

**STIHL**

**STIHL HT 102, 103, 132, 133**

Instruction Manual  
Manual de instrucciones



**WARNING**  
Read the instruction manual thoroughly before use and follow all safety precautions. Improper use can cause serious or fatal injury.

**ADVERTENCIA**  
Antes de usar la motosierra lea y siga los avisos de seguridad y las instrucciones de seguridad. El uso incorrecto puede causar lesiones graves o mortales.



English

**Guide to Using this Manual**

**Pictograms**

The meanings of the pictograms attached to or enclosed on the machine are explained in this manual. Depending on the model concerned the following pictograms may be on your machine.

- Fuel tank for gasoline and engine oil mixture
- Tank for bar and chain oil
- Direction of chain rotation
- Press to operate manual fuel pump
- Manual fuel pump

**Symbols in Text**

Many operating and safety instructions are supported by illustrations. The individual steps or procedures described in the manual may be marked in different ways:

- A bullet marks a step or procedure.

A description of a step or procedure that refers directly to an illustration may contain illustrations that appear in the illustration. Example:

- Loosen the screw (1).
- Lever (2) ...

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

**⚠ DANGER**  
Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

**⚠ WARNING**  
Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

**NOTICE**  
Indicates a risk of property damage, including damage to the machine or its individual components.

**Engineering Improvements**

STIHL's philosophy is to continually improve all its products. As a result, engineering changes are made from time to time. Therefore, some changes, modifications and improvements may not be covered in this manual. If the operating characteristics or the appearance of your machine differs from those

described in this manual, please contact your STIHL dealer or the STIHL distributor for your area for assistance.

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**⚠ WARNING**  
Because a pole pruner is a high-speed, fast-cutting power tool with an extended reach, special safety precautions must be observed to reduce the risk of personal injury. Careless or improper use may cause serious or even fatal injury.

Allow only persons who fully understand this manual to operate your pole pruner. To receive maximum performance and satisfaction from your STIHL pole pruner, it is important that you read, understand and follow the safety precautions and the operating and maintenance instructions in chapter Safety Precautions and Working Techniques before using your pole pruner. For further information you can go to [www.stihlusa.com](http://www.stihlusa.com).

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

exposed to vibration are mentioned as factors in the development of carpal tunnel syndrome, hand-arm vibration syndrome, peripheral neuropathy, and other diseases. In order to reduce the risk of these diseases, please note the following:

- Most STHL power tools are available with an anti-vibration (AV) system designed to reduce the transmission of vibrations created by the machine to the operator's hands. An AV system is recommended for those persons using power tools on a regular or sustained basis.
- Wear gloves and keep your hands warm.
- Keep the AV system well maintained. A power tool with loose components or with damaged or worn AV elements will tend to have higher vibration levels.
- Maintain a firm grip at all times, but do not squeeze the handles with constant, excessive pressure. Take frequent breaks.

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

**WARNING**  
The ignition system of the STHL unit produces an electromagnetic field of a very low intensity. This field may interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with a pacemaker should

consult their physician and the pacemaker manufacturer before operating this tool.

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



To reduce the risk of injury to your eyes never operate your power tool unless wearing goggles or properly fitted protective eyewear. Do not use eye protection with ANSI Z 87.1 "+" or higher applicable national standard. To reduce the risk of injury to your face the STHL recommends that you also wear a face shield or face screen over your goggles or protective glasses.

Wear an approved safety hard hat to reduce the risk of injury to your head. Power tool noise may damage your hearing. Wear sound barriers (ear plugs or ear muffs) to protect your hearing. Continual and regular use of power tools may cause hearing checked regularly.

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

Always wear heavy-duty gloves (e.g. made of leather or other wear-resistant material) when handling the machine. Use the cutting tool, handle and power tool grips and help to protect your hands.



Clothing must be sturdy and free of loose fabric. Avoid loose-fitting clothing, such as long pants made of heavy material to help protect your legs. Do not wear shorts, sandals or go barefoot.



Avoid loose-fitting jackets, scarfs, neckties, jewelry, flared or curled pants, unconfined long hair or anything that could become caught on branches, brush or the moving parts of the unit. Secure hair so it is above shoulder level. Good footing is very important. Wear sturdy boots with non-slip soles. Steel-toed safety boots with cut-resistant inserts are recommended.

**THE POWER TOOL**

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

**Safety Precautions and Working Techniques**

**WARNING**  
Because a pole pruner is being repaired, disassembled, or extended reach, special safety precautions must be observed to reduce the risk of personal injury.



It is important that you read, fully understand and observe the following safety precautions and warnings. Read the instruction manual and the safety precautions periodically. Careless or improper use may cause serious or fatal injury.

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

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

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

**WARNING**  
Check for fuel leakage when refueling or during operation. If a fuel leak is found, do not start or run the machine until the leak has been repaired. If fuel has been spilled, clean it up immediately. Take care not to get fuel on your clothing. If this happens, change your clothing immediately.

**WARNING**  
To reduce the risk of fuel spillage and fire from an improperly installed fuel cap, correctly position and tighten the fuel cap in the fuel tank opening.

**WARNING**  
Unintentional fuel spillage can cause an improperly installed fuel filler cap to loosen or come off. In order to reduce the risk of fuel spillage and fire, tighten fuel filler cap by hand as securely as possible.

**WARNING**  
See also the "Fueling" chapter in this instruction manual for additional information.

**Before Starting**  
Take off the chain guard (sawbar) and inspect the pole pruner for proper condition and proper maintenance (see the maintenance chart in the instruction manual).

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

**WARNING**  
If this tool is subjected to unusually high loads for which it was not designed (e.g. heavy impact or fall), always check that it is in good condition before continuing work. Check in particular that the fuel system is tight (no leaks) and working properly. Do not operate the machine if it is damaged or operating in a dangerous manner.

**WARNING**  
Always check your power tool for proper chain tension and operation before starting. If the chain is loose, stop working and tighten the sprocket. The throttle trigger must move freely and always spring back to the idle position. Never attempt to modify the controls or safety devices.

**WARNING**  
Check fuel system for leaks, especially the visible parts, e.g. filler cap, hose connections, manual fuel pump (only for power tools equipped with a manual fuel pump). To reduce the risk of personal injury or property damage from fire, do not start the engine if there are leaks or damage. Have the machine repaired by a servicing dealer before using it.

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

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

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

**WARNING**  
For proper assembly of the bar and chain follow the procedure described in "Chain" of your instruction manual. STHL's O-ring chain guide bar and sprocket must match each other in gauge and pitch.

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

**WARNING**  
Adjust carrying harness and hand trip to suit your size before starting work.

**WARNING**  
To reduce the risk of serious personal injury from fire, start the engine at least 10 feet (3 m) from the fueling spot, outdoors only.

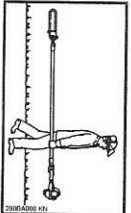
**WARNING**  
Start and operate your pole pruner without assistance. Your power tool is a one-person machine. Do not allow persons in the general work area, even when standing.

**WARNING**  
For specific starting instructions, see the appropriate section of your manual.

**WARNING**  
Fuel your machine in well-ventilated areas, outdoors. Always shut off the engine and allow it to cool before refueling. Gasoline vapor pressure may build up inside the fuel tank depending on the fuel used, the weather or other environmental conditions and the use of the machine.

**WARNING**  
In order to reduce the risk of burns and other personal injury from escaping gas vapor and fumes, remove the fuel filler cap on your power tool carefully so as to blow any pressure build-up in the tank to a safe distance. When removing the fuel filler cap, the engine is running. Select bare ground for fueling and move at least 10 feet (3 m) from the fueling spot before starting the engine. Wipe off fuel from the fuel filler cap before starting your machine.

**WARNING**  
Gasoline is an extremely flammable liquid that can ignite by a spark or other ignition source. It can cause fire and serious burn injury or property damage. Use extreme caution when handling gasoline or fuel mix. Do not smoke or bring any fire or flame near the fuel filler cap. Do not use your power tool. Note that gasoline fumes may escape from the fuel system or gas can during fueling operations.



The power tool should be carried only in a manner that prevents the start in a horizontal position. Keep the fuel filler cap from your body and the cutting attachment behind you.

**WARNING**  
Accidental acceleration of the engine can cause fuel to ignite and cause serious injuries. Always switch off the engine and fit the hood over the cutting attachment before refueling. When refueling, always secure it to prevent fuel spillage and damage to the unit.

**WARNING**  
Your STHL power tool uses an oil-gasoline mixture for fuel (see the chapter on "Fuel" in this instruction manual).

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

**▲WARNING**  
In order to properly control your pole pruner, always maintain good balance and a firm footed. Never work on a ladder, on a tree or on any other insecure working height. Do not overreach. When working at a height above 15 feet (4.5 m) use a fall bucket. For pole pruner with adjustable shaft, expand the shaft only as far as necessary for the intended application.

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

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

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



**▲WARNING**  
As soon as the engine is running, this machine generates toxic exhaust fumes containing chemicals, such as unburned hydrocarbons, lead and carbon monoxide. Lead and carbon monoxide can be known to cause respiratory problems, cancer, birth defects, or other reproductive harm and other injuries. Some of the gases (e.g. carbon monoxide) may be colorless and odorless and can cause asphyxiation or death very quickly. To reduce the risk of serious or fatal injury/illness from inhaling toxic fumes, never run the machine indoors or in poorly ventilated locations. If exhaust fumes become concentrated, use the following ventilation procedures from work area to permit proper ventilation before proceeding and/or take frequent breaks to allow fumes to dissipate before they become concentrated.

**▲WARNING**  
Inhalation of certain dusts, especially organic dusts such as mold or pollen, can cause susceptible persons to have an allergic or asthmatic reaction.

With the engine running only at idle, attach the power tool to the spring hook of your belt or appropriate chapter of this manual.

**▲WARNING**  
When you pull the starter grip, do not wrap the starter rope around your hand. Do not let the grip strap break, but guide the starter rope to permit the rope to retract properly. Failure to follow this procedure may result in injury to your hand or fingers and may damage the starter mechanism.

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

If you cannot set the correct idle speed, have your STHL dealer check your power tool and make proper adjustments and repairs. Proper chain tension is very important at all times. Check it at regular intervals (during work breaks and only when the pole pruner is shut off). If the chain becomes loose while cutting, switch off the engine and tighten. Never try to tighten the chain while the engine is running.



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

**▲WARNING**  
To reduce the risk of injury from loss of control do not attempt to "trip start" your power tool. Trip starting means pushing the machine away from the operator, or allowing it to drop toward the ground, while pulling on the starter grip. This method is very dangerous because you may lose control of the machine.

Once the engine has started, immediately grip the handle trigger with both hands and allow the engine to slow down to idle.

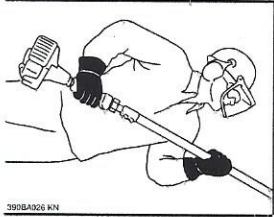
Substantial or repeated inhalation of dusts and other airborne contaminants, in particular those with a smaller particle size, may cause respiratory or other illnesses from hand tools. But also from some softwoods such as Western Red Cedar. Control dust at the source where possible. Use good work practices, such as always cutting with a properly sharpened chain (which produces wood chips rather than fine dust) and operating the unit so that the dust is blown away from the operator. Follow the recommendations of EPA/ OSHA/ NIOSH and occupational and trade associations with respect to dust. (Particulate matter). When the inhalation of dust cannot be substantially controlled, i.e., kept at or near the ambient (background) level, the operator and bystanders should wear appropriate respiratory protection. If you have any reason to believe that you might be cutting asbestos, immediately contact your employer or a local OSHA representative.

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

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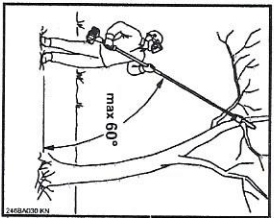
**During Operation**  
**Holding and Controlling the Power Tool**  
Always hold the unit firmly with both hands on the handles while you are working. Wrap your fingers and thumbs around the handles.

Place your left hand on the shaft and your right hand on rear grip and handle trigger. Left hand must follow basic instructions to help maintain control of your pole pruner while working at all times.



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

It could snap and fall toward the operator while being cut. Also look for broken or dead branches which could vibrate loose and fall on the operator. If branch is thick or heavy, make a shallow relief cutting slash from the branch before splitting of the branch. See chapter on "Using the Unit".



**▲WARNING**  
To reduce the risk of severe or even fatal injury from falling objects do not cut vertically above your body. Hold the pole pruner at an angle of not more than 60° from the horizontal level (see picture). Objects may fall in unexpected directions. Do not stand directly underneath the limb being cut. Watch for falling wood! As soon as the limb cut branch starts to fall, step aside and keep a sufficient distance away from the falling wood.

**▲WARNING**  
Always pull the unit out of the cut with the chain running to reduce the possibility of pinching the cutting attachment. Don't put pressure on the pole pruner when reaching the end of a cut. The pressure may cause the end of a cut to pop out of the cut or fall out. If the bar becomes pinched and caught in the branch so that the chain can no longer move, stop the pole pruner and carefully move the branch to open the pinch and release the bar.

**▲WARNING**  
If a rotating saw chain strikes a rock or other hard object, sparks may be created which can ignite flammable materials. Flammable materials can include dry vegetation and brush, particularly when weather conditions are hot and dry. When there is a risk of fire or wildfire, do not use a power tool around flammable materials or around dry vegetation or brush. Contact your local fire authorities or the U.S. Forest Service if you have any question about whether vegetation and weather conditions are suitable for the use of a pole pruner.

**▲WARNING**  
Never modify your muffler. Any modification could cause an increase in heat radiation, sparks or sound level, thereby increasing the risk of fire, burn injury or hearing loss. The engine STHL permanently changes the engine STHL.

**▲WARNING**  
Your power tool is not insulated against electric shock. To reduce the risk of electrocution, never operate this power tool in the vicinity of any wires or cables (power, etc.) which may be carrying electric current. Electricity can jump from one point to another by means of arcs. Higher voltage increases the distance electricity can jump through branches, especially if the wire. Maintain a clearance of at least 50 feet (15 m) between the pole pruner (including any branches it is contacting) and any electrical line carrying the current. Before working with less clearance, contact your electric utility and make sure the current is turned off.

**Operating Instructions**  
**▲WARNING**  
Do not operate your power tool using the starting throttle position, as you do not have control of the engine speed. In the event of an emergency, switch off the engine immediately by pressing the stop switch.

**▲WARNING**  
To reduce the risk of cut injuries, keep hands and feet away from the saw chain. Never touch a moving chain with your hand or any other part of your body.

recommendations having your muffler serviced and repaired by a STHL servicing dealer.

**▲WARNING**  
The muffler and other parts of the engine (e.g. fire of the cylinder, spark plug) become hot during operation and remain hot for a while after stopping the engine. To reduce risk of burns, do not touch the muffler and other parts while they are hot. Keep the area around the muffler clean. Remove excess lubricant and all debris such as pine needles, branches sitting on concrete, metal, bare ground or solid wood (e.g. the trunk of a felled tree) away from any combustible substances.

**▲WARNING**  
An improperly mounted or damaged cylinder housing or damaged muffler may interfere with the cooling process of the muffler. To reduce the risk of fire or burn injury, do not continue work with a damaged or improperly mounted cylinder housing or a damaged/delivered muffler shell. Your muffler is furnished with a spark arresting screen designed to reduce the risk of fire from the emission of hot particles. Never operate your unit with a missing or damaged spark arresting screen. If your gasoil mix ratio is correct (i.e., not too rich), this screen will filter heat from the muffler and need no service or maintenance. If you experience loss of performance and you suspect a clogged screen, have your

The saw chain continues to move for a short period after the throttle trigger is released (inertia effect). Accelerating the engine while the chain is blocked increases the load and will cause the clutch to slip continuously. This may result in overheating and damage to important components (e.g. clutch, polymer housing components) which can then increase the risk of injury if the chain moving while the engine is idling.

**▲WARNING**  
If the chain becomes clogged, always turn off the engine and make sure the chain has stopped before cleaning. Make sure that the saw chain does not touch any foreign materials such as rocks, fences, nails and the like. Such objects may be flung off and injure the operator or bystanders, or damage the saw chain.

**▲WARNING**  
Prior to limbing, clear the working area from interfering limbs and brush. Then, establish an escape area away from where the cut limbs can fall, and remove all obstacles. Keep work area clear - move away from limbs. Place all tools and equipment at a safe distance from the branches being limbed, but not in the escape area.

**▲WARNING**  
Always observe the general condition of the tree. Look for decay and rot in the trunk and branches. If it is rotted inside,

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operator. Pushback frequently occurs when the top of the bar is used for cutting.

**To Avoid Pushback:**

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

**MAINTENANCE, REPAIR AND STORAGE**

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

**WARNING**

STHL recommends the use of STHL replacement parts for maintenance and repair. Use of parts manufactured by others may be extremely dangerous and could result in serious or fatal injury.

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

**WARNING**

Always stop the engine and make sure that the chain is stopped before doing any maintenance or repair work or clearing the power tool. Do not attempt any maintenance or repair work until the engine is completely cooled down. STHL recommends that you have such work performed by your STHL servicing dealer.

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

**WARNING**

To reduce the risk of fire and burn injury or property damage, use only spark plug wire approved by STHL. Always plug the spark plug terminal in the proper size terminal of the proper size. Never if terminal has detachable SAE adapter nut, it must be securely attached. A loose connection between spark plug terminal and the ignition wire connector in the boot may create arcing that could ignite combustible fumes and cause a fire. Keep the spark plug clean and make sure the ignition lead is in good condition.

**WARNING**

Never test the ignition system with the ignition wire boot removed from the spark plug or with a removed spark plug. Since uncontrolled sparking may cause a fire.

**WARNING**

Do not operate your power tool if the muffler is damaged, missing or modified. An improperly maintained muffler will increase the risk of fire and hearing loss. Your muffler is equipped with a spark-arresting screen to reduce the risk of fire. Do not operate your power tool if the screen is damaged or clogged. Remember that the risk of a brush or forest fire is greater in hot or dry weather.

In California, it is a violation of § 4442 or § 4443 of the Public Resources Code to use or operate gasoline-powered tools on forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a complying spark arrester that is maintained in effective working order. The overoperator of this product is responsible for properly maintaining the governmental anti-fire dependencies, such as the U.S. Forest Service, may have similar requirements. Contact your local fire agency or forest service for the laws or regulations relating to fire protection requirements.

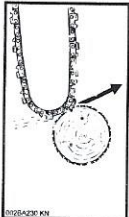
**WARNING**

Keep the chain, bar and sprocket clean; replace worn sprockets or chains. Keep the chain sharp. You can wood a dull chain when easy-to-cut wood becomes hard to cut or burn marks appear on the wood. Keep chain at proper tension. Tighten all nuts, bolts and screws except the carburetor adjustment screws after each use.

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**Kickback:**

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



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

**To Avoid Kickback:**

1. The best protection from kickback is to avoid kickback situations.
2. Be aware of the location of the guide bar nose at all times.

Never let the nose of the guide bar contact a solid object when cutting. Be especially careful near wire fences and when cutting small, tough limbs, which may easily catch the chain.

3. Cut only one limb at a time.

**A = Pull-in**

- Kickback.
- Pushback.
- Pull-in.

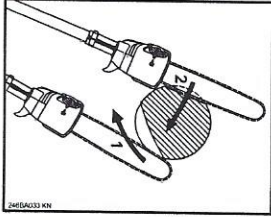
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**Cross-cut**



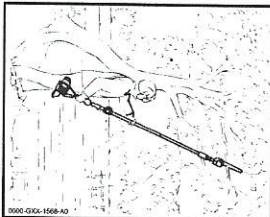
To avoid pinching the bar in the cut, position the cutting attachment with the housing against the branch and then perform the cross-cut from the top downwards.

**Relieving cut**



To avoid tearing the bark on thick branches, always start by performing a relieving cut (1) on the underside of the branch.

**Cutting above obstacles**



The machine's long reach makes it possible to prune branches that are high obstacles, such as trees or lines. The height of the lift bucket depends on the position of the branch.

**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.

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**Using the Unit**

**Preparations**

- Wear suitable protective clothing, observe safety precautions.
- Adjust telescoping shaft to the required length (HT 103, HT 133 only).
- Start the engine.
- Put on the shoulder strap.

**Cutting Sequence**

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

**WARNING**

Never stand directly underneath the branch you are cutting. Be alert to falling branches. Note that a branch may spring back at you after it hits the ground – risk of injury.

**Disposal**

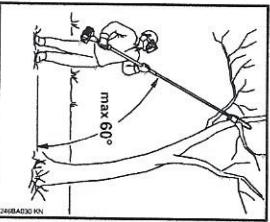
Do not throw cuttings into the garbage can – they can be composted.

**Working Techniques**

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

**HT 102, HT 132**

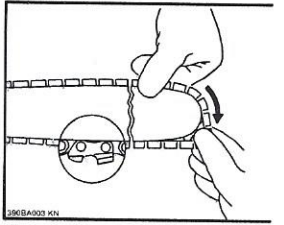
Always hold the shaft with your left hand in the area of the handle hose.



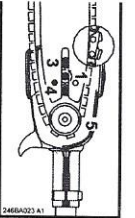
The shaft should always be held at an angle of 60° or less. The least firing working position is a tool angle of 60°. Any lesser angle may be used to suit the situation.

HT 102, HT 103, HT 132, HT 133

### Fit the Chain

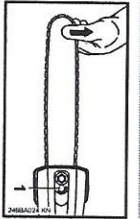


- ▲ WARNING**
- Wear work gloves to protect your hands from the sharp cutters.
  - Fit the chain – start at the bar nose.



- Fit the guide bar over the screw (3) and engage end of tensioner slide in the hole (4) – place the chain over the sprocket (5) at the same time.
- Turn the tensioning screw (1)
- Turn the counter-clockwise until there is very little chain sag on the underside of the bar – and the drive link lugs are engaged in the bar groove.
- Refit the sprocket cover and screw on the nut fingertight.
- Go to chapter on Tensioning the Saw Chain.

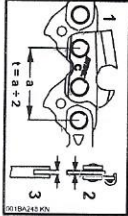
### Tensioning the Chain



- Restoring during cutting work:
- Shut off the engine.
  - Loosen the nut.
  - Hold the bar nose up.
  - Use a screwdriver to turn the tensioning screw (1)
  - counter-clockwise 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 the that has been in use for some time.
  - Check chain tension frequently – see chapter on "Operating instructions".

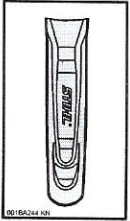
### Cutting Attachment

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 (1) of the saw chain (1), chain sprocket and the nose of the sprocket of the Rotomatic 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.

### Chain scabbard



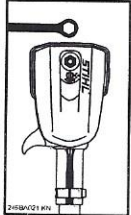
Your pole pruner comes standard with a chain scabbard that matches the cutting attachment.

If you use guide bars of different lengths on the pole pruner, the length of the chain scabbard must be matched to the guide bar to reduce the risk of injury. It should cover the full length of the guide bar.

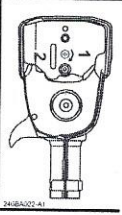
The length of the matching guide bars is marked on the side of the chain scabbard.

### Mounting the Bar and Chain

#### 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.

### Fuel

This engine is certified to operate on unleaded gasoline and the STiHL two-stroke engine oil at a mix ratio of 50:1. Your engine requires a mixture of high-quality unleaded gasoline and two-stroke air-cooled engine oil.

Use mid-grade unleaded gasoline with a minimum octane rating of 89 (R+M)/2 and no more than 10% ethanol content. Fuel with an octane rating below 89 may increase engine temperatures. This, in turn, increases the risk of piston seizure and damage to the engine.

The chemical composition of the fuel is also important. Some fuel additives not only detrimentally affect elastomers (e.g. O-rings, seals, hoses, fuel lines, etc.), but also reduce the efficiency of catalytic converters as well. The use of leaded gasoline is prohibited. The STiHL recommends that you use only quality unleaded gasoline!

Gasoline with an ethanol content of more than 10% can cause running problems and major damage in engines and should not be used.

For further details, see [www.STiHLusa.com/ethanol](http://www.STiHLusa.com/ethanol)

The ethanol content in gasoline affects engine performance. It may be necessary to replace the catalytic converter with various ethanol contents.

### ▲ WARNING

To reduce the risk of personal injury from loss of control and/or contact with the engine, always use the correct unit with correct idle speed. At the correct idle speed, the cutting tool should not move.

If your power tool's idle speed is incorrectly adjusted, always authorized STiHL service dealer check your machine and make the proper adjustments and repairs.

The idle speed and maximum speed of the engine change if you switch from a fuel with a certain ethanol content to another fuel with a much higher or lower ethanol content.

This problem can be avoided by always using fuel with the same ethanol content.

To ensure the maximum performance of your STiHL engine, use a high quality 2-cycle engine oil, such as STiHL 2-Cycle engine oils. STiHL 2-cycle engine oils are specially designed for STiHL engines. To help your engine run cleaner and reduce harmful carbon deposits, STiHL recommends using STiHL HP Ultra 2-cycle engine oil or use an equivalent high quality 2-cycle engine oil.

To meet the requirements of EPA and CARB we recommend to use STiHL HP Ultra oil or equivalent.

Do not use BIA or TCW rated (two-stroke water cooled) mix oils or other mix oils that state they are for use in both water cooled and air cooled engines (e.g., outdoor motors, snowblowers, chain saws, mopsaws, etc.).

### Take care when handling gasoline.

Avoid contact with the skin and avoid breathing in the vapors. After refueling the pump, first remove the container from your vehicle and place the container on the ground before filling. To reduce the risk of sparks from static discharge and resulting fire and/or explosion, do not fill fuel containers that are sitting in or on a vehicle or trailer. The container should be kept tightly closed in order to limit the amount of moisture that gets into the mixture. The machine's fuel tank should be cleaned as necessary.

### STiHL-Motolux

STiHL recommends the use of STiHL Motolux. STiHL Motolux has a high octane rating and ensures that you always use the right gasoline/oil mix ratio.

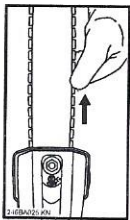
STiHL Motolux uses STiHL HP Ultra two-stroke engine oil suited for high performance engines.

For further details, see [www.STiHLusa.com/ethanol](http://www.STiHLusa.com/ethanol)

### Fuel mix steps

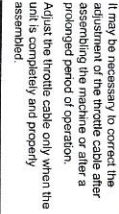
If not using STiHL Motolux, only mix standard fuel for a few days or work not to exceed 100 hours. Use only approved fuel-combiners only. When mixing, pour oil into the container first, and then add gasoline. Close the container and shake it vigorously by hand to ensure proper mix of oil and gasoline.

### Checking Chain Tension



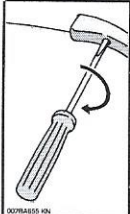
- Shut off the engine.
- Wear work gloves to protect your hands.
- The chain must fit snugly against the sprocket teeth at the end and must still be possible to turn the chain along the bar by hand.
- If necessary, re-tension the chain. A new chain has to be re-tensioned more often than one that has been in use for some time.
- Check chain tension frequently – see chapter on "Operating instructions".

### Adjusting the Throttle Cable



It may be necessary to correct the adjustment of the throttle cable after assembling the machine or after a prolonged period of operation.

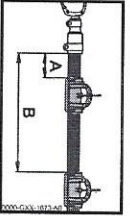
Adjust the throttle cable only when the nut is completely and properly assembled.



- Set the throttle trigger to the full throttle position.
- Carefully rotate the screw in the throttle trigger in the direction of the arrow until you feel initial resistance. Then slowly rotate the handle turn in the same direction.

### Fitting the Clip

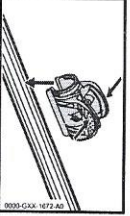
#### Clip-On Carrying Ring (only versions with telescopic shaft)



Position of carrying ring

Depending on the shaft length, the following positions are recommended:

- Telescopic state compressed, distance A = 15 cm (6 in)
- Telescopic shaft fully extended, distance B = 50 cm (20 in)



- Squeeze the ends (arrows) together and push carrying ring onto the shaft.

### Chain Lubricant

For automatic and reliable lubrication of the chain and guide bar – use only an environmentally compatible quality chain and bar lubricant. Repair lubricant is not suitable. For more information see the STIHL brochure 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. Refined 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.

Gasoline	Oil (STIHL 50:1 or equivalent high-quality oils)
1 Liters	0.02 (20)
5	0.10 (100)
10	0.20 (200)
20	0.40 (400)

US gal.	US fl.oz.
1	2.6
1 1/2	6.4
5	12.8

**WARNING**  
To reduce the risk of fire and personal injuries due to escaping fuel and vapor, remove the fuel filler cap carefully so that any excess pressure in the tank can escape slowly.

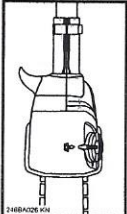
Use the proper seasonal gasoline blend, i.e., winter blend in winter, summer blend in summer.

### Filling Chain Oil Tank



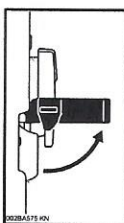
**NOTICE**  
A full chain oil tank is sufficient for only half a tankful of fuel. Check the oil level regularly during cutting work. Never allow the oil tank to run dry.

#### Preparations



- 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.

### Opening



- Raise the grip until it is upright.



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



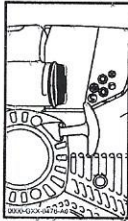
Marks on tank cap and oil tank must be up.

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### Fueling



#### Preparations



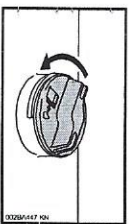
- Before fueling, clean the filter cap and the area around it to ensure that no dirt falls into the tank.
- Always thoroughly shake the mixture in the canister before fueling your machine.
- Position the machine so that the filter cap is facing up.

#### WARNING

To reduce the risk of fire and personal injuries due to escaping fuel and vapor, remove the fuel filler cap carefully so that any excess pressure in the tank can escape slowly.

Use the proper seasonal gasoline blend, i.e., winter blend in winter, summer blend in summer.

### Opening the Threaded Filter Cap

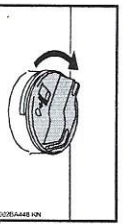


- Turn the cap counterclockwise until it can be removed from the tank opening.
- Remove the filter cap.

#### Refueling

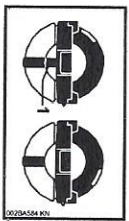
Take care not to spill fuel while fueling and do not overfill the tank.

#### Closing the Threaded Filter Cap

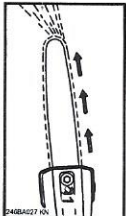


- Position cap.
- Turn the cap clockwise as far as it will go and tighten it as securely as possible by hand.

### Checking Chain Lubrication



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

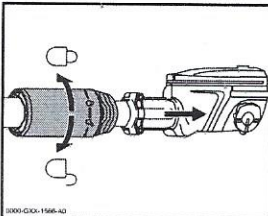


The saw chain must always throw off a small amount of oil.

#### NOTICE

Never operate your machine without chain lubrication. If the chain runs dry, the whole cutting attachment will be heated and damaged with a very short time. Always check 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".



- Loosen the clamp nut half a turn counterclockwise.
- Adjust shaft to the required length.
- Tighten down the clamp nut firmly.

### Adjusting the Telescoping Shaft

**WARNING**  
Always shut off the engine and fit the chain guard.

HT 102, HT 103, HT 132, HT 133

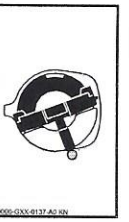


- Remove the tank cap.

#### Filling the Chain Oil Tank

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

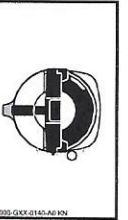
#### Closing



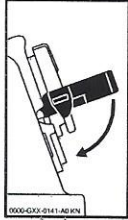
- Grip must be vertical.
- Fit the cap – marks on tank cap and oil tank must line up.
- Press the cap down as far as stop.



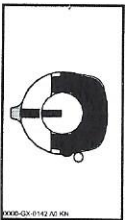
- While holding the cap depressed, turn it clockwise until it engages in position.



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



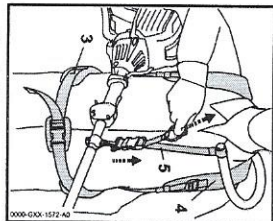
- Fold the grip down.



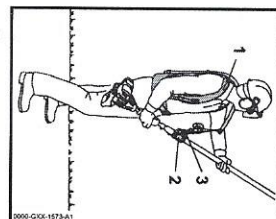
Tank cap is locked. If the oil level in the tank does not go down, the reason may be a problem in the oil supply system. Check chain lubrication, clean the oilways, contact your dealer for assistance if necessary. STIHL recommends that you have servicing and repair work carried out only by an authorized STIHL servicing dealer.

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

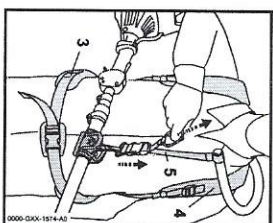
- Bottom of cap is twisted in relation to top.
- Remove the cap from the oil tank and check it from above.



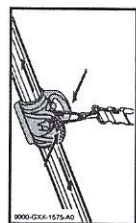
- Adjust the hip belt (3), both shoulder straps (4) and the carrying strap (5).



- Put the backpack carrying system (1) on your back and adjust it as described in the instruction leaflet provided.
- Attach the carburetor (1) to the carrying ring (2) on the shaft.
- Attach the pole pruner to the carrying strap when cutting.



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



- Squeeze the clip together to move it up or down the shaft.

Only versions with telescopic shaft

**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.

**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**

Risk of injury from saw chain turning when the engine is idling. Adjust the carburetor so that the saw chain does not run when the engine is idling – see Adjusting the Carburetor.  
Your machine is now ready for operation.

**Stopping the Engine**

- Depress the momentary contact stop switch – the engine stops – the stop switch returns to the run position.
- Other hints on starting

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

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

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

- 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 lead is properly connected.
- Repeat the starting procedure.

**Engine is flooded**

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

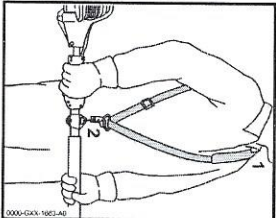
**Fuel tank run until completely dry**

- 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.

**Fitting the Harness**

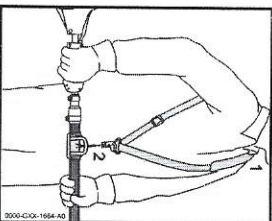
The type and style of the shoulder strap depend on the market.

**Shoulder strap (HT 102, HT 132)**



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

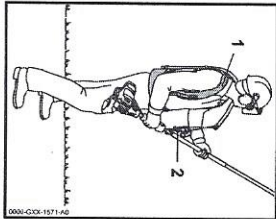
**Shoulder strap (HT 103, HT 133)**



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

**Backpack Carrying System**

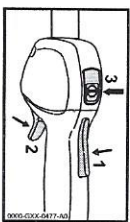
Only versions with rigid shaft



- Put the backpack carrying system (1) on your back and adjust it as described in the instruction leaflet provided.
- Attach the carburetor (2) to the matching carrying ring.
- Attach the pole pruner to the carrying strap when cutting.

**Starting / Stopping the Engine**

**Controls**

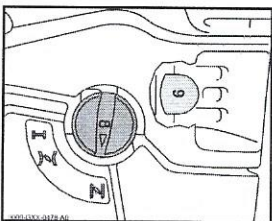


- Throttle trigger lockout
- Throttle trigger
- Stop switch with Run and Stop positions. Depress the stop switch (E) to switch off the ignition – see Function of stop switch and ignition system.

**Function of stop switch and ignition system**

The ignition is switched off and the stop switch is returned to the Run position automatically. The stop switch returns to the Run position when it is released. The ignition is switched on again after the engine stops – the engine is then ready to start.

**Starting the Engine**



- Press the manual fuel pump bulb (G) at least five times – even if the bulb is already filled with fuel.
- Press in the choke knob (Z) and turn it to the position that suits the engine temperature.
- If the engine is cold for warm start – also use this position if the engine has been running but is still cold.

**Cleaning**



- Remove the chain scabbard. Check that the chain is not touching the ground or any other obstacles.
- Place the unit on the ground. It must be supported by the engine support and the foot. If the unit is supported on a raised support (e.g. a branch, mound or something similar).

**WARNING**

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

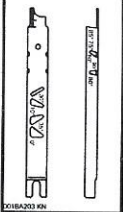
- Make sure you have a safe and secure footing.
- Hold the unit with your left hand on the fan housing and press it down firmly – your thumb should be under the fan housing.

**NOTICE**

- Do not stand or kneel on the drive tube.
- Hold the starter grip with your right hand.
- Pull the starter grip slowly until you feel it engage and then give it a brisk strong pull.

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

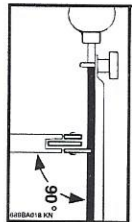
**For checking angles**



Use a STHL 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.

**File correctly**

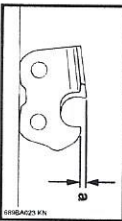
- Select sharpening tools according to chain pitch.
- If you use an FG 2, HOS or USG sharpener: Remove the chain from the bar and sharpen according to the instructions supplied with the tool.
- Clamp the bar in a vise if necessary.
- Sharpen the chain frequently. Take away as little metal as possible.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



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

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.

**Depth gauge setting**



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

• 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	Setting (a)	inch	mm	(inch)
1/4 P	(6.35)	0.45	(0.018)	
3/8 P	(6.35)	0.65	(0.026)	
3/8 P	(9.32)	0.65	(0.026)	
0.325	(4.25)	0.55	(0.028)	
3/8	(9.32)	0.65	(0.026)	

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**Maintaining and Sharpening the Saw Chain**

**Cutting efficiently with a correctly extended chain**

A properly sharpened chain slices through the wood easily 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.

Cardboard-taped saw chains (Duro) are particularly wear resistant. STHL recommends you have your chain resharpened by a STHL servicing dealer.

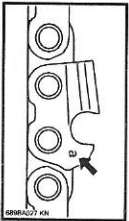
**WARNING**

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 resharpen it on a workshop sharpening tool (FG 2, HOS, USG).

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**Chain pitch**

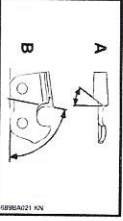


The chain pitch (a) is marked on the depth gauge end of each cutter.

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 3/25	0.325	8.25
3 or 3/8	3/8	9.32

Select the diameter according to chain pitch - see table "Sharpening Tools". You must observe certain angles when resharpening the chain cutter.

**Filing and side plate angles**



A Filing angle

English

STHL 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.

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

**Cutter shapes**

	A	B	Angle (°)
Micro = semi chisel cutter, e.g. 63 PM3, 26 RM3	30	75	
71 PM3	30	60	
Super = chisel cutter, e.g. 63 PFS3, 26 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.

**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 holder.

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**Operating Instructions**

**During Break-in Period**

A factory-new machine should not be run at high revs (full throttle of 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 resistance in the engine is high. The engine develops its full power after about 5 to 15 tank fillings.

**During Operation**

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

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

**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. Retensioning the Saw Chain".

**Storing for a long period**

See chapter on "Storing the Machine"

**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 be damaged. Retension the Saw Chain - see "Retensioning the Saw Chain".

**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.

**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 shift and bearings.

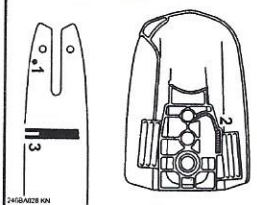
**Storing your saw for a short period**

Wait for the engine to cool down. Drain the fuel tank. Store the machine in a dry location. Check the tightness of all adjustment screws and nuts (oil adjustment screws and nuts for hand and reel tension if necessary).

**Storing for a long period**

See chapter on "Storing the Machine"

**Tending 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 oilway (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
Pico	1/4" P	4.0 mm (0.16 in)

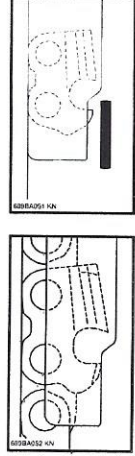
- If groove depth is less than specified:
- Replace the guide bar.

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English

**WARNING**

The kickback tendency of the machine is not increased if the depth gauges are too low.



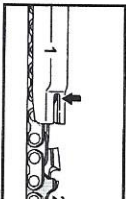
Place the filing gauge on the chain - the highest point of the depth gauge must be level with the filing gauge.

- After sharpening, clean the chain thoroughly with a brush 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.

**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 in 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.

**Sharpening Tools (special accessories)**

Chain pitch	Round file	Round file Ø	Part No.	File holder	Filing gauge	Flat file	Sharpening kit 1)
1/4 P	(6.35)	3.2 (1/8)	5605 771 3206	5605 750 4300	0000 893 4005	0814 292 3556	5605 007 1000
1/4	(6.35)	4.0 (5/32)	5605 772 3206	5605 750 4327	1110 893 4000	0814 292 3556	5605 007 1027
3/8 P	(9.32)	4.0 (5/32)	5605 772 4006	5605 750 4327	1110 893 4000	0814 292 3556	5605 007 1027
0.325	(8.25)	4.8 (1/4)	5605 772 4806	5605 750 4328	1110 893 4000	0814 292 3556	5605 007 1028
3/8	(9.32)	5.2 (1/4)	5605 772 5206	5605 750 4329	1110 893 4000	0814 292 3556	5605 007 1029

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

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