into the garbage can – they can be composted.

3.4 Working technique

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.

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

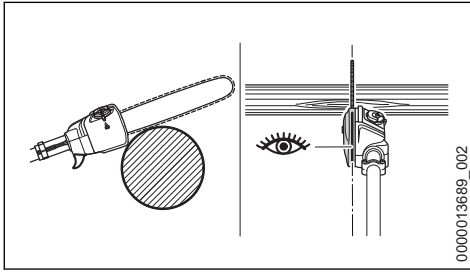


The shaft should always be held at an angle of 60° or less.

The least tiring working position is a tool angle of 60°.

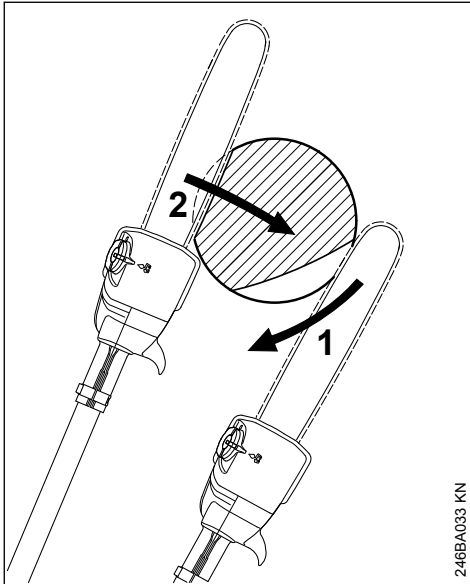
Any lesser angle may be used to suit the situation.

3.4.1 Cross-cut



To avoid pinching the saw in the cut, position the bar in the area of the housing against the branch and then perform the cross-cut from the top downward. The saw chain can be positioned precisely using the gauge bar.

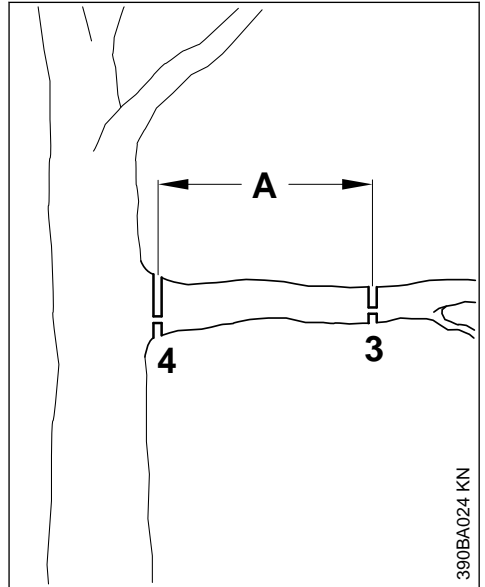
3.4.2 Relieving cut



To avoid tearing the bark on thick branches, always start by performing a

- ▶ Relieving cut (1) on the underside of the branch. To do so, position the cutting attachment and guide it downward to the bar nose in an arc
- ▶ Performing the cross cut (2): Position the bar in the area of the housing against the branch.

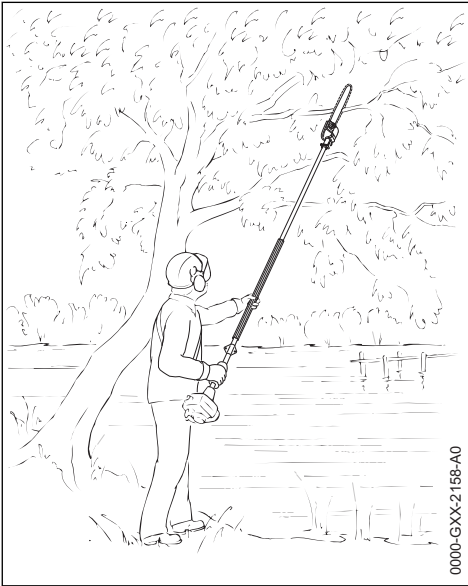
3.4.3 Flush-cutting thick branches



If the branch diameter is more than 10 cm (4 in), first

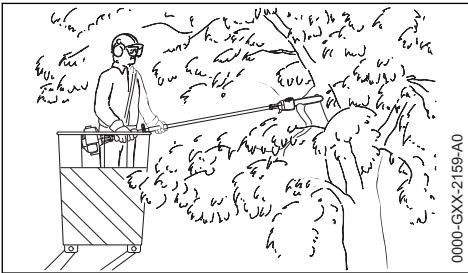
- ▶ perform the undercut (3) and then cross-cut at a distance of about 20 cm/8 in (A) from the final cut. Then carry out the flush-cut (4), starting with a relieving cut and finishing with a cross-cut.

3.4.4 Cutting above obstacles



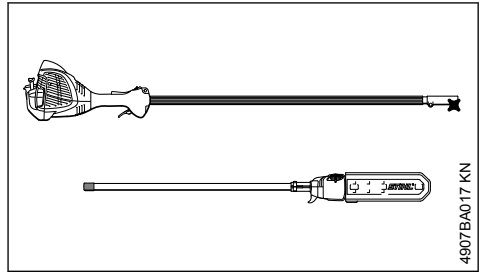
The machine's long reach makes it possible to prune branches that are overhanging obstacles, such as rivers or lakes. The tool angle in this case depends on the position of the branch.

3.4.5 Cutting from a lift bucket



The machine'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 in this case depends on the position of the branch.

4 Assembling the Unit

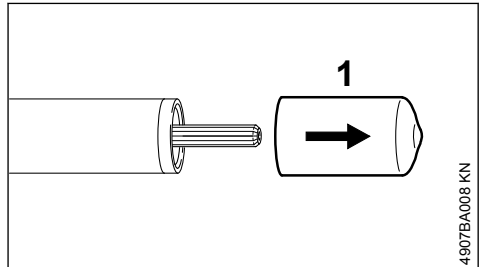


The unit features a split drive tube that helps save space during transportation. It unit can be easily disassembled for transportation – see "Transporting the Power Tool".

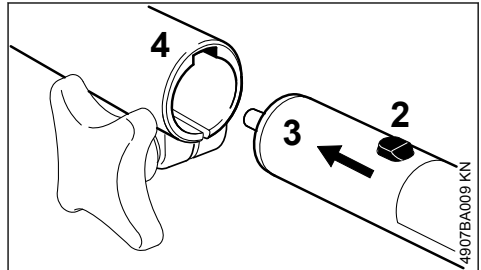
4.1 Connecting the Drive Tube



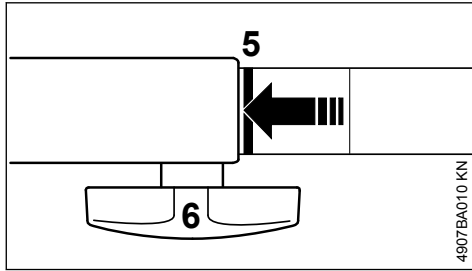
Do not mount KombiTools – only use the drive tube with the splined shaft supplied with the machine.



- ▶ Pull the cap (1) off the end of the front drive tube and keep it in a safe place for later use – see "Storing the Machine".
- ▶ Put the powerhead on the ground so that it rests on the machine support.



- ▶ Slide the lug (2) on the front drive tube (3) into the slot (4) in the coupling sleeve as far as stop – if necessary, turn the front drive tube (3) back and forth while pushing it home.



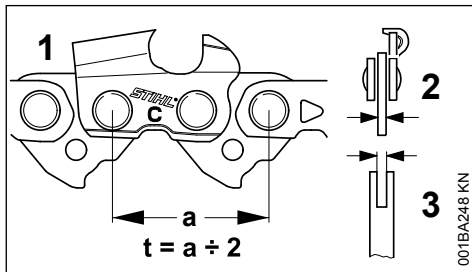
When correctly installed, the red line (5) (arrow point) must be flush with the end of the coupling sleeve.

- ▶ Tighten down the wing screw (6) firmly.
- ▶ Attach shoulder strap to the carrying ring.

5 Cutting Attachment

A cutting attachment consists of the saw chain, guide bar and chain sprocket.

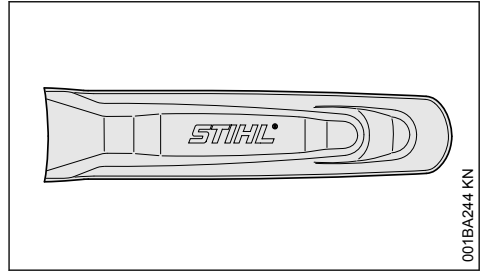
The cutting attachment that comes standard is designed to exactly match the pole pruner.



- The pitch (t) of the saw chain (1), chain sprocket and the nose sprocket of the Rollo-matic guide bar must match.
- The drive link gauge (2) of the saw chain (1) must match the groove width of the guide bar (3).

If non-matching components are used, the cutting attachment may be damaged beyond repair after a short period of operation.

5.1 Chain Scabbard



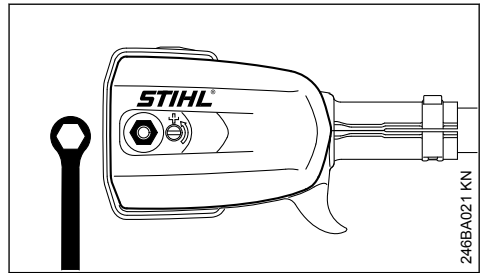
The scope of supply includes a bar scabbard that matches the cutting attachment.

If guide bars of different lengths are mounted to the pole pruner, always use a chain scabbard of the correct length which covers the complete guide bar.

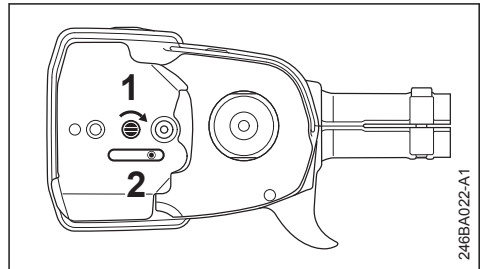
The length of the matching guide bars is marked on the side of the chain scabbard.

6 Mounting the Bar and Chain

6.1 Removing the chain sprocket cover

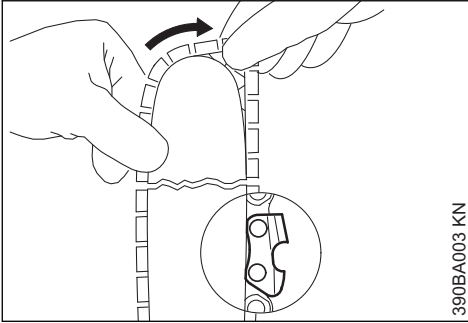


- ▶ Unscrew the nut and remove the chain sprocket cover



- ▶ Turn the screw (1) clockwise until the tensioner slide (2) butts against the right end of the housing slot.

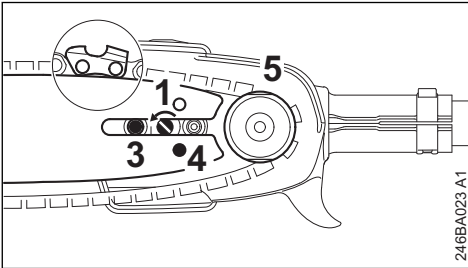
6.2 Fitting the saw chain



! WARNING

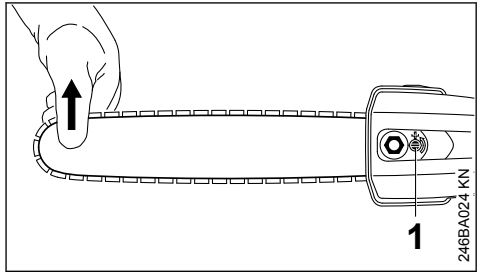
Wear work gloves to protect your hands from the sharp cutters.

- ▶ Fit the saw chain – start at the bar nose



- ▶ Fit the guide bar over the screw (3) and engage peg of tensioner slide in the hole (4) – place the saw chain over the chain sprocket (5) at the same time
- ▶ Turn the tensioning screw (1) counterclockwise until there is very little chain sag on the underside of the bar – and the drive link tangs are engaged in the bar groove.
- ▶ Refit the chain sprocket cover and then screw on the nut by hand until it is finger-tight
- ▶ Go to chapter on "Tensioning the Saw Chain"

7 Tensioning the Chain



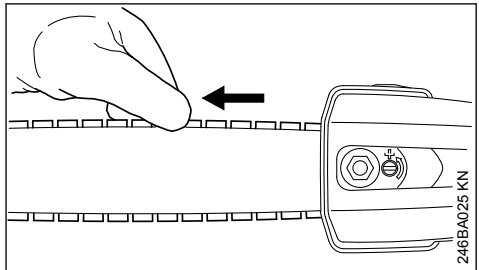
Re-tensioning during cutting work:

- ▶ Shut off the engine.
- ▶ Loosen the nut.
- ▶ Hold the bar nose up.
- ▶ Use a screwdriver to turn the tensioning screw (1) counterclockwise until the chain fits snugly against the underside of the bar.
- ▶ While still holding the bar nose up, tighten down the nut firmly.
- ▶ Go to "Checking Chain Tension".

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

- ▶ Check chain tension frequently – see chapter on "Operating Instructions".

8 Checking Chain Tension



- ▶ Shut off the engine.
- ▶ Wear work gloves to protect your hands.
- ▶ The 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, re-tension the chain.

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

- ▶ Check chain tension frequently – see chapter on "Operating Instructions".

9 Fuel

The engine requires a mixture of gasoline and engine oil.

! WARNING

Avoid direct skin contact with fuel and breathing in of gasoline fumes.

9.1 STIHL MotoMix

STIHL recommends using STIHL MotoMix. This pre-blended fuel is free of benzene and lead, is distinguished by a high octane rating, and always provides the proper mixing ratio.

STIHL MotoMix uses STIHL HP Ultra two-stroke engine oil for optimum engine life.

MotoMix is not available in all markets.

9.2 Mixing fuel

NOTICE

Unsuitable fuels or a mixing ratio that deviates from the specification can lead to severe engine damage. The engine, seals, fuel lines and fuel tank may be damaged if low-quality gasoline or engine oil is used.

9.2.1 Gasoline

Use only **high-quality gasoline** with an octane rating of at least 90 ROC – leaded or unleaded.

Gasoline with an alcohol component exceeding 10% can cause impaired engine performance in engines with manually adjustable carburetors and thus should not be used in these engines.

Engines with M-Tronic deliver full engine performance using gasoline with an alcohol component of up to 27% (E27).

9.2.2 Engine oil

If you mix the fuel yourself, use only STIHL two-stroke engine oil or another high-performance engine oil classified as JASO FB, JASO FC, JASO FD, ISO-L-EGB, ISO-L-EGC or ISO-L-EGD.

STIHL specifies STIHL HP Ultra two-stroke engine oil or an equivalent high-performance engine oil in order to maintain emission limits over the machine's service life.

9.2.3 Mixing ratio

with STIHL two-stroke engine oil 1:50; 1:50 = 1 part oil + 50 parts gasoline

9.2.4 Examples

Quantity of gaso- line Liters	STIHL two-stroke engine oil 1:50 Liters (ml)
1	0.02 (20)
5	0.10 (100)
10	0.20 (200)
15	0.30 (300)
20	0.40 (400)
25	0.50 (500)

- Pour oil into an approved safety fuel canister first, then add gasoline and mix thoroughly

9.3 Storing fuel mixture

Store in approved safety fuel canisters only in a dry, cool and secure place protected against light and sunlight.

Fuel mixture deteriorates with age – mix only as much as needed for a few weeks. Do not store fuel mixture for longer than 30 days. The fuel mixture can become unusable more quickly if exposed to light, sunlight or low or high temperatures.

STIHL MotoMix however can be stored for up to 5 years without any problems.

- Shake the canister containing the fuel mixture thoroughly before refueling

! WARNING

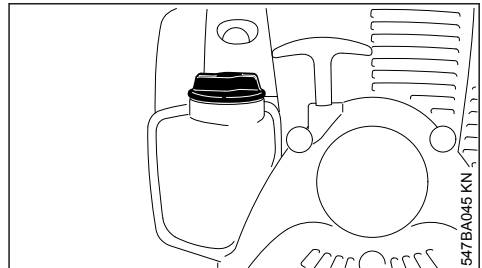
Pressure may have built up in the canister – open it carefully.

- The fuel tank and the canister in which fuel mixture is stored should be cleaned thoroughly from time to time

Residual fuel and the liquid used for cleaning must be disposed of in accordance with regulations and without harming the environment!

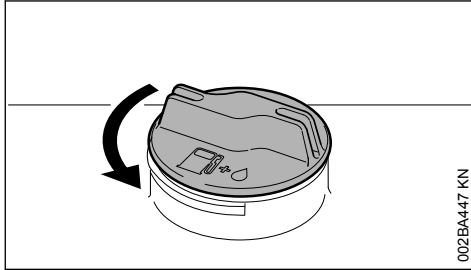
10 Fueling

10.1 Preparations



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

10.2 Opening screw-type tank cap



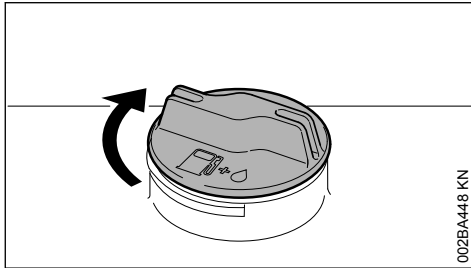
002BA447 KN

- ▶ Turn the cap counterclockwise until it can be removed from the tank opening.
- ▶ Remove the cap.

10.3 Filling up with fuel

Take care not to spill fuel while fueling and do not overfill the tank. STIHL recommends you use the STIHL filler nozzle (special accessory).

10.4 Closing screw-type tank cap



002BA448 KN

- ▶ Place the cap in the opening.
- ▶ Turn the cap clockwise as far as stop and tighten it down as firmly as possible by hand.

11 Chain Lubricant

For automatic and reliable lubrication of the chain and guide bar – use only an environmentally compatible quality chain and bar lubricant. Rapidly biodegradable STIHL BioPlus is recommended.

NOTICE

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.

! WARNING

Do not use waste oil. Renewed contact with waste oil can cause skin cancer. Moreover, waste oil is environmentally harmful.

NOTICE

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

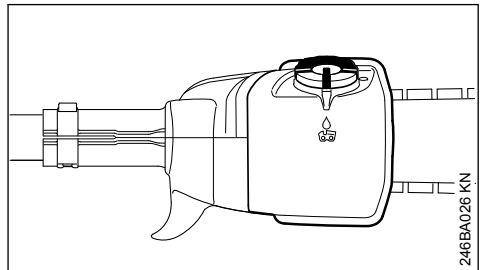
12 Filling Chain Oil Tank



NOTICE

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.

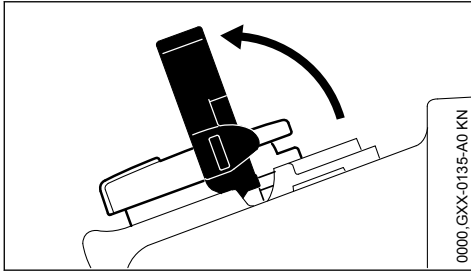
12.1 Preparations



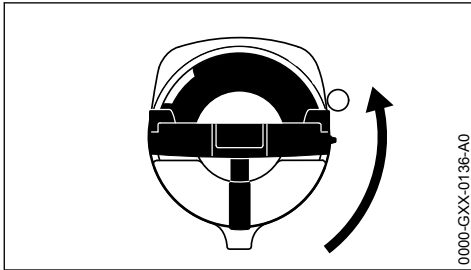
246BA026 KN

- ▶ Thoroughly clean the tank cap and the area around it to ensure that no dirt falls into the tank.
- ▶ Position the machine so that the tank cap faces up.

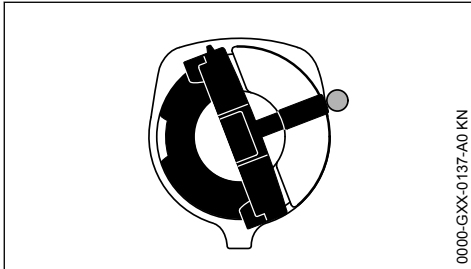
12.2 Opening



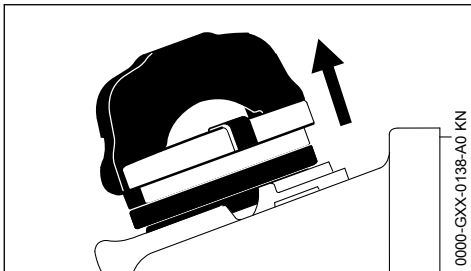
- ▶ Raise grip to vertical position.



- ▶ Turn the cap counterclockwise (about a quarter turn).



Marks on tank cap and oil tank must line up.



- ▶ Remove the tank cap.

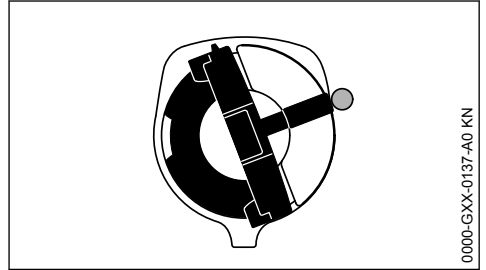
12.3 Filling Up with Chain Oil

- ▶ Fill the tank with chain oil.

Take care not to spill chain oil while refilling and do not overfill the tank.

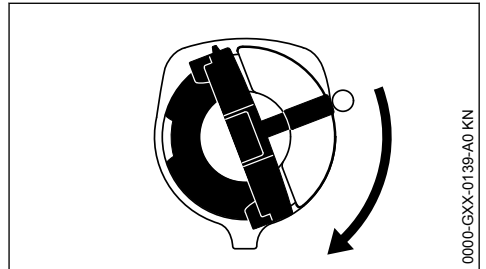
STIHL recommends you use the STIHL filler nozzle for chain oil (special accessory).

12.4 Closing

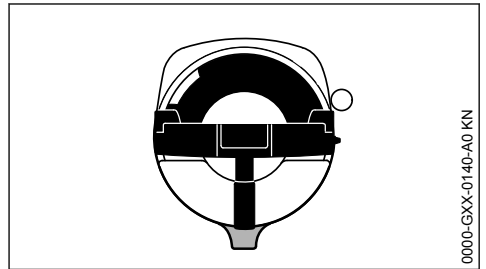


Grip must be vertical:

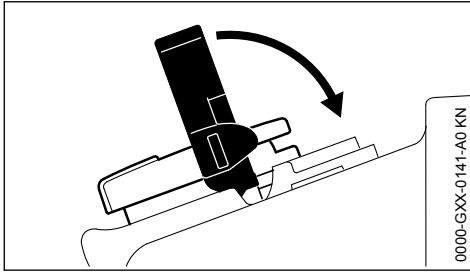
- ▶ Fit the cap – marks on tank cap and oil tank must line up.
- ▶ Press the cap down as far as stop.



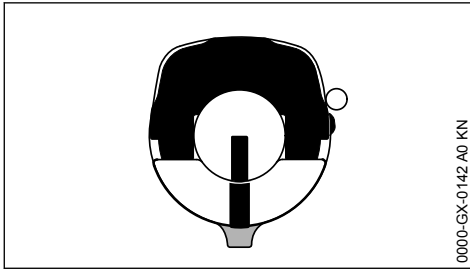
- ▶ While holding the cap depressed, turn it clockwise until it engages in position.



The marks on the cap and oil tank are then in alignment.



- ▶ Fold the grip down.



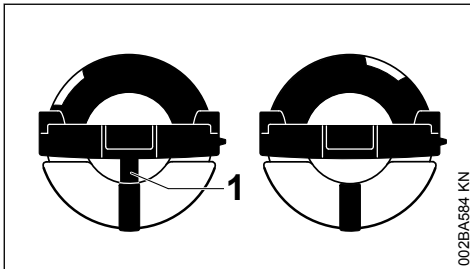
Tank cap is locked.

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 dealer for assistance if necessary. STIHL recommends that you have servicing and repair work carried out exclusively by an authorized STIHL servicing dealer.

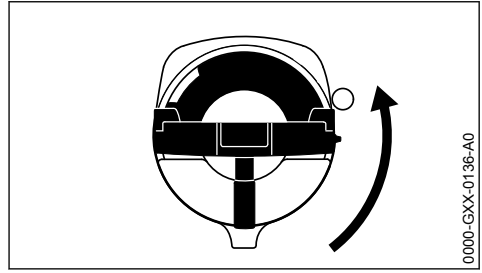
12.5 If the tank cap cannot be locked in the oil tank opening

Bottom of cap is twisted in relation to top.

- ▶ Remove the cap from the oil tank and check it from above.

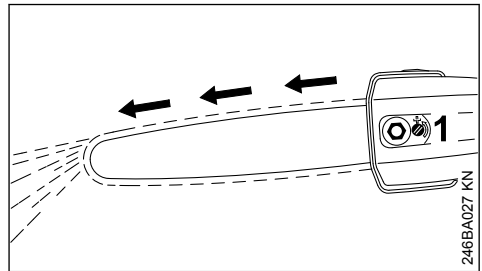


- Left: Bottom of cap is twisted – inner mark (1) in line with outer mark.
- Right: Bottom of cap in correct position – inner mark is under the grip. It is not in line with the outer mark.



- ▶ Place the cap on the opening and rotate it counterclockwise until it engages the filler neck.
- ▶ Continue rotating the cap counterclockwise (about a quarter turn) – this causes the bottom of the cap to be turned to the correct position.
- ▶ Turn the cap clockwise and lock it in position – see section on "Closing".

13 Checking Chain Lubrication



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

NOTICE

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

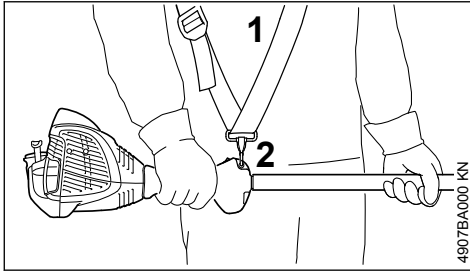
Every new chain has to be broken in for about 2 to 3 minutes.

After breaking in the chain, check chain tension and adjust if necessary – see "Checking Chain Tension".

14 Fitting the Harness

The type and style of the shoulder strap depend on the market.

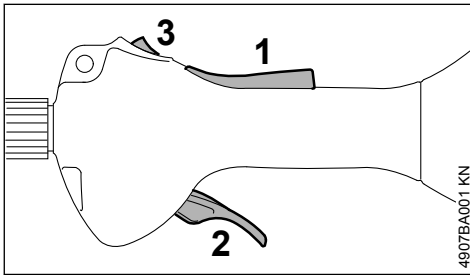
14.1 Shoulder strap



- ▶ Put on the shoulder strap (1).
- ▶ Adjust the length of the strap.
- ▶ With the power tool attached, the carabiner (2) must be at about the same height as your right hip.

15 Starting / Stopping the Engine

15.1 Controls

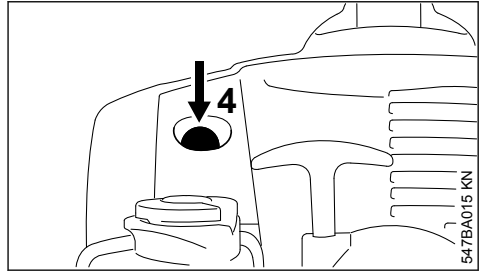


- 1 Throttle trigger lockout
- 2 Throttle trigger
- 3 Stop switch with Run and 0 = Stop positions.

15.1.1 Function of stop switch and ignition system

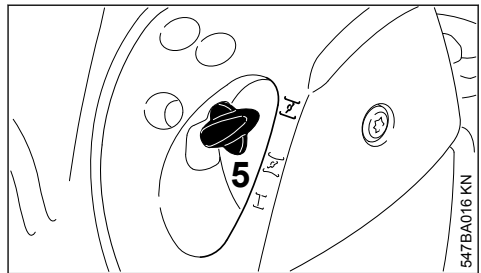
The stop switch is normally in the Run position, i.e. when it is **not** depressed: The ignition is switched on – the engine is ready to start. If the stop switch is moved to the **0** position, the ignition is switched off. The ignition is switched on again automatically after the engine stops.

15.2 Starting the Engine



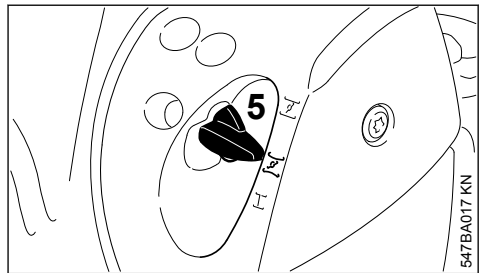
- ▶ Press the manual fuel pump bulb (4) at least five times – even if the bulb is filled with fuel.

15.2.1 Cold engine (cold start)



- ▶ Press in the choke knob (5) and turn it to **I** at the same time.

15.2.2 Warm engine (warm start)

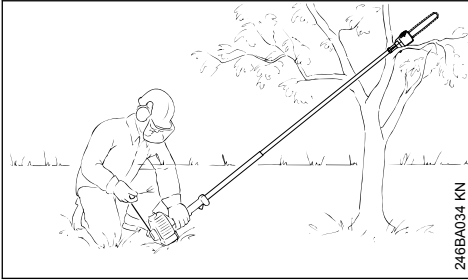


- ▶ Press in the choke knob (5) and turn it to **II** at the same time.

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

15.2.3 Cranking

- ▶ Remove the chain guard.



- ▶ Place the machine 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). Check that the chain is not touching any object or the ground.

! WARNING

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

- ▶ Make sure you have a safe and secure footing.
- ▶ Hold the unit **firmly** on the ground with your left hand and press down – do not touch the throttle trigger or throttle trigger lockout.

NOTICE

Do not stand or kneel on the shaft.

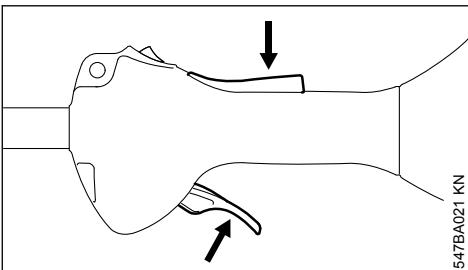
- ▶ Hold the starter grip with your right hand.
- ▶ Pull the starter grip steadily.

NOTICE

Do not pull out the starter rope all the way – it **might otherwise break**.

- ▶ Do not let the starter grip snap back. Guide it slowly back into the housing so that the starter rope can rewind properly.
- ▶ Continue cranking until the engine runs.

15.2.4 As soon as the engine runs



- ▶ Press down the throttle trigger lockout and open the throttle – the choke knob moves to the run position **I**. After a cold start, warm up the engine by opening the throttle several times.

! WARNING

Make sure the carburetor is correctly adjusted. The saw chain must not move when the engine is idling.

Your machine is now ready for operation.

15.3 Stopping the Engine

- ▶ Move the stop switch in the direction of **0** – the engine stops – release the stop switch – it springs back to the run position.

15.4 Other Hints on Starting

Engine stalls in cold start position **I or under acceleration.**

- ▶ Move the choke knob to **II** and continue cranking until the engine runs.

Engine does not start in warm start position **II**

- ▶ Move the choke knob to **I** and continue cranking until the engine runs.

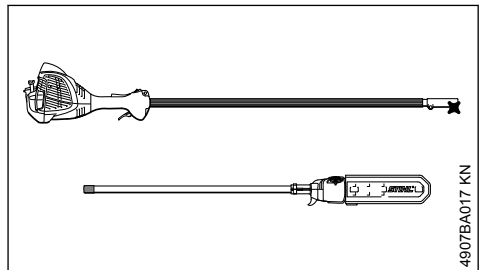
If the engine does not start

- ▶ Check that all settings are correct.
- ▶ Check that there is fuel in the tank and refuel if necessary.
- ▶ Check that the spark plug boot is properly connected.
- ▶ Repeat the starting procedure.

Fuel tank run until completely dry

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

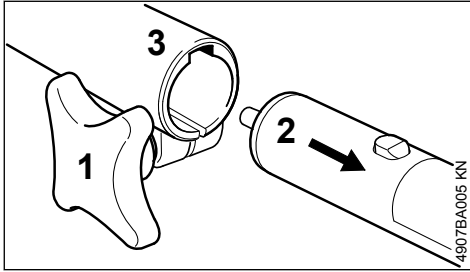
16 Transporting the Unit



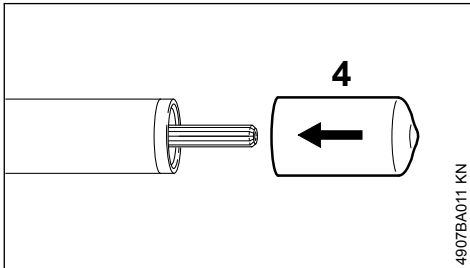
The unit features a split drive tube that helps save space during transportation.

16.1 Disconnecting the Drive Tube

- ▶ Disconnect the shoulder strap from the carrying ring.
- ▶ Place the unit on the ground:



- ▶ Loosen the star knob (1) – do not remove it.
- ▶ Pull the drive tube (2) out of the coupling sleeve (3).



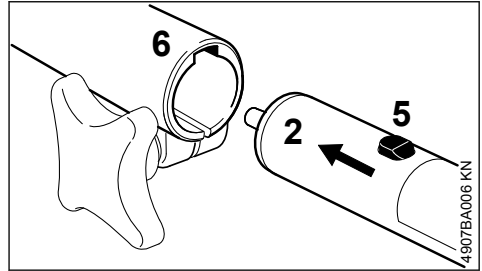
- ▶ Fit the cap (4) on the end of the drive tube.

NOTICE

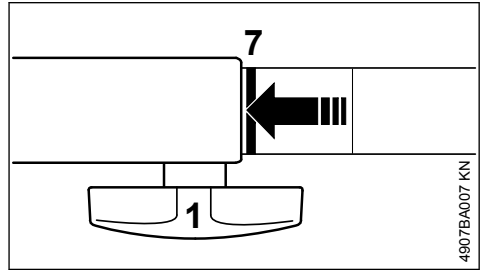
Make sure the ends of the drive tube are clean.

16.2 Connecting the Drive Tube

- ▶ Pull the cap off the drive tube and keep it in a safe place.
- ▶ Put the powerhead on the ground so that it rests on the machine support.
- ▶ Examine ends of drive tube for dirt and clean if necessary.



- ▶ Slide the lug (5) on the front drive tube (2) into the slot (6) in the coupling sleeve as far as stop – if necessary, turn the front drive tube (2) back and forth while pushing it home.



When correctly installed, the red line (7) (arrow point) must be flush with the end of the coupling sleeve.

- ▶ Tighten down the star knob (1) firmly.
- ▶ Attach the harness to the carrying ring.

17 Operating Instructions

17.1 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.

17.2 During Operation

NOTICE

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

17.2.1 Check chain tension frequently

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

17.2.2 Chain cold

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 "Tensioning the Saw Chain".

17.2.3 Chain at operating temperature

The chain stretches and begins to sag. The drive links must not come out of the bar groove – the chain may otherwise jump off the bar. Retension the chain – see "Tensioning the Saw Chain".

NOTICE

The chain contracts as it cools down. If it is not slackened off, it can damage the gear shaft and bearings.

17.2.4 After long period of full-throttle operation

Allow engine to run for a short while at idle speed so that engine heat can be dissipated by the flow of cooling air. This protects engine-mounted components (ignition, carburetor) from thermal overload.

17.3 After Finishing Work

- ▶ Slacken off the chain if you have retensioned it at operating temperature during cutting work.

NOTICE

Always slacken off the chain after finishing work. The chain contracts as it cools down. If it is not slackened off, it can damage the gear shaft and bearings.

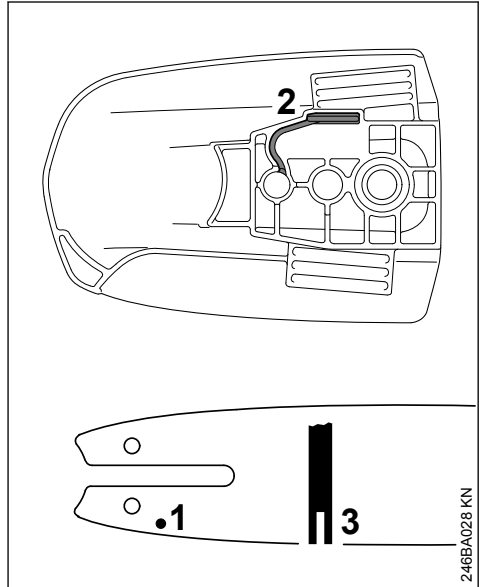
17.3.1 Storing your saw for a short period

Fit the chain scabbard and allow engine to cool down. To avoid condensation, fill the fuel tank and keep the machine in a dry place, well away from sources of ignition, until you need it again.

17.3.2 Storing for a long period

See chapter on "Storing the Machine"

18 Taking Care of the Guide Bar



- ▶ Turn the bar over – every time you sharpen the chain and every time you replace the chain – this helps avoid one-sided wear, especially at the nose and underside of the bar.
- ▶ Regularly clean the oil inlet hole (1), the oil-way (2) and the bar groove (3).
- ▶ Measure the groove depth – with the scale on the filing gauge (special accessory) – in the area used most for cutting.

Chain type	Chain pitch	Minimum groove depth
Picco	1/4" P	4.0 mm

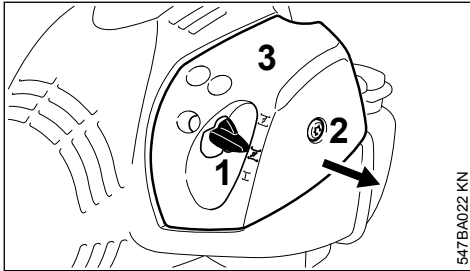
If groove depth is less than specified:

- ▶ Replace the guide bar.

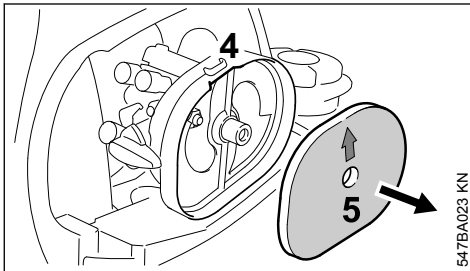
The drive link tangs will otherwise scrape along the bottom of the groove – the cutters and tie straps will not ride on the bar rails.

19 Cleaning the Air Filter

19.1 If there is a noticeable loss of engine power



- ▶ Move the choke lever (1) to $\overline{\text{Z}}$.
- ▶ Turn the screw (2) in the filter cover (3) counterclockwise until the cover is loose.
- ▶ Ease the filter cover (3) over the choke lever and lift it away.
- ▶ Clean away loose dirt from around the filter.



- ▶ Reach into the recess (4) in the filter housing and take out the felt filter (5).
- ▶ Fit a new felt filter element (5). As a temporary measure you can knock it out on the palm of your hand or blow it out with compressed air. Do not wash.

NOTICE

Replace damaged parts.

- ▶ Fit the felt filter (5) in the filter housing, make sure it is properly seated – the arrow points to the recess.
- ▶ Move the choke lever (1) to $\overline{\text{Z}}$.
- ▶ Fit the filter cover in position, making sure the screw is square. Tighten down the screw.

20 Adjusting the Carburetor

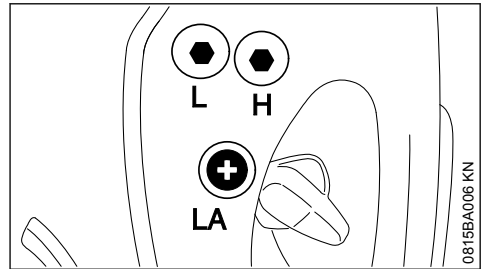
The carburetor comes from the factory with a standard setting.

On this machine it is no longer necessary to adjust the carburetor.

It has been set at the factory to provide an optimum fuel-air mixture in all locations and operating conditions.

20.1 Adjusting Idle Speed

Engine stops while idling



- ▶ Warm up the engine for about 3 minutes.
- ▶ Turn the idle speed screw (LA) slowly clockwise until the engine runs smoothly – the saw chain must not rotate.

Chain rotates when engine is idling

- ▶ Turn the idle speed screw (LA) counterclockwise until the chain stops running and then turn the screw another 1/2 to 3/4 turn in the same direction.



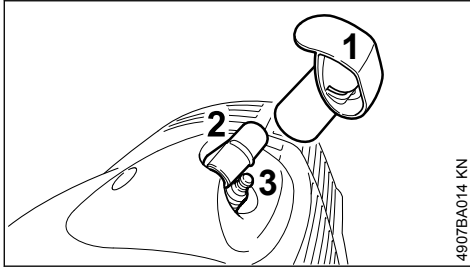
If the saw chain continues to rotate when the engine is idling, have your machine checked and repaired by your servicing dealer.

21 Spark Plug

- ▶ If the engine is down on power, difficult to start or runs poorly at idle speed, first check the spark plug.
- ▶ Fit a new spark plug after about 100 operating hours – or sooner if the electrodes are badly eroded. Install only suppressed spark plugs of the type approved by STIHL – see "Specifications".

21.1 Removing the Spark Plug

- ▶ Shut off the engine.



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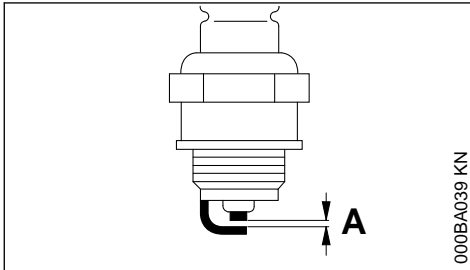
The spark plug boot (2) is under the cap (1).

! WARNING

The cap (1) protects the spark plug boot from damage. Do not operate the machine without a cap – replace a damaged cap.

- ▶ Remove the cap (1).
- ▶ Pull off the spark plug boot (2).
- ▶ Allow the spark plug (3) to cool down.
- ▶ Unscrew the spark plug (3).

21.2 Checking the Spark Plug

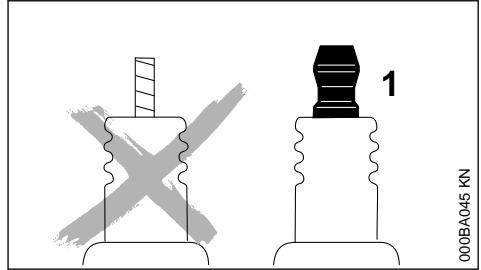


000BA039 KN

- ▶ Clean dirty spark plug.
- ▶ Check electrode gap (A) and readjust if necessary – see "Specifications".
- ▶ Rectify the problems which have caused fouling of the spark plug.

Possible causes are:

- Too much oil in fuel mix.
- Dirty air filter.
- Unfavorable running conditions.



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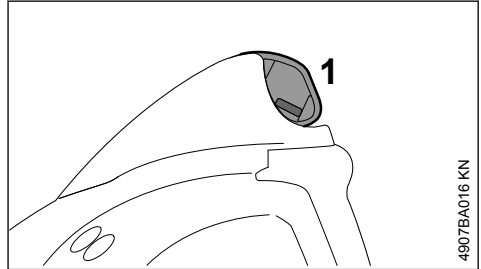
! WARNING

Arcing may occur if the adapter nut (1) is loose or missing. Working in an easily combustible or explosive atmosphere may cause a fire or an explosion. This can result in serious injuries or damage to property.

- ▶ Use resistor type spark plugs with a properly tightened adapter nut.

21.3 Installing the spark plug

- ▶ Screw the spark plug into the cylinder.
- ▶ Press the boot firmly onto the spark plug.



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- ▶ Push the cap (1) on to the spark plug boot as far as stop.

22 Storing the Machine

If not used for periods of about 30 days or longer

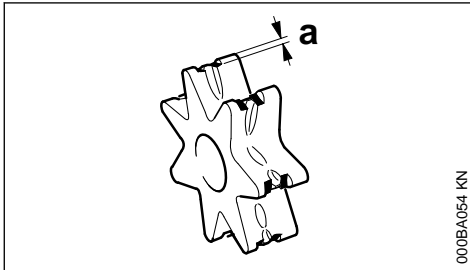
- ▶ Drain and clean the fuel tank in a well-ventilated area.
- ▶ Dispose of fuel properly in accordance with local environmental requirements.
- ▶ If a manual fuel pump is fitted: Press the manual fuel pump at least 5 times.
- ▶ Start the engine and run it at idling speed until it stops
- ▶ Remove the saw chain and guide bar, clean and spray with protective oil. Always place the chain scabbard on the mounted cutting attachment

- ▶ If the unit is stored with the shaft disassembled: Attach the protective cap to the shaft to prevent dirt from getting into the coupling
- ▶ Thoroughly clean the unit, especially the cylinder fins and air filter
- ▶ When using biological chain oil (e.g. STIHL BioPlus), fill the lubricant oil tank
- ▶ Store the machine in a dry and secure location. Keep out of the reach of children and other unauthorized persons

23 Checking and Replacing the Chain Sprocket

- ▶ Remove chain sprocket cover, saw chain and guide bar

23.1 Replace the chain sprocket

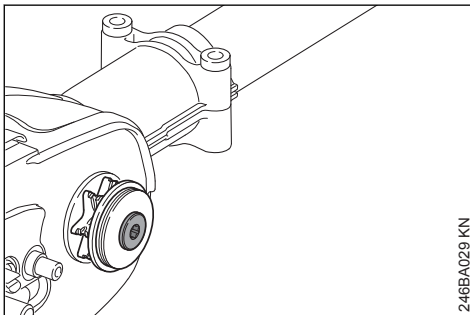


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- replace after using two saw chains or sooner
- if the wear marks (a) on the sprocket are deeper than approx. 0.5 mm (0.02 in) since this would reduce the life of the chain. You can use a gauge (special accessory) to check the depth of the wear marks

Using two saw chains in alternation helps preserve the chain sprocket.

STIHL recommends the use of original STIHL chain sprockets.



246BA029 KN

The chain sprocket is driven via a friction clutch. Have the chain sprocket replaced by an authorized dealer.

STIHL recommends that maintenance and repair work be carried out only by authorised STIHL dealers.

24 Maintaining and Sharpening the Saw Chain

24.1 Cutting effortlessly with a correctly sharpened chain

A properly sharpened chain slices through wood effortlessly and requires very little feed pressure.

Do not work with a dull or damaged chain as it will increase the physical effort required, produce unsatisfactory results and a higher rate of wear.

- ▶ Clean the chain.
- ▶ Check the chain for cracks in the links and damaged rivets.
- ▶ Replace any damaged or worn parts of the chain and match the new parts to the shape and size of the original parts.

Carbide-tipped saw chains (Duro) are particularly wear resistant. STIHL recommends you have your chain resharpened by a STIHL servicing dealer.

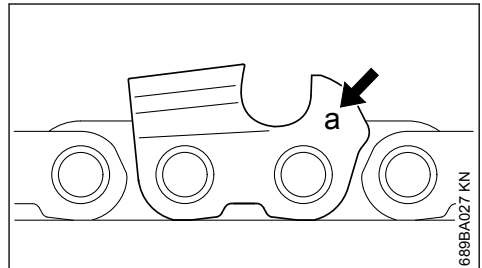


WARNING

It is absolutely essential to comply with the angles and dimensions specified below. If the saw chain is incorrectly sharpened – and in particular if the depth gauge is set too low – there is an increased risk of kickback, with resulting **risk of injury**.

The saw chain cannot be locked in place on the guide bar. Therefore, it is best to remove the chain from the bar and sharpenen it on a workshop sharpening tool (FG 2, HOS, USG).

24.2 Chain pitch



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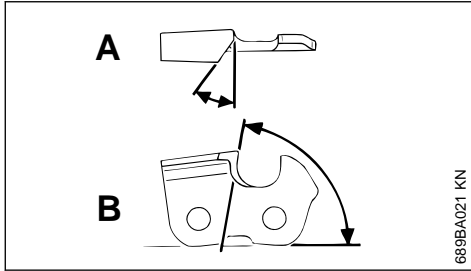
The chain pitch (a) is marked on the depth gauge end of each cutter.

Mark (a)	Chain pitch	
	inch	mm
7	1/4 P	6,35
1 or 1/4	1/4	6,35
6, P or PM	3/8 P	9,32
2 or 325	0.325	8,25
3 or 3/8	3/8	9,32

Select file diameter according to chain pitch – see table “Sharpening Tools”.

You must observe certain angles when resharpening the chain cutter.

24.3 Filing and side plate angles



A Filing angle

STIHL saw chains are sharpened to a filing angle of 30°. Exceptions are ripping chains with a filing angle of 10°. Ripping chains have an X in their designations.

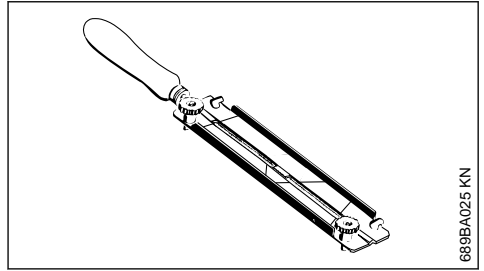
B Side plate angle

The correct side plate angle is obtained automatically if you use the prescribed file holder and file diameter.

Cutter shapes	Angle (°)	
	A	B
Micro = semi chisel cutter, e.g. 63 PM3, 26 RM3, 71 PM3	30	75
Super = chisel cutter, e.g. 63 PS3, 30 26 RS, 36 RS3	30	60
Ripping chain, e.g. 63 PMX, 36 RMX	10	75

The angles must be the same on all cutters. If the angles are uneven: Chain will run roughly, not in a straight line, wear quickly and finally break.

24.4 File holder

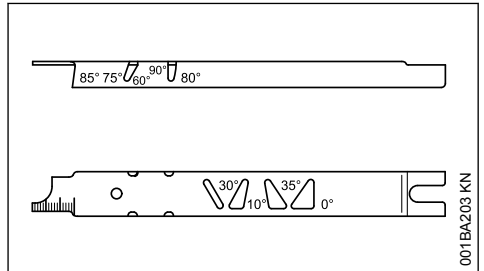


► Use a file holder

A file holder must be used for manual resharpening (see table "Sharpening Tools"). The correct filing angles are marked on the file holder.

Use only special saw chain sharpening files. Other files have the wrong shape and cut.

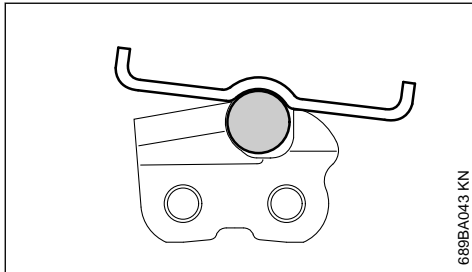
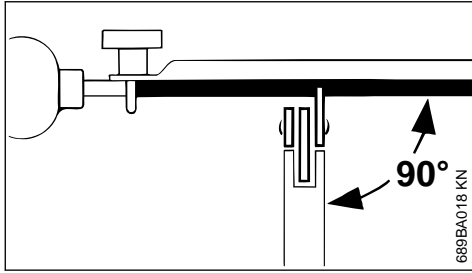
24.5 For checking angles



Use a STIHL filing gauge (special accessory, see table "Sharpening Tools"). This is a universal tool for checking the filing and side plate angles, depth gauge setting, cutter length and groove depth. It also cleans the guide bar groove and oil inlet holes.

24.6 File correctly

- Select sharpening tools according to chain pitch.
- If you use an FG 2, HOS or USG sharpener: Remove the chain from the bar and sharpen according to the instructions supplied with the tool.
- Clamp the bar in a vise if necessary.
- Sharpen the chain frequently, take away as little metal as possible – two or three strokes of the file are usually enough.



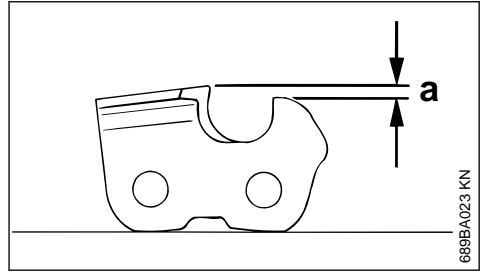
- ▶ Hold the file **horizontally** (at a right angle to the side of the guide bar) and file according to the angles marked on the file holder. Rest the file holder on the top plate and depth gauge.
- ▶ Always file from the inside to the outside of the cutter.
- ▶ The file only sharpens on the forward stroke – lift the file off the cutter on the backstroke.
- ▶ Avoid touching the tie straps and drive links with the file.
- ▶ Rotate the file at regular intervals while filing to avoid one-sided wear.
- ▶ Use a piece of hardwood to remove burrs from the cutting edge.
- ▶ Check angles with the filing gauge.

All cutters must be the same length.

If the cutters are not the same length, they will have different heights. This makes the chain run roughly and can cause it to break.

- ▶ Find the shortest cutter and then file all other cutters back to the same length. It is best to have this work done by a servicing dealer on an electric grinder.

24.7 Depth gauge setting



The depth gauge determines the height at which the cutter enters the wood and thus the thickness of the chip removed.

a Specified distance or setting between depth gauge and cutting edge.

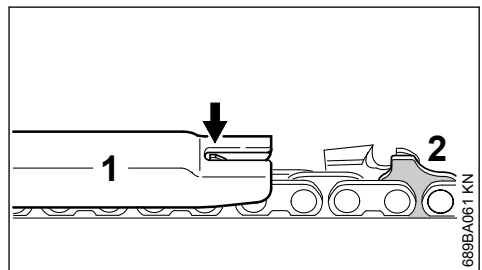
This setting may be increased by 0.2 mm (0.008") for cutting softwood in the mild weather season – no frost.

Chain pitch		Depth gauge Setting (a)	
inch	(mm)	mm	(inch)
1/4 P	(6,35)	0,45	(0.018)
1/4	(6,35)	0,65	(0.026)
3/8 P	(9,32)	0,65	(0.026)
0.325	(8,25)	0,65	(0.026)
3/8	(9,32)	0,65	(0.026)

24.8 Lowering depth gauges

The depth gauge setting is reduced when the chain is sharpened.

- ▶ Use a filing gauge to check the setting every time you sharpen the chain.

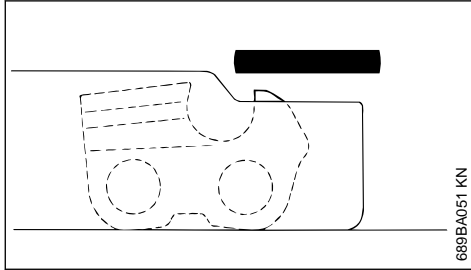


- ▶ Place a filing gauge (1) that matches the chain pitch on the chain and press it against the cutter – if the depth gauge projects from the filing gauge, the depth gauge has to be lowered.

Saw chains with humped drive link (2) – upper part of humped drive link (2) (with service mark) is lowered along with the depth gauge.

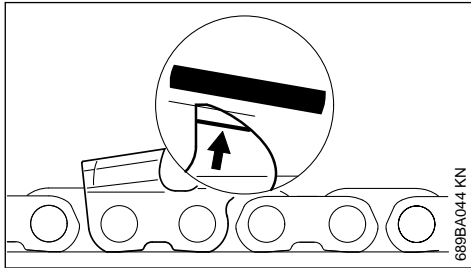
 **WARNING**

The other parts of the humped drive link must not be filed since this may increase the kickback tendency of the power tool.



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- File down the depth gauge until it is level with the filing gauge.

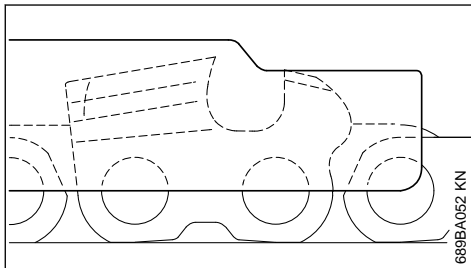


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- File the top of the depth gauge parallel to the stamped service marking (see arrow) – but do not lower the highest point of the depth gauge in this process.

 **WARNING**

The kickback tendency of the machine is increased if the depth gauges are too low.



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- Place the filing gauge on the chain – the highest point of the depth gauge must be level with the filing gauge.

- After sharpening, clean the chain thoroughly, remove filings or grinding dust – lubricate the chain thoroughly.
- Before a long out-of-service period, clean the chain and store it in a well-oiled condition.

Sharpening Tools (special accessories)								
Chain pitch		Round file Ø		Round file	File holder	Filing gauge	Flat file	Sharpening kit ¹⁾
inch	(mm)	mm	(inch)	Part No.	Part No.	Part No.	Part No.	Part No.
1/4 P	(6,35)	3,2	(1/8)	5605 771 3206	5605 750 4300	0000 893 4005	0814 252 3356	5605 007 1000
1/4	(6,35)	4,0	(5/32)	5605 772 4006	5605 750 4327	1110 893 4000	0814 252 3356	5605 007 1027
3/8 P	(9,32)	4,0	(5/32)	5605 772 4006	5605 750 4327	1110 893 4000	0814 252 3356	5605 007 1027
0.325	(8,25)	4,8	(3/16)	5605 772 4806	5605 750 4328	1110 893 4000	0814 252 3356	5605 007 1028
3/8	(9,32)	5,2	(13/64)	5605 772 5206	5605 750 4329	1110 893 4000	0814 252 3356	5605 007 1029

¹⁾consisting of file holder with round file, flat file and filing gauge

25 Inspections and Maintenance by Dealer

25.1 Spark arresting screen in muffler



WARNING

To reduce the risk of fire caused by hot particles escaping from the machine, never operate the machine without a spark arresting screen, or with the spark arresting screen damaged. Do not modify the muffler or spark arresting screen. To reduce the risk of fire from accumulated debris such as pine needles, branches or leaves, ensure that the muffler plugs are in place before taking up work.

NOTICE

According to the law or regulations in some countries or federal states, certain operations may only be carried out if a properly serviced spark arresting screen is provided.

- ▶ If the engine is down on power, check the spark arresting screen in the muffler.

- ▶ If the muffler plugs are missing or damaged, mount new plugs.

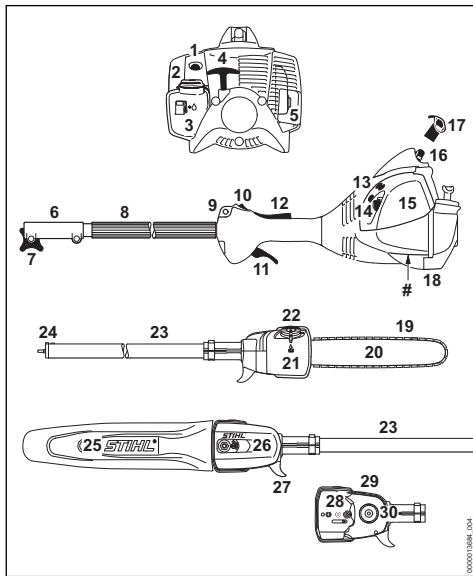
STIHL recommends that maintenance and repair work be carried out only by authorized STIHL dealers.

26 Maintenance and Care

The following intervals apply for normal operating conditions. The specified intervals must be shortened accordingly when working for longer than normal or under difficult cutting conditions (extensive dust, highly resinous lumber, lumber from tropical trees, etc.). If you only use your power tool occasionally, extend the intervals accordingly.		Before starting work	At the end of work and/or daily	Whenever tank is refilled	Weekly	Monthly	Annually	if faulty	if damaged	As required
Complete machine	Visual inspection (condition, leaks)	X		X						
	Clean		X							
Control handle	Function test	X		X						
Air filter	Clean							X		X
	replace								X	
Manual fuel pump (if present)	check	X								
	Have repaired by a specialist dealer ¹⁾								X	
Fuel pickup body in fuel tank	check							X		
	replace					X			X	X
Fuel tank	Clean						X			X
Carburetor	Check idle adjustment – saw chain must not rotate	X		X						
	Readjust idle speed									X
Spark plug	Adjust electrode gap							X		
	Replace after every 100 hours of operation									
Intake port for cooling air	Visual inspection		X							
	Clean									X
Spark arresting screen in muffler	Check if installed	X								
	Check or replace ¹⁾						X			
All accessible screws, nuts and bolts (not adjusting screws)	Tighten									X
Chain lubrication	check	X								
Lubricating oil tank	Clean							X		X
Saw chain	Check, pay attention to sharpness	X		X						
	Checking the chain tension	X		X						
	sharpen									X
Guide bar	Check (wear, damage)	X								
	Clean and turn over									X
	Deburr				X					
	replace								X	X

The following intervals apply for normal operating conditions. The specified intervals must be shortened accordingly when working for longer than normal or under difficult cutting conditions (extensive dust, highly resinous lumber, lumber from tropical trees, etc.). If you only use your power tool occasionally, extend the intervals accordingly.		Before starting work	At the end of work and/or daily	Whenever tank is refilled	Weekly	Monthly	Annually	If faulty	If damaged	As required
Chain sprocket	check				X					
	Replace ¹⁾									X
Safety information label	replace							X		
¹⁾ STIHL recommends STIHL dealers										

27 Main Parts



- 1 Manual fuel pump
- 2 Fuel cap
- 3 Fuel tank
- 4 Starter grip
- 5 Muffler
- 6 Coupling sleeve
- 7 Clamping screw
- 8 Shaft with handle hose
- 9 Carrying ring
- 10 Stop switch

- 11 Throttle trigger
- 12 Throttle trigger lockout
- 13 Carburetor adjusting screws
- 14 Choke lever
- 15 Air filter cover
- 16 Spark plug boot
- 17 Cap
- 18 Machine support
- 19 Oilomatic saw chain
- 20 Guide bar
- 21 Oil tank
- 22 Oil tank cap
- 23 Shaft
- 24 Sleeve
- 25 Chain scabbard
- 26 Chain sprocket cover
- 27 Hook
- 28 Chain tensioner
- 29 Gauge bar
- 30 Chain sprocket
- # Serial number

28 Specifications

28.1 Engine

Single-cylinder two-stroke engine
 Displacement: 27.2cm³
 Cylinder bore: 34 mm
 Piston stroke: 30 mm
 Engine power acc. to ISO 8893: 0.8 kW at 8500 rpm

Idle speed acc. to ISO 11680:	2800 ± 50 rpm
Cut-off speed (nominal value):	10000 rpm
Max. output shaft speed (chain sprocket):	7900 rpm

28.2 Ignition system

Electronic magneto ignition

Spark plug (suppressed):	NGK CMR 6 H
Electrode gap:	0.5 mm

28.3 Fuel system

All-position diaphragm carburetor with integral fuel pump

Fuel tank capacity:	340 cm ³ (0.34 l)
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28.4 Chain lubrication

Fully automatic, speed-controlled oil pump with rotary piston

Oil tank capacity:	120 cm ³ (0.12 l)
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28.5 Weight

dry, without cutting attachment

HT 56 C:	6.4 kg
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28.6 Cutting attachment

The actual cutting length may be less than the specified cutting length.

28.6.1 Rollomatic E Mini guide bars

Blade length:	25, 30 cm
Pitch:	1/4" P (6.35 mm)
Groove width:	1.1 mm

28.6.2 Saw chain 1/4" P

Picco Micro3 (71PM3) Type 3670

Pitch:	1/4" P (6.35 mm)
Drive link gauge:	1.1 mm

28.6.3 Chain sprocket

8-tooth for 1/4" P

28.7 Sound and Vibration Levels

For further details on compliance with Vibration Directive 2002/44/EC, see

www.stihl.com/vib

28.7.1 Sound pressure level L_{peq} in accordance with ISO 22868

HT 56 C:	91 dB(A)
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28.7.2 Sound power level L_w in accordance with ISO 22868

HT 56 C:	106 dB(A)
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28.7.3 Vibration level $a_{hv,eq}$ in accordance with ISO 22867

Shaft:

HT 56 C:	5.2 m/s ²
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Control handle:

HT 56 C:	4.9 m/s ²
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The K-factor in accordance with Directive 2006/42/EC is 2.0 dB(A) for the sound pressure level and sound power level; the K-factor in accordance with Directive 2006/42/EC is 2.0 m/s² for the vibration level.

28.8 REACH

REACH is an EC regulation and stands for the Registration, Evaluation, Authorization and Restriction of Chemical substances.

For information on compliance with the REACH regulation (EC) No. 1907/2006 see

www.stihl.com/reach

28.9 Exhaust Emissions

The CO₂ value measured in the EU type approval procedure is specified at

www.stihl.com/co2

in the product-specific technical data.

The measured CO₂ value was determined on a representative engine in accordance with a standardized test procedure under laboratory conditions and does not represent either an explicit or implied guarantee of the performance of a specific engine.

The applicable exhaust emission requirements are fulfilled by the intended usage and maintenance described in this User Manual. The operating license shall be void if the engine is modified in any way.

29 Maintenance and Repairs


Users of this machine may only carry out the maintenance and service work described in this user manual. All other repairs must be carried out by a servicing dealer.

STIHL recommends that you have servicing and repair work carried out exclusively by an authorized STIHL servicing dealer. STIHL dealers are regularly given the opportunity to attend training

courses and are supplied with the necessary technical information.

When repairing the machine, only use replacement parts which have been approved by STIHL for this power tool or are technically identical. Only use high-quality replacement parts in order to avoid the risk of accidents and damage to the machine.

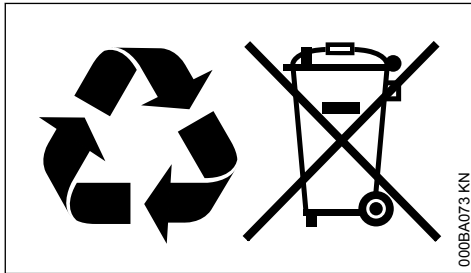
STIHL recommends the use of original STIHL replacement parts.

Original STIHL parts can be identified by the STIHL part number, the **STIHL** logo and the STIHL parts symbol  (the symbol may appear alone on small parts).

30 Disposal

Contact the local authorities or your STIHL servicing dealer for information on disposal.

Improper disposal can be harmful to health and pollute the environment.



- ▶ Take STIHL products including packaging to a suitable collection point for recycling in accordance with local regulations.
- ▶ Do not dispose with domestic waste.

31 EC Declaration of Conformity

ANDREAS STIHL AG & Co. KG
Badstr. 115
D-71336 Waiblingen
Germany

declare under our sole responsibility that

Designation: Pole pruner
Make: STIHL
Series: HT 56 C
Serial identification number: 4139
Displacement: 27.2cm³

conforms to the relevant provisions of Directives 2011/65/EU, 2006/42/EC and 2014/30/EU and

has been developed and manufactured in compliance with the following standards in the versions valid on the date of production:

EN ISO 11680-1, EN 55012, EN 61000-6-1

The EC type examination was carried out by

DPLF

Deutsche Prüf- und Zertifizierungsstelle für Land- und Forsttechnik GbR
(NB 0363)
Spremlberger Straße 1
D-64823 Groß-Umstadt

Certification no.

HT 56 C: D-EG 13.00494/01

Technical documents deposited at:

ANDREAS STIHL AG & Co. KG
Produktzulassung

The year of manufacture and serial number are applied to the product.

Done at Waiblingen, 03.02.2020

ANDREAS STIHL AG & Co. KG

pp



Dr. Jürgen Hoffmann

Director Product Certification & Regulatory Affairs

CE

www.stihl.com



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