

STIHL FH 75

**Instruction Manual
Owner's Manual
Assembling
Safety Precautions
Operating Instructions
Maintenance**

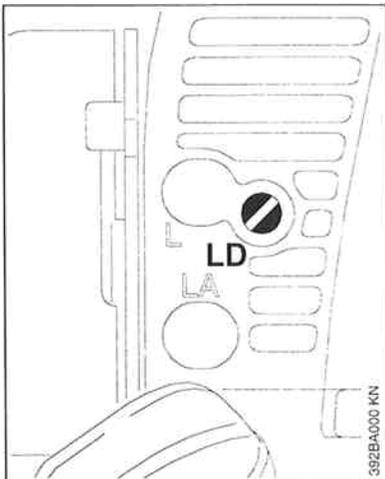


Warning:
Always follow safety precautions in
Owner's Manual - improper use
can cause serious injury!

USA

Adjusting the Carburetor

Units with Idle Speed Adjusting Screw LD



Motor Management

Exhaust emissions are controlled by the design of the fundamental engine parameters and components (e.g. carburation, ignition, timing and valve or port timing) without the addition of any major hardware.

The carburetor is tuned at the factory for an optimum fuel-air mixture under all operating conditions.

Note: This supplement replaces the chapter "Adjusting the Carburetor" in the owner manuals for FC 75, FH 75, FS 75 and HL 75

Adjusting idle speed

- **On trimmer and power edger:**
Mounting the cutting tool

On power scythe and hedge trimmer:

Check cutting blades - clean if necessary (blades must be clean, move freely and not be bent or warped)

- Check the air filter and clean it if necessary.
- Check spark arresting screen in muffler and clean or replace as necessary.

- Carefully screw the idle speed screw (LD) counterclockwise (left-hand thread) down onto its seat. Then open it **two full turns** clockwise (standard setting).

- Start the engine and warm it up.

Adjust idle correctly with the idle speed screw (LD):
The cutting tool must not rotate.

Engine stops while idling:

Turn the idle speed screw (LD) clockwise until engine runs smoothly - the cutting tool must not rotate.

Cutting head runs when engine is idling:

Turn the idle speed screw (LD) counterclockwise until cutting tool stops running and then turn the screw about another **one full turn** in the same direction (counterclockwise).

FC 75, FH 75, FS 75, HL 75

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This manual contains warnings, operating and safety precautions for the STIHL FH 75 scrub cutter. Pay special attention to the safety precautions outlined on pages 4 to 10. Allow only persons who understand this manual to operate your scrub cutter. To receive maximum performance and satisfaction from your STIHL scrub cutter, it is important that you read and understand the maintenance and safety precautions before using your scrub cutter. Contact your STIHL dealer or the STIHL distributor for your area if you do not understand any of the instructions in this manual.

Warning!

Because a scrub cutter is a high-speed, gasoline-powered cutting tool, some special safety precautions must be observed to reduce the risk of personal injury. Careless or improper use may cause serious or even fatal injury.

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

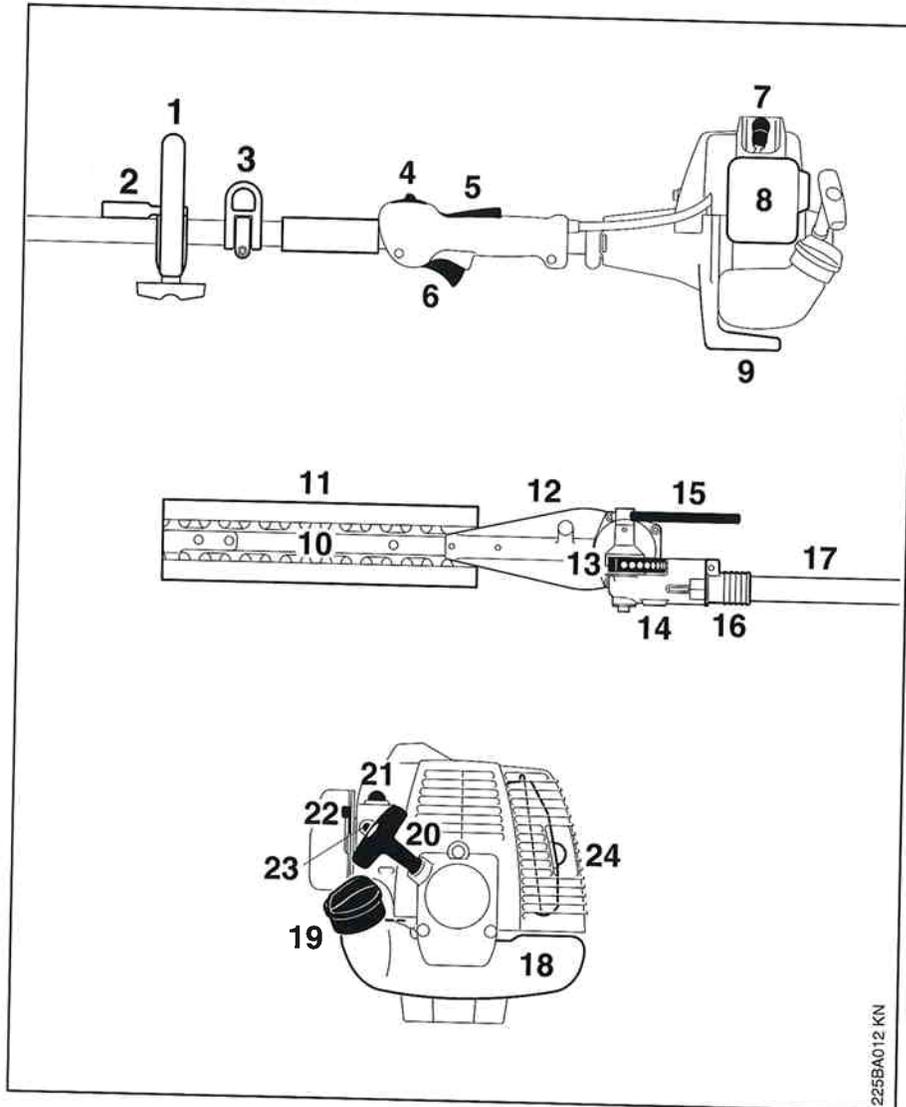
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STIHL®

FH 75

Parts and Controls



- 1 Loop handle
- 2 Barrier bar
- 3 Carrying loop
- 4 Slide control
- 5 Throttle trigger interlock
- 6 Throttle trigger
- 7 Spark plug boot
- 8 Air filter cover
- 9 Machine support
- 10 Cutting blade
- 11 Cutting blade scabbard
- 12 Blade drive gear
- 13 Quadrant
- 14 Angle drive
- 15 Adjusting lever
- 16 Sliding sleeve
- 17 Drive tube
- 18 Fuel tank
- 19 Fuel filler cap
- 20 Starter grip
- 21 Fuel pump
- 22 Choke lever
- 23 Carburetor adjusting screws
- 24 Muffler

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Definitions

- 1. Loop handle**
For easy control of machine during cutting work.
- 2. Barrier bar**
Helps keep unit at a safe distance from operator's feet and legs.
- 3. Carrying loop**
The device to connect the scrub cutter to the harness.
- 4. Slide control**
Starting throttle lock and stop switch.
Keeps the throttle partially open during starting and switches the engine's ignition off and stops the engine.
- 5. Throttle trigger interlock**
Must be depressed before the throttle trigger can be activated
- 6. Throttle trigger**
Controls the speed of the engine.
- 7. Spark plug boot**
Connects the spark plug to the ignition wire.
- 8. Air filter cover**
Covers the air filter element.
- 9. Machine support**
For resting machine on the ground.
- 10. Cutter blade**
Steel blades for cutting scrub and shrubs.
- 11. Cutter blade scabbard**
Covers cutter blade when scrub cutter is not in use.
- 12. Blade drive gear**
Converts rotary motion of angle drive into reciprocating movement of cutter blades
- 13. Quadrant**
Locks the cutter blades in the required position
- 14. Angle drive**
Transmits rotary motion of drive shaft to the blade drive gear
- 15. Adjusting lever**
Lever for swiveling cutter blades to required angle
- 16. Sliding sleeve**
Sleeve for locking and unlocking the adjusting mechanism
- 17. Drive tube**
Device to connect the engine with the gearbox.
- 18. Fuel tank**
For fuel and oil mixture.
- 19. Fuel filler cap**
For closing the fuel tank.
- 20. Starter grip**
The grip of the pull starter, which is the device to start the engine.
- 21. Fuel pump**
Provides additional fuel feed for a cold start.
- 22. Choke lever**
Eases engine starting by enriching mixture.
- 23. Carburetor adjusting screws**
For tuning carburetor
- 24. Muffler**
Attenuates exhaust noises and diverts exhaust gases away from operator.

Safety Precautions



Warning!

Because a scrub cutter is a high-speed, fast-cutting power tool, 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

owner's manual and the safety instructions periodically.

Careless or improper use of any scrub cutter may cause serious or fatal injury.

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



Warning!

The use of any scrub cutter may be hazardous. If the cutting tool comes in contact with your body, it will cut you.

Striking solid foreign objects such as stones, fence wire or metal could damage the cutting attachment and may cause blades to crack, chip or break. STIHL does not recommend the use of scrub cutters when cutting in areas where the blades could contact such objects.



Warning!

Minors should never be allowed to use a scrub cutter. Bystanders, especially children, and animals should not be allowed in the area where a scrub cutter is in use.

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

Never let the scrub cutter run unattended.



Warning!

Do not lend or rent your scrub cutter without the owner's manual. Be sure that anyone using your scrub cutter

understands the information contained in this manual.

Safe use of a scrub cutter involves

1. the operator
2. the scrub cutter
3. the use of the scrub cutter.

THE OPERATOR!

Physical Condition

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

Be alert - if you get tired while operating your scrub cutter, take a break.

Tiredness may result in loss of control. Working with any scrub cutter can be strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating a scrub cutter.



Warning!

Prolonged use of a scrub cutter (or other machines) exposing the operator to vibrations may produce whitefinger disease (Raynaud's phenomenon) or carpal tunnel syndrome. These conditions reduce the hand's ability to feel and regulate temperature, produce numbness and burning sensations and may cause nerve and circulation damage and tissue necrosis.

All factors which contribute to whitefinger disease are not known, but cold weather, smoking and diseases or physical conditions that affect blood vessels and blood transport, as well as high vibration levels and long periods of exposure to vibration

are mentioned as factors in the development of whitefinger disease. In order to reduce the risk of whitefinger disease and carpal tunnel syndrome, please note the following:

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

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

Proper Clothing



Warning!



Scrub cutter operation can cause serious injury to eyes, ears and person. Therefore, to reduce the risk of injury to your eyes never operate a scrub cutter unless wearing goggles or properly fitted safety glasses with adequate top and side protection complying with ANSI Z 87.1 (or your applicable national standard). To reduce the risk of injury to your face STIHL recommends that you also wear a face shield or face screen over your goggles or safety glasses.



Warning!

Scrub cutter noise may damage your hearing. Wear sound barriers (ear plugs or ear mufflers) to protect your hearing. Continual and regular users should have their hearing checked regularly. Wear an approved safety hard hat to reduce the risk of injury to your head when there is a danger of head injuries.

Wear proper protective clothing.



Protect your hands with gloves when handling the scrub cutter and the cutting tool. Heavy-duty, nonslip gloves improve your grip and help to protect your hands.



Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loose-fitting jackets, scarfs, neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become caught on branches, brush or moving parts of the unit. Wear long pants made of heavy material to protect your legs.

Do not wear shorts.



Good footing is most important in scrub cutter work. Wear sturdy boots with nonslip soles. Steel-toed safety boots are recommended.

THE SCRUB CUTTER

For illustrations and definitions of the scrub cutter parts, see the chapter on "Parts and Controls"!



Warning!

Never modify a scrub cutter in any way. Only attachments supplied by STIHL or expressly approved by STIHL for use with the specific STIHL scrub cutter models are authorized. Although certain unauthorized attachments may be useable for the STIHL scrub cutter, their use may, in fact, be extremely dangerous. Never remove or disable any safety devices.

USE OF THE SCRUB CUTTER

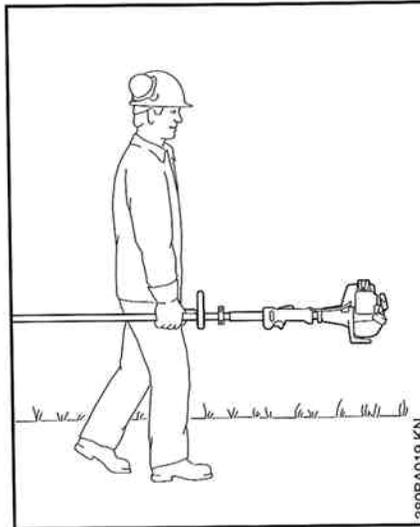
Transporting the scrub cutter

Warning!

To reduce the risk of injury from blade contact, never carry or transport the scrub cutter with the cutter blades running. The correct engine idle speed is important in this respect. If the carburetor setting is correct, the cutter blades will be stationary at idle speed.

Warning!

Always turn off the engine and make sure the cutting attachment has stopped before putting the unit down or carrying it between work stations.



The scrub cutter may be carried only in a horizontal position. Grip the shaft in a manner that the machine is balanced horizontally. Keep the hot muffler away from your body and the cutting attachment behind you.

Always switch off the engine and fit the scabbard over the cutter blades before transporting the scrub cutter over long distances. When transporting your scrub cutter in a vehicle, properly secure it to prevent turnover, fuel spillage and damage to the scrub cutter.

Preparation for the use of the scrub cutter.

Warning!

Never use a scrub cutter that is damaged or not properly maintained. When not in use, always check your scrub cutter for proper condition and operation before starting, particularly the throttle trigger, throttle trigger interlock, stop switch and cutting tool. The throttle trigger must move freely and always spring back in the idle position.

The cutting tool must be properly tightened and in safe operating condition. Inspect for loose part (nuts, screws, etc.) and for cracked, bent, warped or damaged blades. Regularly check the condition and tightness of the cutter blades - with the engine stopped!

Service damaged cutter blades before using the scrub cutter. Always keep blades sharp. Keep the handles clean and dry at all times; it is particularly important to keep them free of oil and resin to ensure that you can always maintain a firm grip and safely control your machine. Stihl recommends that you always spray the cutter blades with STIHL resin solvent before starting work - with engine stopped! You can obtain this protective spray from your dealer. Apply generously.

Fueling

Your STIHL scrub cutter uses an oil-gasoline mixture for fuel (see the chapter on "Fuel" of your owner's manual).



Warning!



Gasoline is an extremely flammable fuel. If spilled or ignited by a spark or other ignition source, it can cause fire and serious burn injury or property damage. Use extreme caution when handling gasoline or fuel mix.

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

Fueling Instructions

Fuel your scrub cutter in well ventilated areas, outdoors.



Warning!

Gasoline vapor pressure may build up inside the gas tank of a two cycle engine depending on the fuel used, the weather conditions, and the venting system of the tank. In order to reduce the risk of burns or other personal injury from escaping gas vapor and fumes, remove the fuel filler cap on your scrub cutter carefully so as to allow any pressure build-up in the tank to release slowly. Never remove fuel filler cap while engine

is running. Select bare ground for fueling and move at least 10 feet (3 m) from the fueling spot before starting the engine.

Wipe off any spilled fuel before starting your scrub cutter and check for leakage.

Check for fuel leakage while refueling and during operation. If fuel leakage is found, do not start or run the engine until leak is fixed and spilled fuel has been wiped away. Take care not to get fuel on your clothing. If this happens, change your clothing immediately. Never attempt to fuel a running or hot engine.

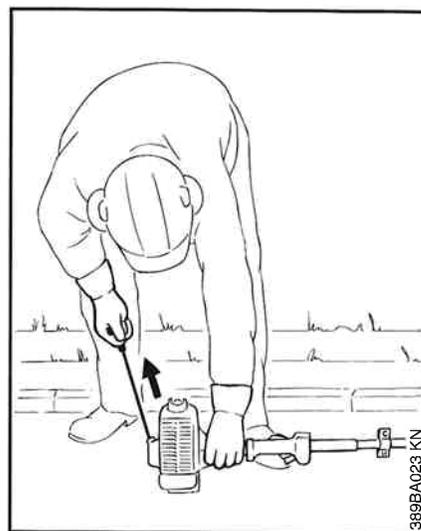


Warning!



Unit vibrations can cause an improperly tightened fuel cap to loosen or come off and spill quantities of fuel.

In order to reduce risk of fuel spillage and fire, tighten fuel cap by hand with as much force as possible.



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Starting



Warning!

Your scrub cutter is a one-person machine. Start and operate your scrub cutter without assistance. To reduce the risk of injury, keep bystanders at least 5 m (17 ft) away. For specific starting instructions, see the appropriate section of your owner's manual. Place the scrub cutter on firm ground or other solid surface in an open area. Maintain good balance and secure footing.

When the engine starts at starting-throttle, engine speed will be fast enough for the clutch to engage and move the cutting tool.

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

Working Conditions



Warning!



To reduce the risk of injury from inhalation of poisonous fumes, operate and start your power tool only outdoors in a well ventilated area. Hold your power tool in such a way that you do not breathe in the exhaust fumes. Operate the power tool under good visibility and daylight conditions only.



Warning!

Make sure you always have good footing. Take particular care in slippery conditions and on slopes. Be careful on uneven ground. Watch out for stumps, roots, ditches or holes which could cause you to trip or stumble.

Before cutting, inspect the area for stones, glass, pieces of metal, trash or other solid objects.

When working close the ground, make sure that no sand, grit, stones or wire gets between the cutting blades.



Warning!

When cutting the top of a taller hedge, when visibility is obstructed check back-side of the hedge frequently for bystanders, animals and obstructions.

Danger! Risk of Electrocutation!



This scrub cutter is not insulated against electric shock. Approaching or contacting electric power lines with a scrub cutter may cause death by electrocution or serious bodily injury. Electricity can jump from one point to another by means of arcing. Higher voltage increases the distance electricity can arc. Electricity can also move through branches,

especially if they are wet. Maintain a clearance of at least 33 ft (10m) between the scrub cutter (including any branches it is contacting) and any electrical line carrying live current. Before working with less clearance, contact your electric utility and make sure current is turned off.

Operating instructions

Use your scrub cutter only for cutting grass, scrub, shrubs, thicket, wild growth, bushes and similar plants. It must not be used for any other purpose because of the increased risk of accidents.



Warning!

To reduce the risk of injury from loss of control, always hold your scrub cutter firmly with both hands while you are working. Your right hand should grip the rear handle. This also applies to left-handers. Wrap your fingers tightly around the front and rear handles.

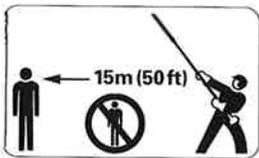


Warning!

Never attempt to operate any scrub cutter with one hand. Loss of control of the scrub cutter can result in serious or fatal injury. To avoid the risk of serious injury, never touch the moving cutter blades



Always work calmly and carefully, stay alert so as not to endanger others. If the cutter blades become jammed by thick branches or any other obstruction, switch off the engine immediately before attempting to free the blades.



Warning!

The scrub cutter has a large range. In order to reduce the risk of personal or even fatal injury to bystanders from falling objects and thrown pieces of wood or in advertent contact with the moving cutter blades of the scrub cutter always keep bystanders at least 50 feet (15 m) away when the scrub cutter is running.

Warning!

To reduce the risk of injury from loss of control, never work on a ladder, in a tree or any other insecure support.

Warning!

The cutter blades tend to run on for a short period after the throttle trigger is released (flywheel effect).

Important adjustments

Warning!

To reduce the risk of personal injury from loss of control or contact with the running cutting blades, do not use a scrub cutter with incorrect idle adjustment. At correct idle speed, the cutting blades should not move. For directions to adjust idle speed, see the appropriate section of your owner's manual. If you cannot set the correct idle speed, have your STIHL dealer check your scrub cutter and make proper adjustments or repairs.

MAINTENANCE, REPAIR AND STORING

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

Use only STIHL replacement parts for maintenance and repair. Use of parts manufactured by others may cause serious or fatal injury.

Follow the maintenance and repair instructions in the appropriate section of your owner's manual. Refer to the maintenance chart at the last pages of this manual.

Warning!

Always stop the engine and make sure that the cutting tool is stopped before doing any maintenance or repair work or cleaning the scrub cutter. Do not attempt any maintenance or repair work not described in your owner's manual. Have such work performed at your STIHL service shop only.

Warning!

Check condition of cutting tool at regular short intervals. If behavior of tool changes, check it immediately for tightness or any signs of cracks in particular. Replace damaged or dull cutting tools

immediately, even if they have only superficial cracks.

Never repair damaged cutting attachments by welding, straightening or modifying the shape. This may cause parts of the cutting tool to come off and result in serious or fatal injuries.



Warning!

To reduce the risk of fire, check fuel filler cap for leaks at regular intervals. Use the specified spark plug and make sure it and the ignition lead are always in good condition.

Keep spark plug and wire connection tight and clean. The spark plug electrode gap should be checked with a feeler gauge at least every 50 operating hours and reset if necessary. Fit a new spark plug if the electrodes are badly pitted.

Keep cutting tool sharp. Tighten all nuts, bolts and screws except the carburetor adjustment screws after each use. Always clean dust and dirt off the machine after finishing work. Do not use a grease solvent for cleaning! In some countries an aerosol can of resin solvent (protective spray), Part No. 0782 420 1002, is available for spraying the cutter blades. This resin solvent protects the cutter blades and has anticorrosive properties. Spray the cutter blades before and after work. Then start and run the scrub cutter briefly so that the resin solvent is evenly distributed

over the blades. If the hedge itself is very dusty and dirty, spray the cutter blades more frequently. This greatly reduces blade friction and the damaging effects of sap and dust particles.



Warning!

Do not operate your scrub cutter if the muffler is damaged, missing or modified. An improperly maintained muffler will increase the risk of fire and hearing loss. Never touch a hot muffler or burn will result. If your muffler was equipped with a spark-arresting screen to reduce the risk of fire (e.g. in the USA, Canada and Australia), never operate your scrub cutter if the screen is missing or damaged. Remember that the risk of forest fires is greater in hot or dry weather.

Keep the engine and muffler free from cuttings, chips, leaves, fibers and excess lubricant.

For any maintenance please refer to the maintenance chart **and to the warranty statement** near the end of this manual.

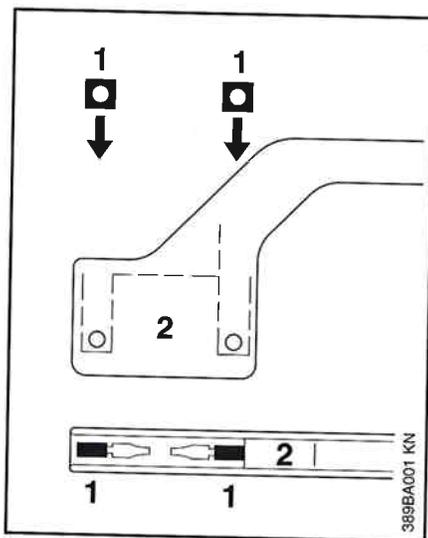
Store scrub cutter in a dry and high or locked location out of reach of children. Before storing for longer than a few days, always empty the fuel tank.

Storing the Machine

For periods of about 3 months or longer:

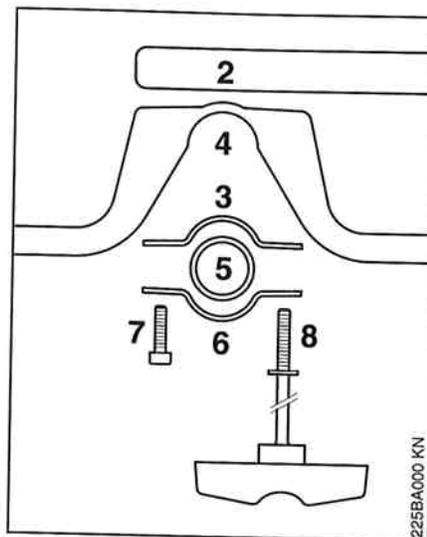
- Drain and clean the fuel tank.
- Run engine until carburetor is dry - this helps prevent the carburetor diaphragms sticking together.
- Clean and inspect cutting blade.
- Thoroughly clean the machine - pay special attention to the cylinder fins and air filter.
- Store the machine in a dry, high or locked location - out of the reach of children and other unauthorized persons.

Assembling the Unit

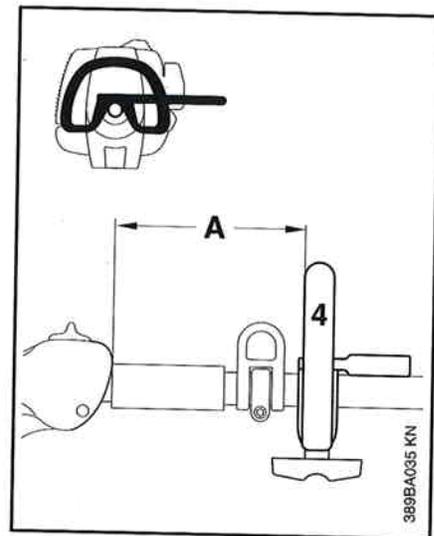


Mounting the loop handle

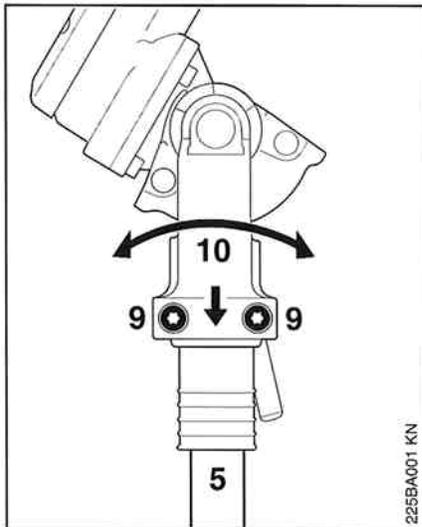
- Fit the square nuts (1) in the barrier bar (2) - the holes must line up.



- Fit the clamp (3) in the loop handle (4) and place them both on the drive tube (5).
- Place clamp (6) in position and fit the barrier bar (2) so that the holes line up.
- Insert screw (7) and tighten it down firmly.
- Fit wing screw (8) in the barrier bar and tighten it down as far as stop.

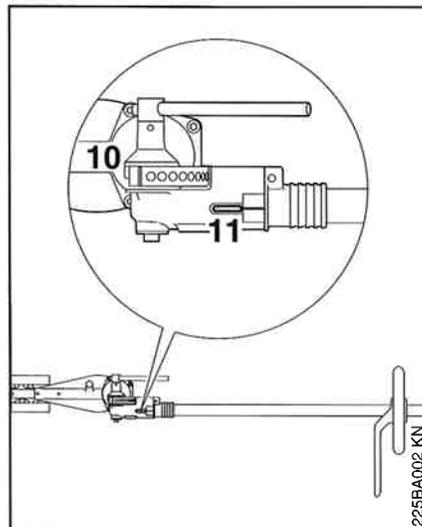


- Align the loop handle (4) and move it to the most comfortable position.
Important:
Distance **A** must not be more than 55cm (21.5") (recommended: about 35 cm (14"))
- Tighten down the wing screw.



Mounting the gearbox

- Slacken off the clamp screws (9).
- Push the drive tube (5) into the gearbox (10) - turn the gearbox back and forth as necessary.



- Once the end of the drive tube is inserted beyond the slot in the clamp (11), push it fully home as far as stop.
- Fit clamp screws and tighten moderately.
- Line up the gearbox (10).
- Tighten down the clamp screws firmly.

Fuel Mix

This engine is certified to operate on unleaded gasoline and with the mix ratio 50:1.

Your two-stroke engine requires a mixture of brand-name gasoline and quality two-stroke engine oil with the classification TC.

Use regular branded unleaded gasoline with a minimum octane number of 90 RON (U.S.A./Canada: pump octane min. 89!). If the octane number of the regular grade gasoline in your area is lower use premium unleaded fuel. Fuel with a lower octane number may result in preignition (causing "pinging") which is accompanied by an increase in engine temperature. This, in turn, increases the risk of the piston seizure and damage to the engine.

The chemical composition of the fuel is also important. Some fuel additives not only detrimentally affect elastomers (carburetor diaphragms, oil seals, fuel lines etc.), but magnesium castings as well. This could cause running problems or even damage the engine. For this reason it is essential that you use only name branded fuels!

Use only STIHL two-stroke engine oil or equivalent branded two-stroke air-cooled engine oils with the classification TC for mixing.

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

Do not use BIA or TCW (two-stroke water cooled) mix oils!

Take care when handling gasoline. Avoid direct contact with the skin and avoid inhaling fuel vapour.

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

The fuel tank and the canister in which fuel mix is stored should be cleaned from time to time.

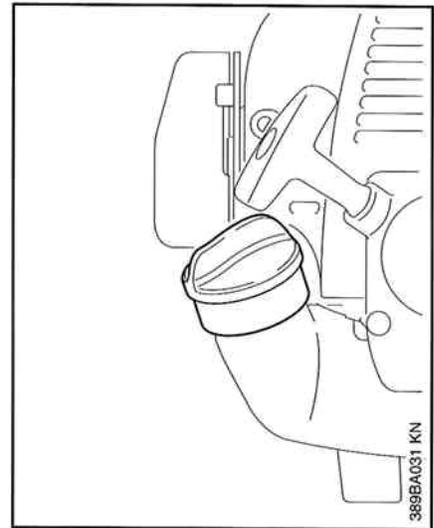
Fuel mix ages:

Only mix sufficient fuel for a few days work, not to exceed 30 days of storage. Store in approved safety fuel-canisters only. When mixing, pour oil into the canister first, and then add gasoline.

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

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

Fueling



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

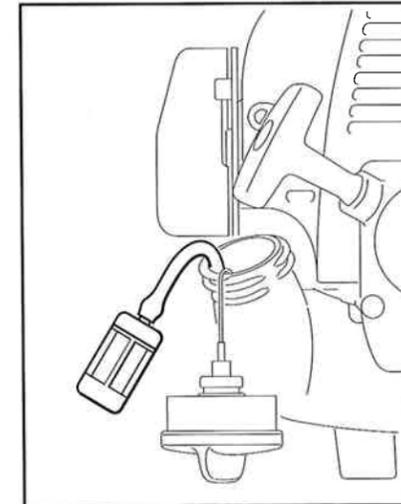
Always thoroughly shake the mixture in the canister before fueling your machine.

Warning!

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

Warning!

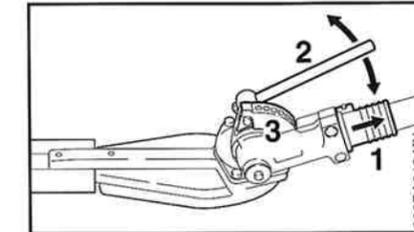
After fueling, tighten fuel cap as securely as possible by hand.



Change the fuel pick up body every year.

Before storing your machine for a long period, drain and clean the fuel tank and run engine until carburetor is dry.

Adjusting Cutter Bar Angle



The angle of the cutter bar can be adjusted to 8 positions between 0° (straight) and 90° (right angle).

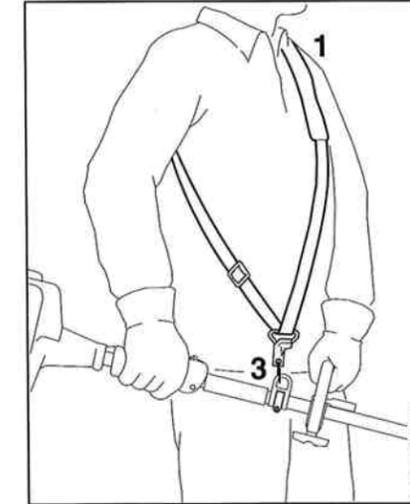
This choice of angles helps enhance the versatility of the unit.

To adjust cutter blade angle

- Shut off the engine.
- Pull back the sliding sleeve (1) and use lever (2) to adjust joint by one or several holes.
- Release the sliding sleeve and allow pin to engage the quadrant (3).

Note: Sliding sleeve butts against the housing when the pin is properly engaged (after making adjustment).

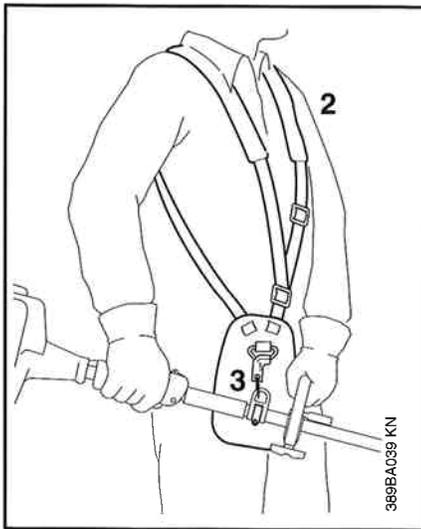
Fitting the Harness



Shoulder strap

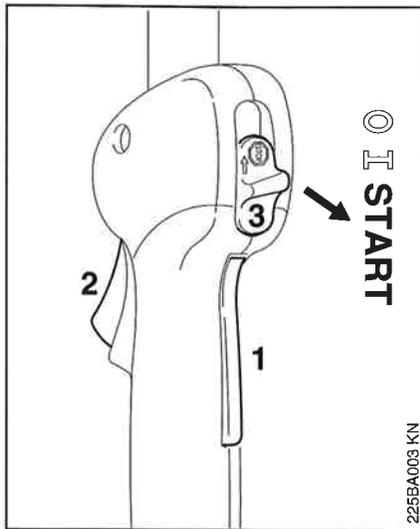
- Put on the shoulder strap (1).
- Attach scrub cutter and adjust length of strap until the spring hook (3) is at hip height.

Starting

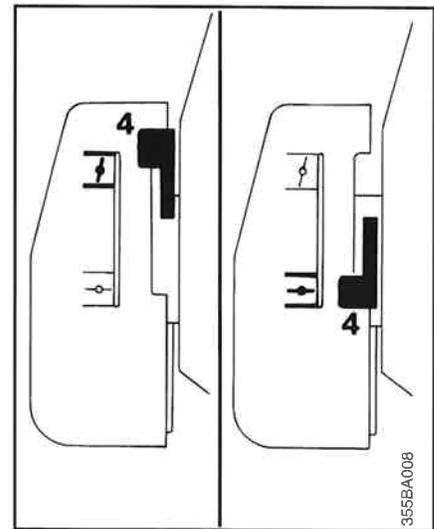


Full harness*

- Put on the full harness (2).
- Attach scrub cutter and adjust length of strap until the spring hook (3) is at hip height.



- Hold down the trigger interlock (1) and squeeze the throttle trigger (2).
- Move the slide control (3) to **START** position.
- Now release the throttle trigger, slide control and trigger interlock in that order = This is the **starting-throttle position**.

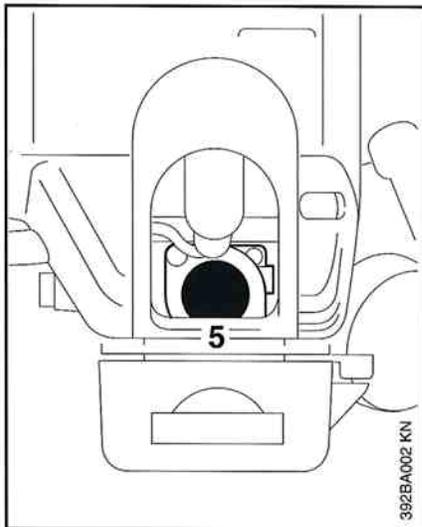


If engine is cold:
Set the choke lever (4) to I

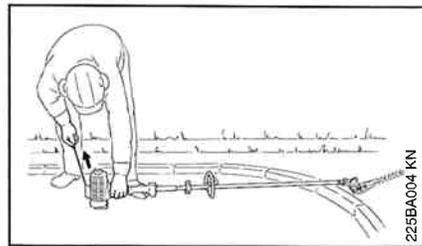
If engine is warm:
Set the choke lever (4) to II

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

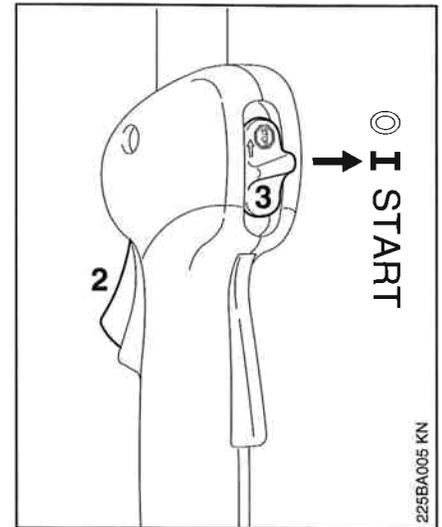
* Optional accessory



- Press the fuel pump bulb (5) at least five times.



- Put the unit on the ground: It must rest securely on the engine support and the gearbox.
- Remove blade scabbard. Check that the cutting blades are not touching the ground or any other obstacles. If necessary, place the gearbox on a raised support (e.g. bump, brick or block of wood).
- Make sure you have a firm footing: Hold the unit with you left hand on the fan housing and press it down **firmly** - your thumb should be under the housing.
- Do not stand or kneel on the drive shaft!
- Pull the starter grip slowly with your right hand until you feel it engage - and then give it a brisk strong pull. Do not pull out starter rope more than 70cm (27") - it might break. Do not let the starter grip snap back - guide it slowly into the housing so that the starter rope can rewind properly.



When engine begins to fire:

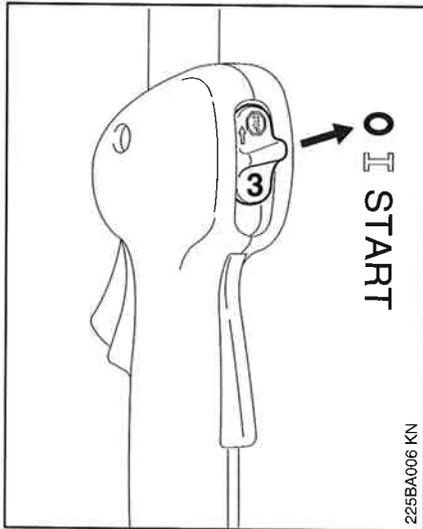
- Move choke lever to  and continue cranking -

As soon as engine runs:

- Blip the throttle trigger (2) - the slide control (3) moves to the run position **I**, and the engine returns to idling speed.

Make sure carburetor is correctly adjusted - cutting blades must not run when engine is idling.

Your scrub cutter is ready for operation.

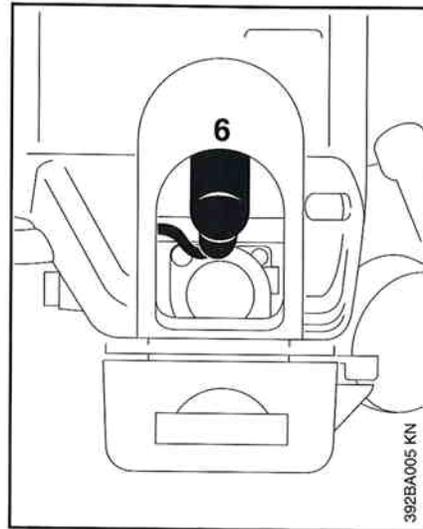


To shut down engine:

Move the slide control (3) to 0 - stop

**At very low outside temperatures:
Allow engine to warm up**

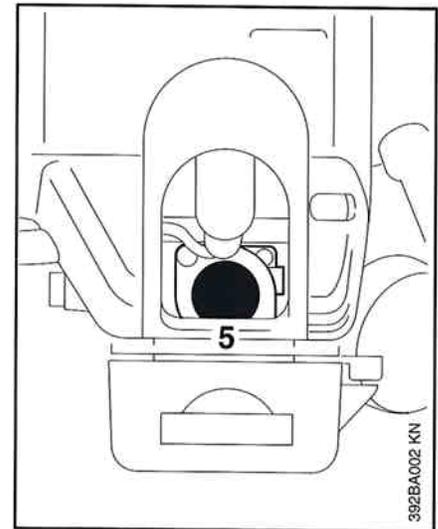
- As soon as engine runs:
- Blip the throttle trigger - the slide control (3) moves to the run position I, and the engine returns to idling speed.
- Open throttle slightly - warm up engine for short period.



If the engine doesn't start:

If you did not move the choke lever to II quickly enough after the engine began to fire, the combustion chamber is flooded.

- Move the slide control to 0 - stop
- Pull off the spark plug boot (6).
- Unscrew and dry off the spark plug.
- Open the throttle fully.
- Pull the starter rope several times to clear the combustion chamber.



- Fit the spark plug and reconnect the spark plug boot.
- Move the slide control to **START**
- Set choke lever to II even if engine is cold.
- Now start the engine.

Fuel tank run until dry and then refueled

- Press the fuel pump bulb (5) at least five times.
- Now start the engine.

Applications

General

The scrub cutter is used at ground level. As its blades operate like a mower bar, the unit is ideal for cutting scrub, thicket, reed, wild growth and hard grasses.

The scrub cutter is particularly suitable for applications in busy areas, such as traffic islands or parks, because cuttings are not caught and thrown by the blades.

Preparations

Always wear a harness.



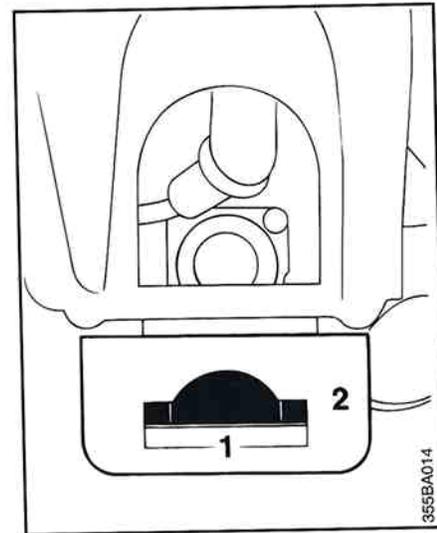
Do not throw cuttings in the rubbish bin (garbage can) - they can be composted!



Cutting technique

Working position and method are exactly the same as for a brushcutter. The cutter bar is swept to and fro in an arc just above the ground.

Cleaning the Air Filter

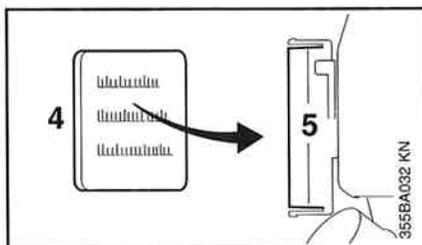
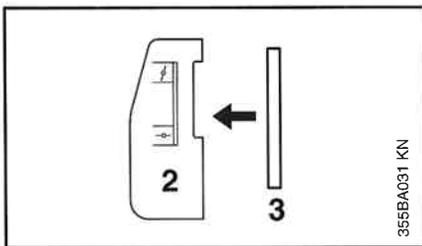


Dirty air filters reduce engine power, increase fuel consumption and make starting more difficult.

If there is a noticeable loss of engine power:

- Set choke lever to \bar{I}
- Press in the tab (1) and swing the filter cover (2) away.
- Clean away loose dirt from around the filter.
- Remove the foam element and the felt element.

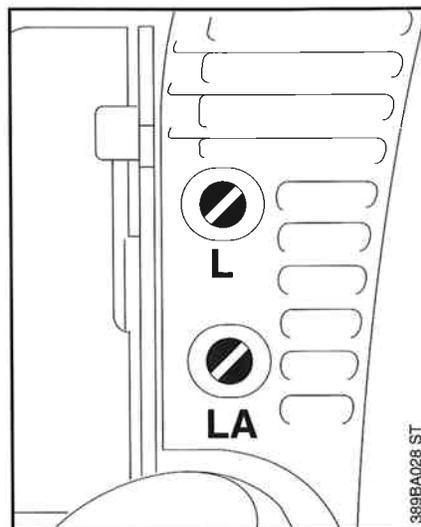
Carburetor Adjustment



- Wash the foam element in fresh, non-flammable cleaning solution (e.g. warm soapy water) and dry.
- **Do not wash** the felt element. Fit a new one. As a temporary measure, clean it by knocking it out on the palm of your hand or blowing it out with compressed air.

Replace damaged parts of filter.

- Place the foam element (3) in the filter cover (2).
- Place the felt element (4) (marking facing inwards) in the filter housing (5).
- Fit the filter cover so that it snaps into position.



Motor Management

Exhaust emissions are controlled by the design of the fundamental engine parameters and components (e.g. carburation, ignition, timing and valve or port timing) without the addition of any major hardware.

The carburetor is set at the factory to guarantee an optimum fuel-air mixture under all operating conditions.

- Check cutting blades - clean if necessary (blades must be clean, move freely and not be bent or warped)
- Check spark arresting screen and clean or replace as necessary.

- Check the air filter and clean it if necessary.
- Start the engine and warm it up.

Standard setting

- Carefully screw the low speed screw (L) down onto its seat. Then open it one turn counterclockwise (standard setting, L = 1).

Adjusting idle speed

Engine stops while idling:

Check standard setting.
(L screw must be one turn open)

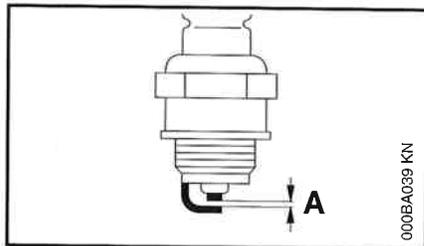
Turn the idle speed screw (LA) clockwise until cutting blades begin to run and then turn the screw back one half turn counterclockwise.

Cutting blades run when engine is idling

Check standard setting.

Turn the idle speed screw (LA) counterclockwise until cutting blades stop running and then turn the screw another half turn in the same direction (counterclockwise).

Checking the Spark Plug

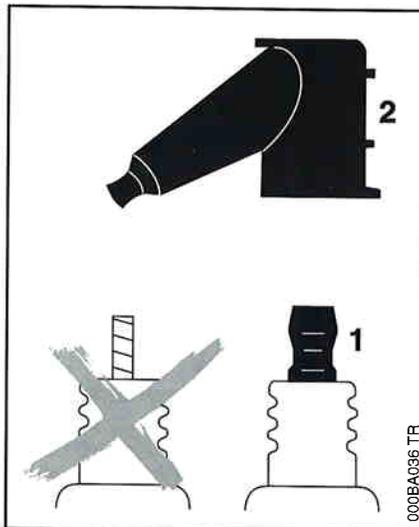


Wrong fuel mix (too much engine oil in the gasoline), a dirty air filter and unfavorable running conditions (mostly at part throttle etc.) affect the condition of the spark plug. These factors cause deposits to form on the insulator nose which may result in trouble in operation.

If engine is down on power, difficult to start or runs poorly at idling speed, first check the spark plug.

- Remove spark plug - see chapter "Starting":
- Clean dirty spark plug.
- Check electrode gap - it should be 0.5mm/0.02" (A) - readjust if necessary.
- Use only resistor type spark plugs of the approved range.

Rectify problems which have caused fouling of spark plug:
 Incorrect carburetor setting, too much oil in fuel mix, dirty air filter, unfavorable running conditions, e.g. operating at part load.



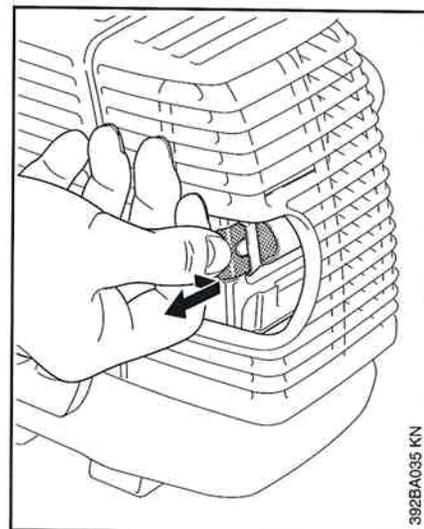
- Fit a new spark plug after approx. 100 operating hours -

or earlier if the electrodes are badly eroded.

Warning!

To reduce the risk of fire and burn injury, use only spark plugs authorized by STIHL (see "Specifications"). Always press spark plug boot (2) snugly onto spark plug terminal (1) of the proper size. (Note: If terminal has detachable SAE adapter nut, it must be attached.) A loose connection between spark plug terminal and ignition wire connector in the boot may create arcing that could ignite combustible fumes and cause a fire.

Spark Arresting Screen in Muffler *

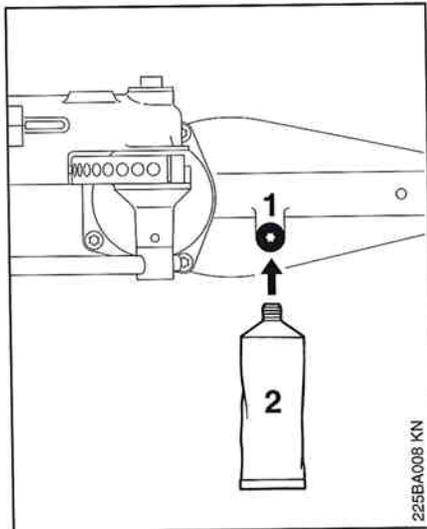
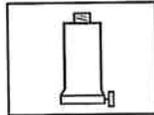


If the engine is low on power, check the spark arresting screen in the muffler.

- Lift the spark arresting screen and pull it out sideways.
- Clean spark arresting screen.
- If screen is damaged or coked up, fit a new one.
- Refit the spark arresting screen.

* not all versions

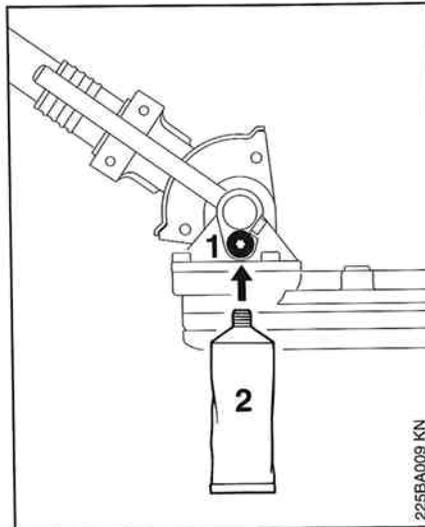
Lubricating Gearbox



225BA008 KN

Use STIHL gear lubricant for hedge trimmers for lubrication of the **blade drive gear** (see "Special Accessories") after every 25 hours of operation.

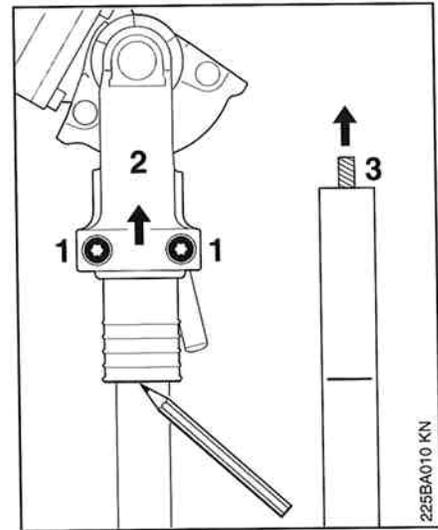
- Remove the filler plug from the gearbox cover.
- Screw the tube of grease into the filler hole.
- Roll up the end of the tube to the next division on the scale. This forces about 20g (3/4oz) grease into the gearbox.
- Relubricate the gearbox about every 25 hours of operation.



225BA009 KN

- Check grease level in **angle drive** about every 50 hours of operation.
- Unscrew the filler plug (1).
- If no grease can be seen on the inside of the filler plug, screw the tube (2) of STIHL gear lubricant for brushcutters (see "Special Accessories") into the filler hole.
- Squeeze grease into the gear housing - about 5 - 10g (1/4 oz).
- Do not completely fill the gear housing with grease.
- Refit the filler plug and tighten it down firmly.

Lubricating the Drive Shaft



225BA010 KN

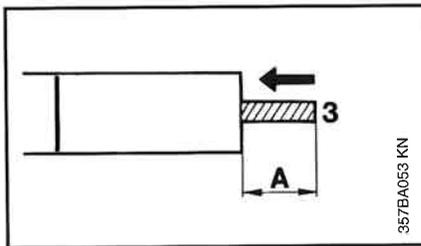
- Check film of lubricant at regular intervals:

About every 50 hours of operation if you use your scrub cutter daily.

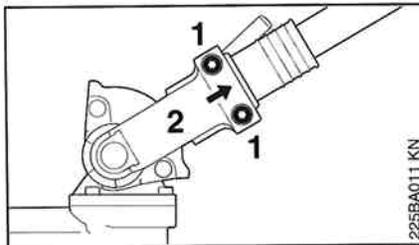
Once a year if you use your scrub cutter occasionally.

- Mark end of gearbox on drive tube with a pencil.
- Slacken off clamp screws (1).
- Pull the gearbox (2) off the drive tube.
- Pull the shaft (3) out of the drive tube.
If shaft has turned blue, fit a new one.

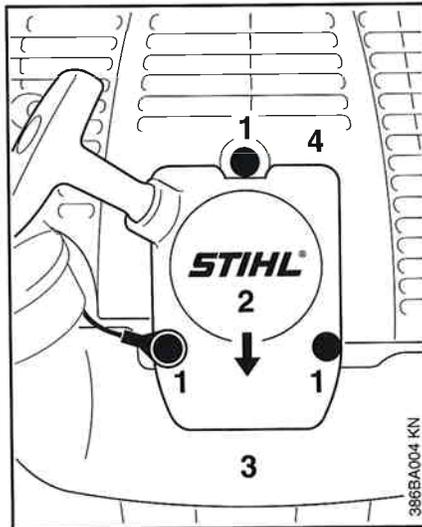
Replacing the Starter Rope and Rewind Spring



357BA053 KN



225BA011 KN



386BA004 KN



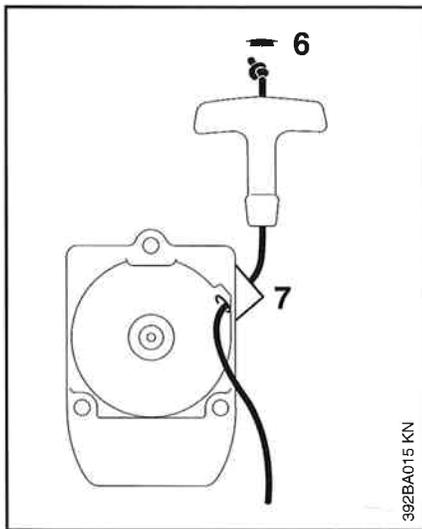
392BA014 KN

- Coat dry areas of shaft with STIHL gear lubricant 0781 120 1109/10 (see "Special Accessories"). Never pump grease into the drive tube.
- Push the shaft (3) into the drive tube - turn it to and fro until the distance A is less than 20 mm (0.8").
- Coat clamp area of drive tube and gearbox with grease.
- Push gearbox onto the drive tube.
- Turn the gearbox (2) back and forth until pencil mark is reached.
- Line up the gearbox.
- Tighten down the clamp screws firmly.

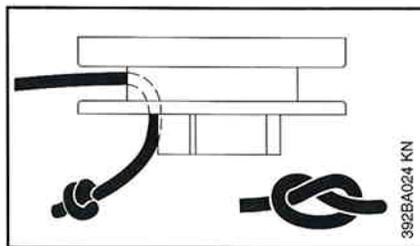
- Take out the screws (1).
- Remove cable lug.
- Lift starter cover (2) away from tank (3) and pull it out from under the shroud (4).

Caution! The tank is now loose.

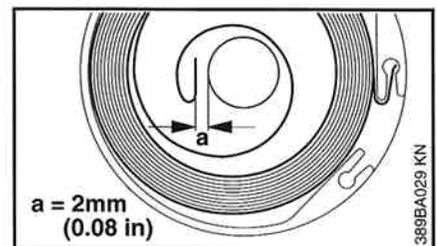
- Take out the screw (5).
- Remove the rope rotor very carefully - the rewind spring is seated in the rope rotor and may pop out and uncoil if care is not taken.



- Use a screwdriver to ease the cap (6) out of the starter grip.
- Remove remaining rope from the rotor and grip, making sure the ElastoStart sleeve is not pushed out of the grip.
- Tie a simple overhand knot in the end of the new starter rope and then thread the rope through the top of the grip and the rope bush (7).
- Refit the cap in the grip.



- Pull the rope through the rotor and secure it with a simple overhand knot.
- Coat rope rotor bearing bore with non-resinous oil.
- Slide rotor onto starter post - turn it back and forth until the rewind spring anchor loop (8) engages.
- Insert screw and tighten down securely.
Go to "Tensioning the rewind spring".

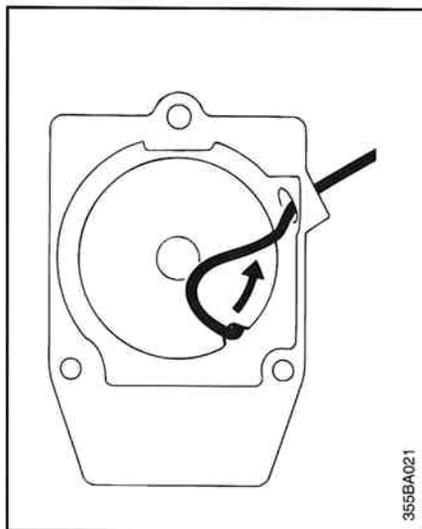


Replacing a broken rewind spring

- Lubricate the new spring with a few drops of non-resinous oil, do not open the wire retainer.
- Remove the rope rotor.
- Remove parts of old spring.
- Fit the new spring - position outer spring loop in the recess - the wire retainer slips off in this process.

If the spring has popped out:
Refit it in the counterclockwise direction - starting outside and working inward.

- Install the rope rotor.
Go to "Tensioning the rewind spring".



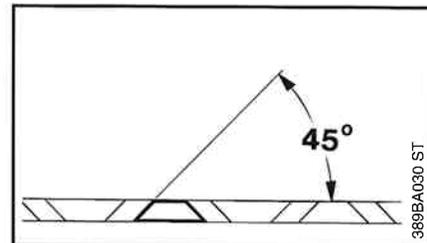
Tensioning the rewind spring

- Make a loop in the starter rope and use it to turn the rope rotor six full revolutions counterclockwise. Hold the rotor steady - straighten the twisted rope - release the rotor - let go of rope slowly so that it winds onto the rotor.

The starter grip must be firmly seated in the rope guide bush.
If grip droops to one side:
Add one more turn on rope rotor to increase spring tension.

- When the starter rope is fully extended if must be possible to rotate the rotor another half turn. If this is not the case, the spring is over tensioned and could break. Take one turn of rope off the rotor.
- Fit the starter cover - to do this, push the upper mounting boss under the shroud - line up the tank and push lower part of cover onto the tank.
- Insert and tighten down the housing screws.
- **Important:**
Refit the cable lug.

Sharpening Instructions



It is best to have the cutting blades resharpened by your STIHL dealer on a STIHL USG sharpener.

It is also possible to use a portable electric grinder or a flat crosscut sharpening file.

The portable electric grinder should be a high-speed unit fitted with an 8mm (5/16") grinding point.

Hold the file or grinding point at an angle of 45° to the cutting blade.

- Always file toward the cutting edge.
- The file only sharpens on the forward stroke - lift it off the blade on the backstroke.
- Use a whetstone to remove burr from cutting edge.
- Remove as little material as possible.
- After sharpening, clean filing or grinding dust off the cutting blade and lubricate with grease.

Maintenance Chart

Please note that the following maintenance intervals apply for normal operating conditions only. If your daily working time is longer than normal or operating conditions are difficult (very dusty work area etc.), shorten the specified intervals accordingly.		before starting work	after finishing work or daily	after each refueling stop	weekly	monthly	if problem	if damaged	as required	see page:
Complete machine	Visual inspection (condition, leaks)	x		x						
	Clean		x							
Control handle	Check operation	x		x						15-17
Air filter	Clean						x		x	18-19
	Replace							x		18-19
Filter in fuel tank	Check						x			13-14
	Replace								x	13-14
Fuel tank	Clean					x				12-13
Carburetor	Check idle setting - cutting blades must not run	x		x						19
	Readjust idle								x	19
Spark plug	Readjust electrode gap						x			20
Cylinder fins	Clean				x					
Spark arresting screen in muffler	Inspect		x							20
	Clean or replace							x	x	20
All accessible screws and nuts (not adjusting screws)	Retighten								x	
Cutting blades	Visual inspection	x		x						
	Sharpen							x	x	24
Gearbox lubrication	Check	x								21
	Top up								x	21
Drive shaft	Check lubrication									21-22
	Relubricate								x	21-22

The user of this unit should carry out only the maintenance operations described in this manual. Other repair work may be performed only by an authorized STIHL Service dealer.

Warranty claims following repairs can be accepted only if the repair has been performed by an authorized STIHL Service dealer using original STIHL spare 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.

Specifications

Engine

Single cylinder two-stroke engine
Displacement: 25.4 cm³
(1.55 cu.in)
Bore: 34 mm (1.34 in)
Stroke: 28 mm (1.10 in)
Engine power: 0.9 kW
(1.2 bhp)

Ignition System

Type:
Electronic (breakerless)
magneto ignition
Spark plug
(suppressed): Bosch WSR 6 F,
NGK BPMR 7A
or
Champion RCJ 6 Y
(not all markets)

Electrode gap: 0.5 mm (0.02 in)
Spark plug thread: M 14 x 1.25;
9.5 mm
(0.37 in) long

Cutting Blades

Bidirectional
Blade length: 300 mm (12 in)
Cutting length: 250 mm (10 in)

Fuel System

Carburetor:
All position diaphragm carburetor
with integral fuel pump

Air filter:
Foam and felt elements

Fuel tank capacity: 0.44 l (0.92 US pt)

Fuel mix:
See chapter "Fuel"

Weight: 6.5 kg (14.3 lb)

Special Accessories

Shoulder strap
Full harness
Safety glasses

STIHL gear lubricant
for hedge trimmers
(80g/3oz tube) 0781 120 1109
(225g/8oz tube) 0781 120 1110

STIHL gear lubricant
for brushcutters
(80g/3oz tube) 0781 120 1117
(225g/8oz tube) 0781 120 1118

Operating Instructions

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.

During operation

After a long period of full-throttle operation, allow engine to run for a while at idle speed so that the heat in the engine can be dissipated by flow of cooling air. This protects engine-mounted components (ignition, carburetor) from thermal overload.

After finishing work

Storing for short period:
To avoid condensation, fill the fuel tank and keep the unit in a dry place until you need it again.

Storing for a long period:
Drain and clean the fuel tank - run engine until carburetor is dry.

Andreas Stihl AG & Co. Limited Warranty Federal Emission Control Systems Utility Engines

Your Warranty Rights and Obligations

The U.S. Environmental Protection Agency (EPA) and Andreas Stihl are pleased to explain the Emission Control System Warranty on your utility equipment engine.

In the U.S., new 1997 and later model year utility equipment engines must be designed, built and equipped, at the time of sale, to meet the U.S. EPA regulations for small nonroad engines. The equipment engine must be free from defects in materials and workmanship which cause it to fail to conform with U.S. EPA standards for the first two years of engine use from the date of sale to the ultimate purchaser.

Andreas Stihl must warrant the emission control system on your utility equipment engine for the period of time listed above provided there has been no abuse, neglect or improper maintenance of your utility equipment engine.

Your emission control system includes parts such as the carburetor and the ignition system. Also included may be hoses, and connectors and other emission related assemblies.

Where a warrantable condition exists, Andreas Stihl will repair your utility equipment engine at no cost to you, including diagnosis (if the diagnostic work is performed at an authorized dealer), parts, and labor.

Manufacturer's Warranty Coverage:

In the U.S., 1997 and later model year utility equipment engines are also warranted for two years. If any emission-related part on your engine is defective, the part will be repaired or replaced by Andreas Stihl free of charge.

Owner's Warranty Responsibilities:

As the utility equipment engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual.

Andreas Stihl recommends that you retain all receipts covering maintenance on your utility equipment engine, but Andreas Stihl cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

Any replacement part or service that is equivalent in performance and durability may be used in non-warranty maintenance or repairs, and shall not reduce the warranty obligations of the engine manufacturer.

As the utility equipment engine owner, you should be aware, however, that Andreas Stihl may deny you warranty

coverage if your utility equipment engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your utility equipment engine to a Stihl service centre as soon as a problem exists. The warranty repairs will be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, please contact a Stihl customer service representative at 1-800-467-8445 or you can write to

Stihl Inc.,
536 Viking Drive, P.O. Box 2015,
Virginia Beach, VA 23450-2015.

Coverage

Andreas Stihl warrants to the ultimate purchaser and each subsequent purchaser that your utility equipment engine will be designed, built and equipped, at the time of sale, to meet all applicable regulations. Andreas Stihl also warrants to the initial purchaser and each subsequent purchaser that your engine is free from defects in materials and workmanship which cause the engine to fail to conform with applicable regulations for a period of two years.

In the U.S., for 1997 and later model years, EPA requires manufacturers to warrant utility equipment engines for two years. These warranty periods will begin on the date the utility equipment engine is purchased by the initial purchaser. If any emission related part on your engine is defective, the part will be replaced by Andreas Stihl at no cost to the owner.

The warranty period begins on the date the engine or equipment is delivered to you and you have signed and sent back the warranty card to Stihl.

Warranty Period

Any warranted part which is not scheduled for replacement as required maintenance, or which is scheduled only for regular inspection to the effect of "repair or replace as necessary" will be warranted for the warranty period. Any warranted part which is scheduled for replacement as required maintenance will be warranted for the period of time up to the first scheduled replacement point for that part.

Diagnosis

You, as the owner, shall not be charged for diagnostic labor which leads to the determination that a warranted part is defective. However, if you claim warranty for a component and the machine is tested as non-defective, Stihl will charge you for the cost of the emission test. Mechanical diagnostic work is performed

at an authorized Stihl servicing dealer. Emission test may be performed either at Stihl or at any independent test laboratory.

Andreas Stihl shall remedy warranty defects at any authorized Stihl servicing dealer or warranty station. Any authorized work done at an authorized dealer or warranty station shall be free of charge to the owner if such work determines that a warranted part is defective. Any manufacturer-approved or equivalent replacement part may be used for any warranty maintenance or repairs on emission-related parts, and must be provided free of charge to the owner if the part is still under warranty. Andreas Stihl is liable for damages to other engine components caused by the failure of a warranted part still under warranty.

The California Air Resources Board's Emission Warranty Parts List specifically defines the emission-related warranted parts. These warranted parts are:

Carburetor
Ignition system (ignition module)
Spark plug
Airfilter
Manifold
Fasteners

How to File a Claim

Bring the product to any authorized Stihl servicing dealer and present the signed warranty card.

Where to get Warranty Service

Warranty services or repairs will be provided at all authorized Stihl servicing dealers.

Maintenance Requirements

The owner is responsible for the performance of the required maintenance as defined by Stihl in the owner's manual.

These instructions are based on the application of the recommended 2-stroke mixture (see also instruction "Fuel"). Discrepancies regarding quality and mixing ratio of fuel and oil may require shorter maintenance intervals.

Limitations

This Emission Control Systems Warranty shall not cover any of the following:

- repair or replacement required because of misuse or neglect, lack of required maintenance, repairs improperly performed or replacements not conforming to Andreas Stihl specifications that adversely affect performance and/or durability, and alterations or modifications not recommended or approved in writing by Andreas Stihl,

and

- replacement of parts and other services and adjustments necessary for required maintenance at and after the first scheduled replacement point.