

STIHL FS 235

STIHL



2 - 23

Instruction Manual



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1 Introduction

Dear Customer,

Thank you for choosing STIHL. We develop and manufacture our quality products to meet our customers' requirements. The products are designed for reliability even under extreme conditions.

STIHL also stands for premium service quality. Our dealers guarantee competent advice and instruction as well as comprehensive service support.

STIHL expressly commit themselves to a sustainable and responsible handling of natural resources. This user manual is intended to help you use your STIHL product safely and in an environmentally friendly manner over a long service life.

We thank you for your confidence in us and hope you will enjoy working with your STIHL product.



Dr. Nikolas Stihl

**IMPORTANT! READ BEFORE USING AND
KEEP IN A SAFE PLACE FOR REFERENCE.**

2 Guide to Using this Manual

2.1 Applicable Documentation

Local safety regulations apply.

- Read, understand and save the following documents in addition to this instruction manual:
 - Instruction manual and packaging of the cutting attachment you are using

2.2 Symbols used with warnings in the text



WARNING

- This symbol indicates dangers that can cause serious injuries or death.
 - The measures indicated can avoid serious injuries or death.

NOTICE

- This symbol indicates dangers that can cause damage to property.
 - The measures indicated can avoid damage to property.

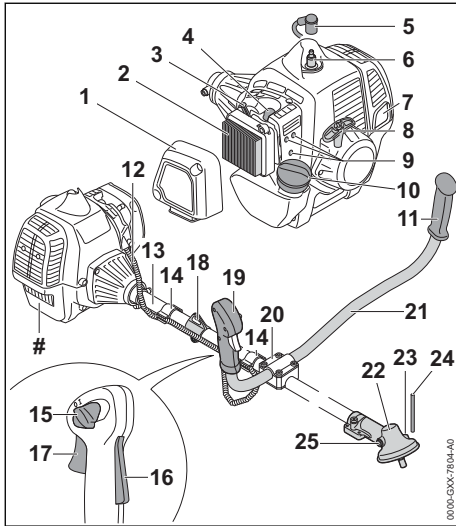
2.3 Symbols in Text



This symbol refers to a chapter in this instruction manual.

3 Overview

3.1 Trimmer

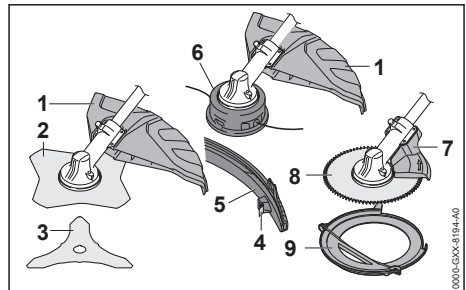


- 1 Filter Cover**
Covers the air filter.
- 2 Air Filter**
Filters the air entering the engine.
- 3 Choke Lever**
Helps start the engine.
- 4 Manual Fuel Pump**
Eases engine starts.
- 5 Spark Plug Boot**
Connects ignition lead to spark plug
- 6 Spark Plug**
Ignites fuel-air mixture in the engine.
- 7 Muffler**
Reduces trimmer noise emissions.
- 8 Starter Grip**
Serves to crank the engine.
- 9 Carburetor Adjusting Screws**
For tuning the carburetor.
- 10 Fuel Tank Cap**
Closes the fuel tank.
- 11 Handle**
For holding and controlling the trimmer.
- 12 Throttle Cable**
Connects the throttle trigger to the engine.
- 13 Shaft**
Connects all components.

- 14 Throttle Cable Retainer**
Secures throttle cable in position.
- 15 Slide Control**
For starting, running and stopping the engine.
- 16 Throttle Trigger Lockout**
Unlocks the throttle trigger.
- 17 Throttle Trigger**
Controls engine speed.
- 18 Carrying Ring**
For attaching carrying system.
- 19 Control Handle**
For operating, holding and controlling the trimmer.
- 20 Handlebar Clamp**
Connects handlebar to the drive tube.
- 21 Handlebar**
Connects control handle and left grip to drive tube.
- 22 Gear Housing**
Encloses the gearbox.
- 23 Opening for Stop Pin**
Accommodates the stop pin.
- 24 Stop Pin**
Blocks shaft while cutting attachment is being mounted.
- 25 Screw Plug**
Closes filler opening for STIHL gear grease.
- # Rating Label with Serial Number**

3.2 Deflectors and Cutting Attachments

The illustrations show examples of deflectors and cutting attachments. Approved combinations are listed in this instruction manual, 20.



- 1 Universal deflector**
Protects user from flying debris and contact with the cutting attachment.

2 Grass Cutting Blade

Cuts grass and weeds.

3 Brush Knife

Cuts brushwood.

4 Line Limiting Blade

Trims mowing line to correct length.

5 Skirt

Extends universal deflector for use with a mowing head.

6 Mowing Head

The mowing head contains the mowing line.

7 Limit Stop

Protects user from flying debris and contact with the circular saw blade and helps support the trimmer against the wood during cutting work.

8 Circular Saw Blade

Cuts shrubs and trees.

9 Transport Guard

Helps protect user from contact with metal cutting attachments.

3.3 Symbols

Meanings of symbols that may be on the trimmer and the deflector:



This symbol marks the fuel tank.



This symbol denotes the manual fuel pump.

START Engine is started with the slide control lever in this position.



Engine is operated with the slide control in this position.

STOP-0 Engine is stopped when the slide control is in this position.



Slide control is moved in this direction to stop the engine.



Engine is started with the choke lever in this position.



Engine is made ready for start with the choke lever in this position.



This symbol shows the direction of rotation of the cutting attachment.

max Ø xxx This symbol shows the maximum diameter of the cutting attachment in millimeters.



This symbol shows the rated speed of the cutting attachment.

4 Safety Precautions**4.1 Warning Signs****4.1.1 Warning Symbols**

Meanings of warning signs on the trimmer:



Observe safety notices and take the necessary precautions.



Read, understand and save the instruction manual.



Wear safety glasses, hearing protection and a hard hat.



Wear safety boots.



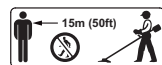
Wear work gloves.



Observe safety notices on kickback and take the necessary precautions.



Observe safety notices on flying debris and take the necessary precautions.



Maintain safe distance.



Do not touch hot surface.

4.1.2 Universal Deflector and Skirt**Universal deflector**

Meanings of warning signs on the universal deflector:



Do not use this deflector without skirt for mowing heads.



Use this deflector for grass cutting blades.



Use use this deflector for brush knives.



Use this deflector for shredder blades.



Do not use this deflector for circular saw blades.

Skirt

Meanings of warning signs on the skirt:



Use the universal deflector with skirt and line limiting blade for mowing heads.

4.2 Intended Use

The STIHL FS 235 trimmer is designed for the following applications:

- with a mowing head: Mowing grass
- with a grass cutting blade: Mowing grass and weeds
- with a brush knife: Cutting brush with a stem diameter up to 20 mm
- with a circular saw blade: Cutting shrubs with a stem diameter up to 40 mm

⚠ WARNING

- Using the trimmer for purposes for which it is not designed may result in serious or fatal injuries and damage to property.
 - ▶ Use the trimmer as described in this instruction manual.

4.3 The Operator

⚠ WARNING

- Users who have had no instruction cannot recognize or assess the risks involved in using the trimmer. The user or other persons may sustain serious or fatal injuries.



- ▶ Read, understand and save the instruction manual.

- ▶ If you pass the trimmer is on to another user: Always give them the instruction manual.
- ▶ Make sure the user meets the following requirements:
 - The user must be rested.
 - The user must be in good physical condition and mental health to operate and work with the trimmer. If the user's physical, sensory or mental ability is restricted, he or she may work only

under the supervision of or as instructed by a responsible person.

- The user is able to recognize and assess the risks involved in using the trimmer.
- The user must be of legal age or is being trained in a trade under supervision in accordance with national rules and regulations.
- The user has received instruction from a STIHL servicing dealer or other experienced user before working with the trimmer for the first time.
- The user must not be under the influence of alcohol, medication or drugs.
- ▶ If you have any queries: Contact a STIHL servicing dealer for assistance.
- The trimmer's ignition system produces an electromagnetic field. This field may interfere with some pacemakers. This can result in serious or fatal injuries.
 - ▶ If the user has a pacemaker: Make sure the pacemaker is not affected.

4.4 Clothing and equipment

⚠ WARNING

- Long hair can be drawn into the brushcutter during operation. This may result in serious injury to the user.
 - ▶ Tie up and confine long hair above your shoulders.
- Objects can be thrown at high speed during operation. This may result in injury to the user.



- ▶ Wear close-fitting safety glasses. Suitable safety glasses are tested in accordance with EN 166 or national regulations and available commercially with the corresponding marking.

- ▶ Wear face protection.
- ▶ Wear long trousers made from resistant material.

- Noise is generated during operation. Noise can damage your hearing.



- ▶ Wear ear protection.

- Falling objects can cause head injuries.



- ▶ If objects are likely to fall while working: wear a hard hat.

- Dust can be whipped up during operation. Whipped up dust can damage the respiratory passages and cause allergic reactions.

- ▶ If dust is generated: Wear a dust respirator mask.
- Inappropriate clothing can snag on wood, brush or the brushcutter. Users not wearing suitable clothing are at risk of serious injury.
 - ▶ Wear close-fitting clothing.
 - ▶ Remove scarves and jewelry.
- The user may come into contact with the rotating cutting attachment during operation. This may result in serious injury to the user.
 - ▶ Wear robust footwear.



- ▶ If you are using a metal cutting attachment: Wear steel-toed safety boots.

- ▶ Wear long trousers made from resistant material.
- When mounting and dismounting the cutting attachment and during cleaning or maintenance, the user may come into contact with the sharp edges of the cutting attachment or the crosscut blade. This may result in injury to the user.

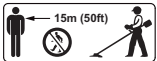


- ▶ Wear work gloves made from resistant material.
- Wearing unsuitable footwear may cause the user to slip. This may result in injury to the user.
 - ▶ Wear sturdy, closed-toed footwear with high-grip soles.

4.5 Working Area and Surroundings

⚠ WARNING

- Bystanders, children and animals are not aware of the dangers of the brushcutter or flying debris. This may result in serious injury to bystanders, children and animals and damage to property.



- ▶ Do not allow bystanders, children or animals within 15 meters of the work area.
- ▶ Maintain a clearance of 15 meters from objects.
- ▶ Do not leave the brushcutter unattended.
- ▶ Make sure that children cannot play with the brushcutter.
- Hot exhaust gas is emitted through the muffler while the engine is running. Hot exhaust gas can ignite easily flammable materials and cause a fire.
 - ▶ Keep exhaust gas well away from easily flammable materials.

4.6 Safe Condition

4.6.1 Brushcutter

The brushcutter is in a safe condition if the following points are observed:

- The brushcutter is not damaged.
- There is no fuel leaking from the trimmer.
- The fuel tank cap is closed.
- The brushcutter is clean.
- The controls function properly and have not been modified.
- A combination of cutting attachment and deflector recommended in this user manual is mounted.
- The cutting attachment and deflector are properly mounted.
- Genuine STIHL accessories for this brushcutter are fitted.
- The accessories are correctly attached.
- All accessible screws and fastening parts are firmly tightened.

⚠ WARNING

- If not in safe condition, components may no longer operate correctly, safety devices may be disabled and fuel leakage may occur. This may result in serious or fatal injury to people.
 - ▶ Work only with an undamaged brushcutter.
 - ▶ If fuel is leaking from the trimmer: Do not use the trimmer and contact a STIHL dealer for assistance.
 - ▶ Close the fuel tank cap.
 - ▶ If the brushcutter is dirty: Clean the brushcutter.
 - ▶ Never attempt to modify your brushcutter. Exception: Mounting one of the combinations of cutting attachment and deflector recommended in this user manual.
 - ▶ If the controls do not function properly: Do not use your brushcutter.
 - ▶ Fit genuine STIHL accessories for this brushcutter.
 - ▶ Mount the cutting attachment and deflector as described in this user manual.
 - ▶ Attach accessories as described in this User Manual or in the User Manual for the accessories.
 - ▶ Tighten loose screws and fastening parts.
 - ▶ Never insert objects in the openings of the brushcutter.
 - ▶ Replace worn or damaged labels.
 - ▶ If you have any doubts, be sure to consult a STIHL dealer.

4.6.2 Deflector

The deflector is in a safe condition if the following points are observed:

- The deflector is not damaged.
- If you are using the line limiting blade and skirt: Line limiting blade and skirt are correctly fitted.

▲ WARNING

- If components do not comply with safety requirements, they will no longer function properly and safety devices may be rendered inoperative. This can result in serious injuries.
 - ▶ Work only with an undamaged deflector.
 - ▶ If you are using the line limiting blade and skirt: Work with a correctly fitted line limiting blade and skirt.
 - ▶ If you have any queries: Contact your STIHL servicing dealer.

4.6.3 Mowing Head

The mowing head is in a safe condition if the following points are observed:

- The mowing head is not damaged.
- The mowing head is not jammed.
- The mowing lines are properly installed.
- The wear limits are not exceeded.

▲ WARNING

- If they are in an unsafe condition, parts of the mowing head or mowing lines may come off and be ejected at high speed. They may cause serious injury to persons.
 - ▶ Work only with an undamaged mowing head.
 - ▶ Never use metal objects in place of the nylon mowing lines.
 - ▶ Observe and remain inside the wear limits.
 - ▶ If you have any doubts, be sure to consult a STIHL dealer.

4.6.4 Metal cutting attachment

The metal cutting attachment is in a safe condition if the following points are observed:

- Metal cutting attachment and mounting hardware are undamaged.
- Metal cutting attachment is not warped.
- Metal cutting attachment is properly mounted.
- Metal cutting attachment is correctly sharpened.
- Cutting edges of the metal cutting attachment have no burrs.
- The wear limits are not exceeded.
- If a metal cutting attachment not manufactured by STIHL is used, it must not be heavier, thicker, of a different shape, of a lower quality,

or larger in diameter than the largest metal cutting attachment approved by STIHL.

▲ WARNING

- If it is not in an safe condition, parts of the metal cutting attachment may come off and be thrown at high speed. They may cause serious injury to persons.
 - ▶ Never work with a damaged metal cutting attachment or damaged mounting hardware.
 - ▶ Sharpen the metal cutting attachment correctly.
 - ▶ Deburr the cutting edges with a file.
 - ▶ Have the metal cutting attachment balanced by a STIHL servicing dealer.
 - ▶ Observe and remain inside the wear limits.
 - ▶ Use a metal cutting attachment specified in these instructions for use.
 - ▶ If you have any doubts, be sure to consult a STIHL dealer.

4.7 Fuel Mixture and Refueling

▲ WARNING

- This trimmer requires a fuel mixture of gasoline and two-stroke engine oil. Fuel mixture and gasoline are extremely flammable. If fuel mixture or gasoline make contact with open fire or hot objects, they can cause a fire or explosion. This can result in serious or fatal injuries and damage to property.
 - ▶ Protect fuel mixture and gasoline from heat and fire.
 - ▶ Do not spill fuel mixture and gasoline.
 - ▶ If fuel has been spilled: Wipe up the fuel with a cloth and do not attempt to start the engine until all parts of the trimmer and the area around it are dry.
 - ▶ Do not smoke.
 - ▶ Never refuel near a fire.
 - ▶ Shut off the engine and allow it to cool down before refueling.
 - ▶ Start the engine at least 3 meters from the fueling spot, outdoors only.
- Inhaling fuel fumes and gasoline fumes can have toxic effects.
 - ▶ Avoid inhaling fuel fumes or gasoline fumes.
 - ▶ Refuel in a well-ventilated location.
- The trimmer becomes hot during operation. The fuel expands and excess pressure can build up in the tank. Fuel can escape as a spray when the fuel tank cap is opened. The escaping fuel can ignite. This can result in serious injuries.

- ▶ Allow the trimmer to cool down first and then open the tank cap carefully.
- Clothing that has been in contact with fuel or gasoline is more easily flammable. This can result in serious or fatal injuries and damage to property.
 - ▶ If your clothing comes into contact with fuel or gasoline: Change your clothing.
- Fuel mix, gasoline and two-stroke engine oil can harm the environment.
 - ▶ Do not spill fuel, gasoline or two-stroke engine oil.
 - ▶ Dispose of fuel mix, gasoline and two-stroke engine oil in accordance with local regulations and environmental requirements.
- Fuel, gasoline or two-stroke engine oil can cause irritation if they come into direct contact with the skin or eyes.
 - ▶ Avoid contact with fuel, gasoline and two-stroke engine oil.
 - ▶ In case of contact with the skin: Wash affected areas with plenty of water and soap.
 - ▶ In case of contact with the eyes: Rinse eyes with plenty of water for at least 15 minutes and seek medical advice.
- The trimmer's ignition system produces sparks. Unconfined sparks may cause a fire or an explosion in an easily combustible or explosive environment. This can result in serious or fatal injuries and damage to property.
 - ▶ Use the spark plugs described in this instruction manual.
 - ▶ Insert and tighten down the spark plug.
 - ▶ Connect the spark plug boot and press it down firmly.
- The trimmer can be damaged if it is run on a fuel mixture consisting of unsuitable gasoline or an unsuitable two-stroke engine oil or if an incorrect mix ratio of gasoline and two-stroke engine oil is used.
 - ▶ Mix the fuel as described in this instruction manual.
- The mixture of gasoline and two-stroke engine oil can separate if it is stored for a long period. The trimmer can be damaged if it is used with a fuel mix that has become separated.
 - ▶ Before refueling the trimmer: Thoroughly mix the fuel.
 - ▶ Use a mixture of gasoline and two-stroke engine oil that is not older than 30 days (STIHL MotoMix: 2 years).

4.8 Operation

WARNING

- If the engine is not started properly, the user may lose control of the trimmer. This can result in serious injuries.
 - ▶ Start the engine as described in this instruction manual.
 - ▶ If the cutting attachment is touching the ground or objects: Do not start the engine.
- The slide control is in position **START** for engine starts. Engine RPM in position **START** is higher than idle speed and the cutting attachment may rotate as soon as the engine runs. This can result in serious injuries.
 - ▶ Do not touch the cutting attachment.
 - ▶ Start the engine as described in this instruction manual.
- The user cannot concentrate on the work in certain situations. The user can lose control of the trimmer, stumble or fall and be seriously injured.
 - ▶ Work calmly and carefully.
 - ▶ If light and visibility are poor: Do not use your trimmer.
 - ▶ Operate the trimmer alone.
 - ▶ Keep the cutting attachment close to the ground.
 - ▶ Watch out for obstacles.
 - ▶ Stand on the ground while working and keep a good balance.
 - ▶ If you begin to feel tired: Take a break.
- Exhaust gas is produced when the engine is running. Breathing in exhaust gas can have toxic effects.
 - ▶ Avoid inhaling exhaust gas.
 - ▶ Operate the trimmer in a well ventilated location.
 - ▶ In the event of nausea, headache, visual disturbances, problems with hearing or dizziness: Stop work and seek medical advice.
- The user's ability to hear and assess noises is restricted when wearing hearing protection with the engine running.
 - ▶ Work calmly and carefully.
- The user will not be able to control the trimmer properly if it is operated with the slide control in position **START**. This can result in serious injuries.
 - ▶ Check that the slide control is in position **I** during operation.
 - ▶ Start the engine as described in this instruction manual.
- The rotating cutting attachment can cut the user. This can result in serious injuries.

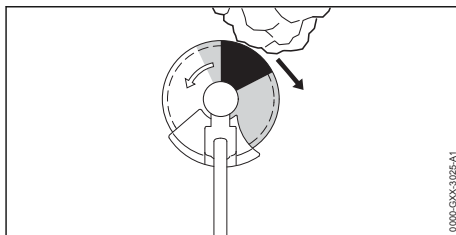
- ▶ Do not touch the rotating cutting attachment.
- ▶ If the cutting attachment is blocked by an object: Shut off the engine. Then remove the object causing the blockage.
- The machine can be damaged if you open the throttle while the cutting attachment is blocked by an object.
 - ▶ Shut off the engine. Then remove the object causing the blockage.
- If the behavior of the trimmer changes during operation or feels unusual, it may no longer be in a safe condition. This can result in serious injuries and damage to property.
 - ▶ Stop work and contact your STIHL dealer for assistance.
- Trimmer vibrations may occur during operation.



- ▶ Wear gloves.

- ▶ Take regular breaks.
- ▶ If signs of circulation problems occur: Seek medical advice.
- If the cutting attachment makes contact with a foreign object during operation, the object or parts of it may be thrown at high speed. This may result in personal injuries and damage to property.
 - ▶ Clear away all foreign objects from the work area.
- If the rotating metal cutting attachment makes contact with a hard object, sparks may occur and the cutting attachment may be damaged. Sparks may cause a fire in an easily combustible location. This can result in serious or fatal injuries and damage to property.
 - ▶ Do not work in an easily combustible location.
 - ▶ Make sure the metal cutting attachment is in a safe condition.
- Note that the cutting attachment continues to rotate for a short period after you release the trigger. This can result in serious injuries.
 - ▶ Wait until the cutting attachment comes to a complete stop.
- In an emergency, the user may panic and not put the carrying system down. This can result in serious injuries.
 - ▶ Practice removing and putting down the carrying system.

4.9 Reactive Forces



Kickout can be caused for the following reasons:

- The shaded area or the black area of the rotating metal cutting attachment comes into contact with a solid object and is suddenly braked.
- The rotating metal cutting attachment gets pinched in the cut.

The risk of kickout is greatest in the black area.

⚠ WARNING

- These situations can abruptly decelerate or stop rotation of the cutting attachment and cause the cutting attachment to be thrown to the right or in the direction of the user (black arrow). The user can lose control of the trimmer. This can result in serious or fatal injuries.
 - ▶ Hold the trimmer firmly with both hands.
 - ▶ Use the working techniques described in this instruction manual.
 - ▶ Do not use the black area for cutting.
 - ▶ Use a combination of cutting attachment, deflector and carrying system recommended in this instruction manual.
 - ▶ Sharpen the metal cutting attachment correctly.
 - ▶ Cut with the motor running at full speed.

4.10 Transporting

⚠ WARNING

- The gearbox can get hot during operation. There is a risk of burn injuries.
 - ▶ Do not touch a hot gearbox.
- The trimmer may turn over or shift during transport. This may result in personal injuries and damage to property.
 - ▶ Shut off the engine.
 - ▶ If a metal cutting attachment is mounted: Fit the transport guard.
 - ▶ Secure the trimmer with lashing straps or a net to prevent it turning over and moving.
- The muffler and engine may be hot after a period of operation. There is a risk of burn injuries.

- ▶ Carry the trimmer properly balanced by the drive tube with the cutting attachment behind you.

4.11 Storing

⚠ WARNING

- Children are not aware of and cannot assess the dangers of a trimmer and can be seriously injured.
 - ▶ Shut off the engine.
 - ▶ If a metal cutting attachment is mounted: Fit the transport guard.
 - ▶ Store the trimmer out of the reach of children.
- Dampness can corrode the electrical contacts on the trimmer and metal components. This can damage the trimmer.
 - ▶ Store the trimmer in a clean and dry condition.

4.12 Cleaning, Maintenance and Repair

⚠ WARNING

- The cutting attachment can start rotating unintentionally if the engine is running during cleaning, maintenance or repair operations. This may result in serious injury to people and damage to property.
 - ▶ Shut off the engine.
- The muffler and engine may be hot after a period of operation. This can result in burn injuries.
 - ▶ Wait until the muffler and engine cool down.
- The gear housing can get hot during operation. There is a risk of burn injuries.
 - ▶ Do not touch a hot gear housing.



- Aggressive cleaning agents, a water jet or pointed objects can damage the trimmer, deflector or the cutting attachment. If the trimmer, deflector and cutting attachment are not cleaned correctly, components may no longer function properly or safety devices may be rendered inoperative. They may cause serious injury to persons.
 - ▶ Clean the trimmer, deflector and cutting attachment as described in this instruction manual.
- If the trimmer, deflector and cutting attachment are not serviced or repaired correctly, components may no longer function properly or safety devices may be rendered inoperative.

This may result in serious or fatal injury to people.

- ▶ Do not attempt to service or repair the trimmer or deflector.
- ▶ If the trimmer or the deflector require servicing or repairs: Contact your STIHL servicing dealer for assistance.
- ▶ Maintain the cutting attachment as described in the User Manual supplied with the cutting attachment being used or on the cutting attachment's packaging.
- The user can be cut by the sharp cutting edges while cleaning or maintaining cutting attachments. This may result in injury to the user.



- ▶ Wear work gloves made from resistant material.

5 Preparing Trimmer for Operation

5.1 Preparing the Brushcutter for Operation

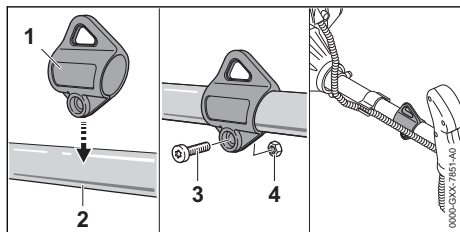
The following steps must be performed before commencing work:

- ▶ Ensure that the following components are in safe condition:
 - Brushcutter, 4.6.1.
 - Deflector, 4.6.2.
 - Mowing head or metal cutting attachment, 4.6.3 or 4.6.4.
- ▶ Clean the brushcutter, 15.1.
- ▶ Fit the carrying ring, 6.1.
- ▶ Mount the bike handle, 6.2.
- ▶ Select combination of cutting attachment, deflector and carrying system, 20.
- ▶ Mount the deflector, 6.3.1.
- ▶ If you are using a universal deflector together with a mowing head: Fit the skirt and line limiting blade, 6.4.1.
- ▶ Mount mowing head or metal cutting attachment, 6.5.1 or 6.6.1.
- ▶ Fuel the trimmer, 8.2.
- ▶ Fit and adjust the carrying system, 7.1.
- ▶ Adjust the bike handle, 7.2.
- ▶ Balance the brushcutter, 7.3.
- ▶ Check the controls, 10.1.
- ▶ If you cannot carry out this work: Do not use your brushcutter and contact your STIHL dealer for assistance.

6 Assembling the Trimmer

6.1 Fitting the Carrying Ring

- ▶ Shut off the engine.

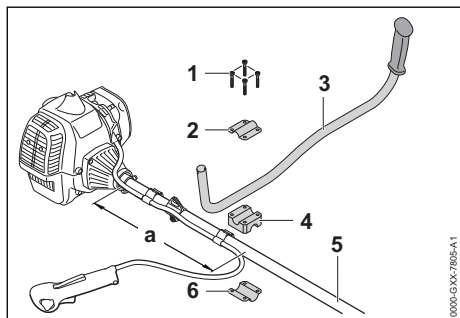


- ▶ Hold the carrying ring (1) against the drive tube (2) and then press it into position.
- ▶ Fit the nut (4).
- ▶ Insert and tighten down the screw (3) firmly.

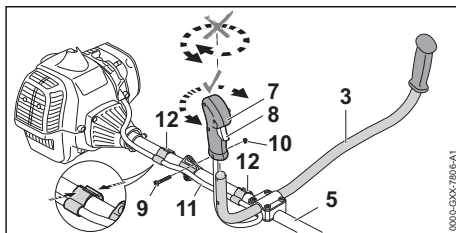
The carrying ring need not be removed again.

6.2 Mounting the Bike Handle

- ▶ Shut off the engine.



- ▶ Take out the screws (1).
- ▶ Fit the friction liner (4) together with the lower clamp (6) on the drive tube (5) at distance of 35 cm (a).
- ▶ Place the handlebar (3) in the clamp (4).
- ▶ Fit the upper clamp (2) so that the holes are in alignment.
- ▶ Insert the screws (1).
- ▶ Swing the handlebar (3) up and line it up with the cutting attachment.
- ▶ Tighten down the screws (1) firmly.



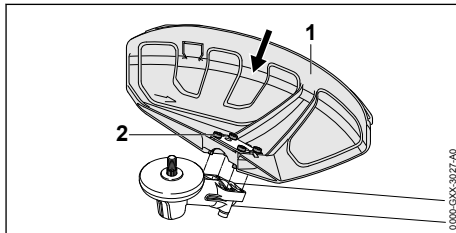
- ▶ Position the control handle (7) and throttle cable (11) over and along the drive tube (5) – do not twist the control handle (7).
- ▶ Take out the screw (9).
- ▶ Fit the control handle (7) on the handlebar (3), trigger facing the gearbox, and line up the hole in the control handle (7) with the hole in the handlebar (3).
- ▶ Fit the nut (10).
- ▶ Insert and tighten down the screw (9) firmly.
- ▶ Position the throttle cable retainer (12) and throttle cable (11) against the drive tube. Do not kink the throttle cable or lay it in tight radii – make sure the throttle trigger moves freely.
- ▶ Close the throttle cable retainer (12). The retainer (12) snaps into place.

The bike handle need not be removed again.

6.3 Mounting and Removing the Deflector

6.3.1 Mounting the Deflector

- ▶ Shut off the engine.



- ▶ Push the deflector (1) into the guides on the gear housing as far as stop.
- ▶ Insert and tighten down the screws (2) firmly.

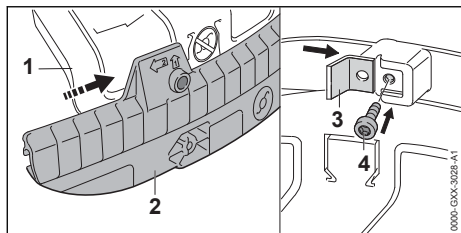
6.3.2 Removing the Deflector

- ▶ Shut off the engine.
- ▶ Take out screws.
- ▶ Remove guard.

6.4 Fitting and Removing the Skirt

6.4.1 Fitting the Skirt

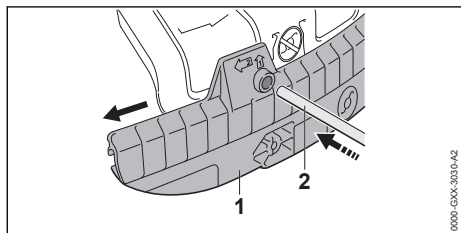
- ▶ Shut off the engine.



- ▶ Slide the guide slot in the skirt (2) onto the deflector (1) – it must snap into position.
- ▶ Push the line limiting blade (3) into the slot in the skirt (2).
- ▶ Insert and tighten down the screw (4) firmly.

6.4.2 Removing the Skirt

- ▶ Shut off the engine.



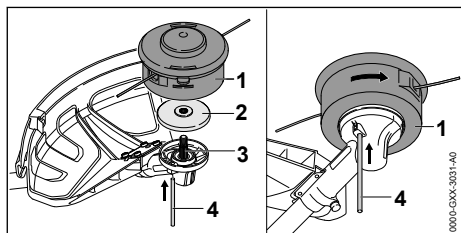
- ▶ Insert stop pin (2) into the hole in the skirt (1).
- ▶ Use the stop pin (2) to slide the skirt (1) off the deflector.

The line limiting blade (1) can be left on the skirt.

6.5 Mounting and Removing the Mowing Head

6.5.1 Mounting the Mowing Head

- ▶ Shut off the engine.



- ▶ Place the thrust plate (2) on the shaft (3) so that its smaller diameter faces up.
- ▶ Fit the mowing head (1) on the shaft (3) and turn it counterclockwise.
- ▶ Insert the stop pin (4) in the bore as far as stop and hold it depressed.
- ▶ Rotate the mowing head (1) counterclockwise until the stop pin (4) engages in position.

The shaft is now blocked.

- ▶ Tighten down the mowing head (1) firmly by hand.
- ▶ Remove the stop pin (4).

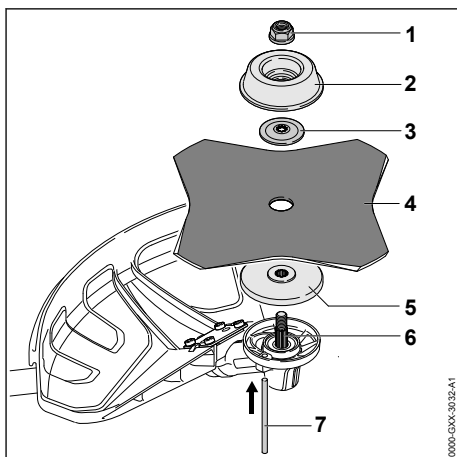
6.5.2 Removing the Mowing Head

- ▶ Shut off the engine.
- ▶ Insert the stop pin in the bore as far as stop and hold it depressed.
- ▶ Rotate the mowing head until the stop pin engages in position.
The shaft is now blocked.
- ▶ Unscrew the mowing head clockwise.
- ▶ Remove the thrust plate.
- ▶ Remove stop pin.

6.6 Removing and Installing Metal Cutting Attachment

6.6.1 Mounting the Metal Cutting Attachment

- ▶ Shut off the engine.



- ▶ Place the thrust plate (5) on the shaft (6) so that its smaller diameter faces up.
- ▶ Place the metal cutting attachment (4) on the thrust plate (5). If you are fitting a circular saw blade or a grass cutting blade with more than 4 cutting edges: Its cutting edges must face in the same direction as the arrow on the deflector.
- ▶ Place the thrust washer (3) on the metal cutting attachment (4) so that its raised side faces up.
- ▶ Place the rider plate (2) on the thrust washer (3) so that its closed side faces up.
- ▶ Insert the stop pin (7) in the bore as far as stop and hold it depressed.

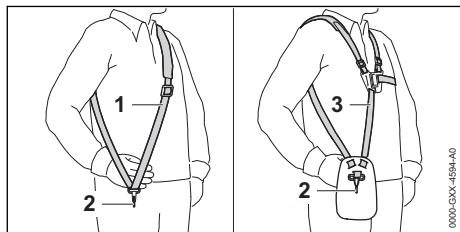
- ▶ Rotate the metal cutting attachment (4) counterclockwise until the stop pin (7) engages in position.
The shaft (6) is now blocked.
- ▶ Fit the nut (1) counterclockwise and tighten it down firmly.
- ▶ Remove the stop pin (7).

6.6.2 Removing the metal cutting attachment

- ▶ Shut off the engine.
- ▶ Insert the stop pin in the bore up to the limit stop and hold it depressed.
- ▶ Rotate the metal cutting attachment clockwise until the stop pin engages in position.
The shaft is now blocked.
- ▶ Unscrew the mounting nut clockwise.
- ▶ Remove the fastening parts, metal cutting tool and pressure plate.
- ▶ Remove the stop pin.

7 Adjusting Trimmer for User

7.1 Fitting and Adjusting the Carrying System

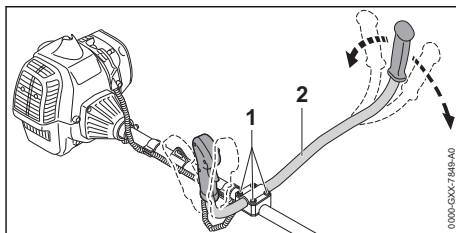


- ▶ Put on the shoulder strap (1) or full harness (3).
- ▶ Adjust the shoulder strap (1) or full harness (3) so that the carabiner (2) is about a hand's width below your right hip.

7.2 Adjusting the Bike Handle

The bike handle can be set to different positions to suit the height and reach of the user.

- ▶ Shut off the engine.
- ▶ Hook the brushcutter from the carrying ring into the carabiner of the carrying system.

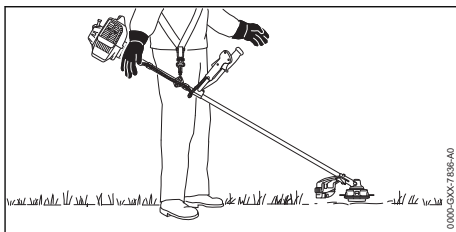


- ▶ Undo the screws (1).
- ▶ Swing the bike handle (2) to the required position.
- ▶ Tighten down the screws (1) firmly.

7.3 Balancing the Trimmer

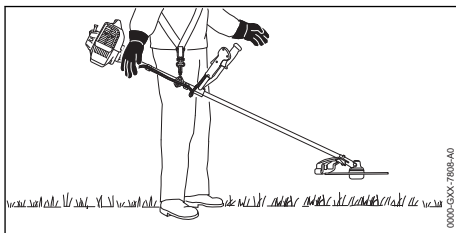
The unit is balanced differently depending on the cutting attachment used.

If a mowing head, grass cutting blade or brush knife is fitted:



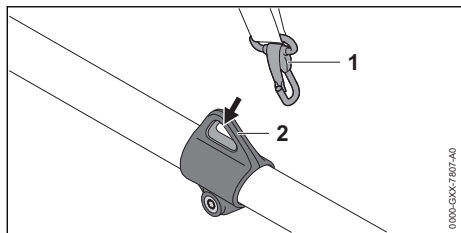
The cutting attachment should rest lightly on the ground.

If a circular saw blade is fitted:

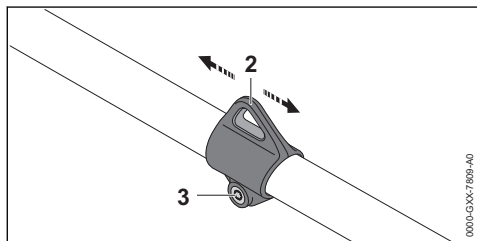


The saw blade must hover at a height of about 20 cm above the ground.

- ▶ Shut off the engine.



- ▶ Connect the carrying ring (2) to the carabiner (1).
- ▶ Wait for the trimmer to stop swinging.
- ▶ Check position of cutting attachment. If it needs adjustment:



- ▶ Loosen the screw (3).
- ▶ Move carrying ring (2) up or down the drive tube until correct balanced position is reached.
- ▶ Tighten down the screw (3) firmly.

8 Mixing Fuel and Refueling the Brushcutter

8.1 Mixing Fuel



A video is available for this chapter



www.stihl.com/sxpweh

This trimmer requires a fuel mixture of gasoline and two-stroke engine oil., in a ratio of 50:1.

STIHL recommends you use STIHL MotoMix.

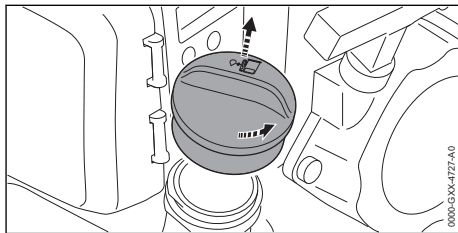
If you mix the fuel yourself, use only STIHL two-stroke engine oil or another high-performance engine oil in accordance with JASO FB, JASO FC, JASO FD, ISO-L-EGB, ISO-L-EGC or ISO-L-EGD.

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

- ▶ Make sure that the octane number of the gasoline is at least 90 RON and the ethanol content is not more than 10%.
- ▶ Make sure the two-stroke engine oil you are using meets the requirements.
- ▶ Depending on the required amount of fuel, determine the correct amounts of two-stroke engine oil and gasoline in a mix ratio of 50:1. Examples for fuel mixes:
 - 1 liter gasoline, 20 ml two-stroke engine oil
 - 3 liters gasoline, 60 ml two-stroke engine oil
 - 5 liters gasoline, 100 ml two-stroke engine oil
- ▶ Pour two-stroke engine oil into a clean approved fuel canister first and then add gasoline.
- ▶ Thoroughly mix the fuel.

8.2 Fueling the Trimmer

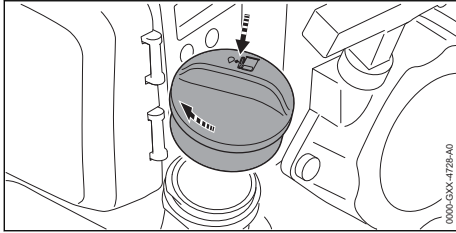
- ▶ Shut off the engine.
- ▶ Place your trimmer on a level surface so that the fuel tank cap faces up.
- ▶ Use a damp cloth to clean the tank cap and the area around it.



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

NOTICE

- Bright light, sunlight and extreme temperatures can cause the fuel mix to separate much faster. The trimmer can be damaged if it is used with a fuel mix that has become separated.
 - ▶ Thoroughly mix the fuel.
 - ▶ Do not use fuel mix that has been stored for more than 30 days.
- ▶ Fill the tank to within no more than 15 mm of the brim, taking care not to spill any fuel.



- ▶ Fit the tank cap on the tank opening.
 - ▶ Turn the tank cap clockwise and tighten it down firmly by hand.
- The fuel tank is closed.

9 Starting and Stopping the Engine

9.1 Selecting the correct starting procedure

When must the engine be prepared for starting?

The engine must be prepared for starting if one of the following conditions apply:

- The engine is at ambient temperature.
 - The engine stopped when accelerated for the first time.
 - The engine stopped because the fuel tank was empty.
- ▶ Prepare engine for start, 9.2 and then start the engine, 9.3.

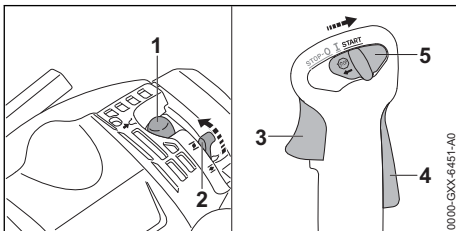
When can the engine be started without preparation?

The engine can be started without preparation if it has been running for at least 1 minute and only shut down for a short work break.

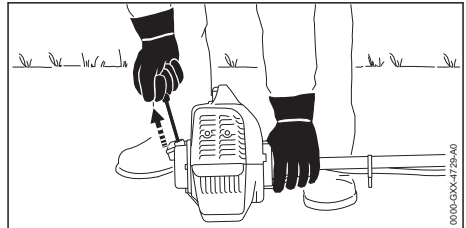
- ▶ Starting the engine, 9.3.

9.2 Preparing Engine for Start

- ▶ Select the correct starting procedure.
- ▶ Place the trimmer on a level surface and make sure the cutting attachment is not touching the ground or other objects.
- ▶ Remove the transport guard.



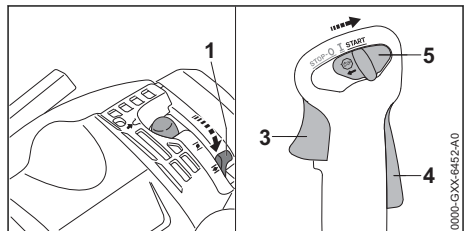
- ▶ Press the manual fuel pump bulb (1) at least five times.
 - ▶ Move the choke lever (2) to position .
 - ▶ Press down the throttle trigger lockout (4) and hold it there.
 - ▶ Pull the throttle trigger (3) and hold it there.
 - ▶ Move the slide control (5) to position **START** and hold it there.
 - ▶ Release the throttle trigger (3) and lockout lever (4).
- The slide control (5) engages in position **START**.



- ▶ Hold the trimmer with your left hand and press it against the ground.
 - ▶ Pull the starter grip slowly with your right hand until you feel it engage.
 - ▶ Pull the starter grip quickly and allow the starter rope to rewind several times until the engine fires and stops.
 - ▶ If the engine does not stop: Move the choke lever to position so that the engine does not flood.
- The engine stops.

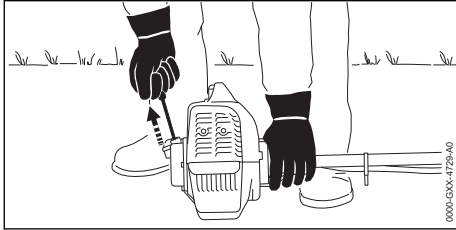
9.3 Starting the Engine

- ▶ Select the correct starting procedure.
- ▶ Place the trimmer on a level surface and make sure the cutting attachment is not touching the ground or other objects.
- ▶ Remove the transport guard.



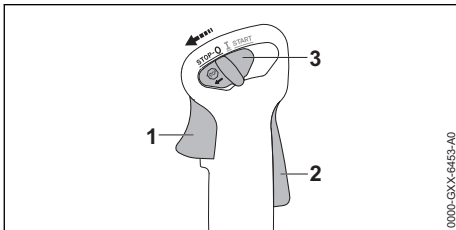
- ▶ Move the choke lever (1) to position .
- ▶ Press down the throttle trigger lockout (4) and hold it there.
- ▶ Pull the throttle trigger (3) and hold it there.

- ▶ Move the slide control (5) to position **START** and hold it there.
- ▶ Release the throttle trigger (3) and lockout lever (4).
The slide control (5) engages in position **START**.



- ▶ Press the trimmer against the ground with your left hand.
- ▶ Pull the starter grip slowly with your right hand until you feel it engage.
- ▶ Pull the starter grip quickly and allow the starter rope to rewind several times until the engine runs.
- ▶ Blip the throttle trigger (3).
The slide control springs (5) to position **I**. The engine runs at idling speed.
- ▶ If the cutting attachment rotates when the engine is idling: Rectify the malfunction. Idle speed adjustment is not correct.
- ▶ If the engine does not start: Prepare the engine for the start and then try again to start the engine.

9.4 Stopping the Engine



- ▶ Release the throttle trigger (1) and lockout lever (2).
The cutting attachment comes to a standstill.
- ▶ Move the slide control (3) to position **STOP-0**.
The engine stops.
- ▶ If the engine does not stop:
 - ▶ Move the choke lever to position **HL**.
The engine stops.
 - ▶ Do not use your trimmer and contact your STIHL dealer for assistance.

There is a malfunction in the slide control.

10 Testing the Trimmer

10.1 Checking the Controls

Throttle trigger lockout and throttle trigger

- ▶ Shut off the engine.
- ▶ Attempt to pull the trigger without depressing the lockout lever.
- ▶ If the trigger can be pulled: Do not use your trimmer and contact your STIHL dealer for assistance.
There is a malfunction in the throttle trigger lockout.
- ▶ Press down the throttle trigger lockout and hold it there.
- ▶ Depress the throttle trigger.
- ▶ Release the throttle trigger and throttle trigger lockout.
- ▶ If the trigger or trigger lockout is stiff or does not spring back to the idle position: Do not use your trimmer and contact your STIHL dealer for assistance.
Trigger or trigger lockout is faulty.

Throttle cable adjustment

- ▶ Start the engine.
- ▶ Attempt to pull the trigger without depressing the lockout lever.
- ▶ If the engine accelerates: Adjust the throttle cable.
Throttle cable adjustment is not correct.

Stopping the engine

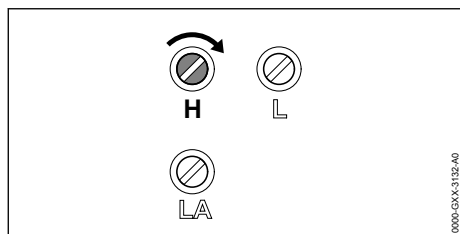
- ▶ Start the engine.
- ▶ Move the slide control to position **STOP-0**.
The engine stops.
- ▶ If the engine does not stop:
 - ▶ Move the choke lever to position **HL**.
The engine stops.
 - ▶ Do not use your trimmer and contact your STIHL dealer for assistance.
There is a malfunction in the slide control.

11 Operating the Trimmer

11.1 Adjusting Carburetor for Operation at High Altitude

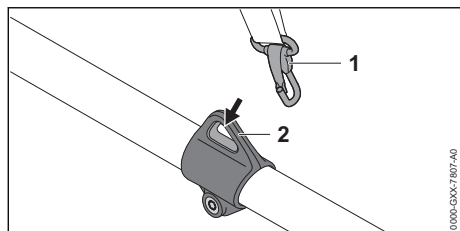
If you use the trimmer at high altitude, the engine will not deliver optimum power. The carburetor setting can be adjusted to obtain optimum engine power.

- ▶ Start the engine.
- ▶ Warm up the engine by opening and closing the throttle for about 1 minute.

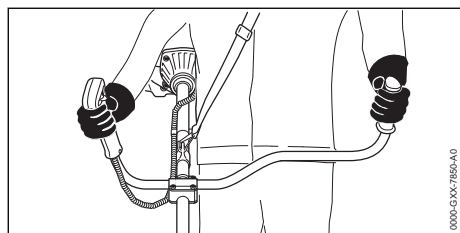
**NOTICE**

- If the trimmer is again used at a low altitude, the engine may overheat.
 - ▶ Carry out the standard setting.
- ▶ Rotate the high speed screw H clockwise until the engine delivers optimum power.

11.2 Holding and Controlling the Trimmer



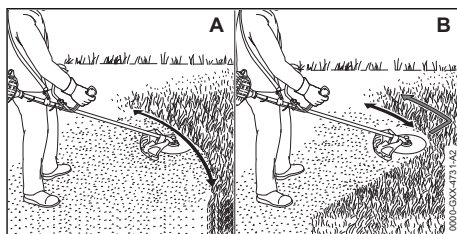
- ▶ Connect the carrying ring (2) to the carabiner (1).



- ▶ Hold the trimmer firmly with your right hand on the control handle – wrap your thumb around the handle.
- ▶ Hold the trimmer firmly with your the left hand on the left handle – wrap your thumb around the handle.

11.3 Mowing

The cutting height is determined by the distance of the cutting attachment from the ground.



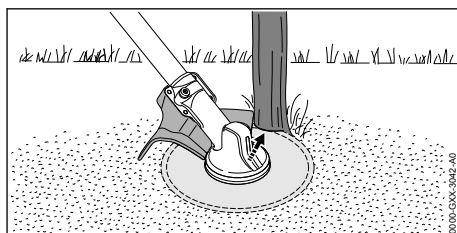
Mowing with a mowing head (A)

- ▶ Swing the brushcutter steadily back and forth in an arc.
- ▶ Move forward slowly in a controlled manner.

Mowing with a grass cutting blade or brush knife (B)

- ▶ Mow with the left-hand side on the metal cutting attachment.
- ▶ Move forward slowly in a controlled manner.

11.4 Saws with a circular saw blade

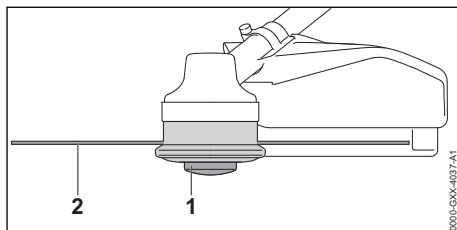


- ▶ Support the left side of the deflector against the stem.
- ▶ Cut through the stem at full speed.
- ▶ A safety distance of at least 2 tree lengths to the next work area.

11.5 Adjusting Nylon Line

11.5.1 Line Feed on AutoCut Mowing Head

- ▶ Tap the rotating mowing head on the ground. About 30 mm of fresh nylon line is advanced. The line limiting blade in the deflector trims the mowing lines to the correct length.



Automatic feed does not operate if the mowing lines are shorter than 25 mm.

- ▶ Shut off the engine.
- ▶ Depress the spool (1) on the mowing head and hold it depressed.
- ▶ Pull out the mowing lines (2).
- ▶ If the mowing lines (2) cannot be pulled out to the required length: Replace the spool (1) or the mowing lines (2).
The spool is empty.

11.5.2 Line Feed on SuperCut Mowing Heads

Mowing lines are adjusted automatically. The line limiting blade in the deflector trims the mowing lines to the correct length.

Automatic feed will not take place if the mowing lines are shorter than 40 mm.

- ▶ Shut off the engine.
- ▶ Pull out the mowing lines.
- ▶ If the mowing lines cannot be pulled out to required length: Replace nylon line.
The spool is empty.

12 After Finishing Work

12.1 When Work is Finished

- ▶ Shut off the engine.
- ▶ Allow trimmer to cool down.
- ▶ If the brushcutter is wet: Allow the brushcutter to dry.
- ▶ Clean the brushcutter.
- ▶ Clean the deflector.
- ▶ Clean the cutting attachment.
- ▶ If a metal cutting attachment is mounted: Fit the matching transport guard.

13 Transporting

13.1 Transporting the Trimmer

- ▶ Shut off the engine.
- ▶ If a metal cutting attachment is mounted: Fit the matching transport guard.

Carrying the trimmer

- ▶ Carry the trimmer properly balanced by the drive tube with the cutting attachment behind you.

Transporting the trimmer in a vehicle

- ▶ Secure the trimmer to prevent turnover and movement.

14 Storing

14.1 Storing the Trimmer

- ▶ Shut off the engine.

- ▶ If a metal cutting attachment is mounted: Fit the matching transport guard.
- ▶ Observe the following points when storing the trimmer:
 - The trimmer is out of the reach of children.
 - The trimmer is clean and dry.
- ▶ If you store the trimmer for more than 3 months:
 - ▶ Remove the cutting attachment.
 - ▶ Open the fuel tank cap.
 - ▶ Drain the fuel tank.
 - ▶ Close the fuel tank.
 - ▶ Have fuel tank cleaned by a STIHL servicing dealer.
 - ▶ Start the engine and run it at idling speed until it stops.

15 Cleaning

15.1 Cleaning the Trimmer

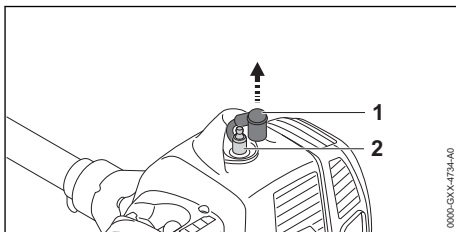
- ▶ Shut off the engine.
- ▶ Allow trimmer to cool down.
- ▶ Clean the trimmer with a damp cloth or STIHL resin solvent.
- ▶ Clean cooling air slots with a soft brush.

15.2 Cleaning the Deflector and Cutting Attachment

- ▶ Shut off the engine.
- ▶ Clean the deflector and cutting attachment with a damp cloth or a soft brush.

15.3 Cleaning the Spark Plug

- ▶ Shut off the engine.
- ▶ Allow trimmer to cool down.



- ▶ Pull off the spark plug boot (1).
- ▶ If the area around the spark plug (2) is soiled: Clean the spark plug (2) with a cloth.
- ▶ Unscrew the spark plug (2).
- ▶ Clean the spark plug (2) with a cloth.
- ▶ If the spark plug (2) is corroded: Install a new spark plug (2).
- ▶ Insert and tighten down the spark plug (2) firmly.
- ▶ Press the spark plug boot (1) firmly home.

16 Maintenance

16.1 Maintenance Intervals

The maintenance intervals are dependent on the environmental and operating conditions. STIHL recommends the following maintenance intervals:

After every 25 hours of operation

- Lubricate the gearbox.

After every 100 hours of operation

- Install a new spark plug.

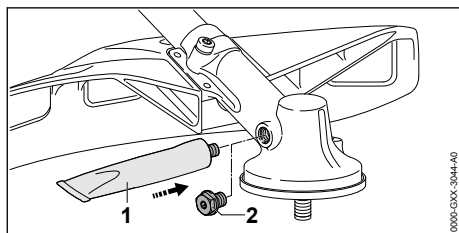
Monthly

- Have fuel tank cleaned by a STIHL servicing dealer.
- Have pickup body (filter) in fuel tank cleaned by a STIHL servicing dealer.

Every 12 months

- Have pickup body (filter) in fuel tank replaced by a STIHL servicing dealer.

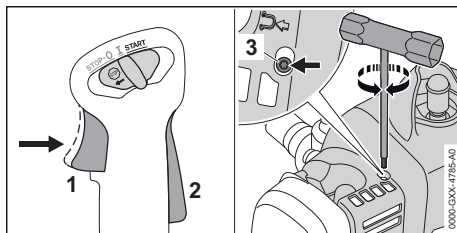
16.2 Lubricating the Gearbox



- Remove the screw plug (2).
 - If no grease can be seen on the end of the screw plug (2):
 - Screw the tube (1) of STIHL gear grease into the filler hole.
 - Squeeze 5 g of STIHL gear grease into the gear housing.
 - Unscrew the tube (1) of STIHL gear grease.
 - Refit and tighten down the screw plug (2) firmly.
 - Run the trimmer for 1 minute.
- STIHL gear grease is distributed evenly.

16.3 Adjusting the Throttle Cable

- Start the engine.



- Pull the trigger (1) without depressing the lock-out lever (2).
- If the engine accelerates: Hold the trigger (1) depressed and turn screw (3) counterclockwise until there is no further noticeable drop in engine speed.
The throttle cable was over-tensioned.
- Pull the trigger (1) and hold it there without depressing the lockout lever (2).
- Turn screw (3) clockwise until the engine accelerates.
- Back off the screw (3) 1.5 turns counterclockwise.
The engine idles and the throttle cable adjustment is correct.
- Shut off the engine.

16.4 Sharpening and Balancing a Metal Cutting Attachment

Correctly sharpening and balancing metal cutting attachments requires a lot of practice.

STIHL recommends you have metal cutting attachments resharpened and balanced by a STIHL servicing dealer.

- Sharpen the metal cutting attachment as described in the instructions and on the packaging supplied with the cutting attachment you are using.

17 Repairing

17.1 Repairing the Trimmer and Cutting Attachment

The trimmer and cutting attachment cannot be repaired by the user.

- If the trimmer or cutting attachment is damaged: Do not use your trimmer or cutting attachment and contact your STIHL servicing dealer.

18 Troubleshooting

18.1 Troubleshooting Trimmer

Most malfunctions have the same causes.

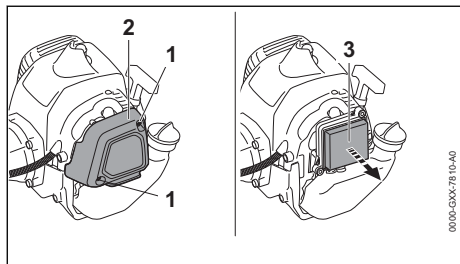
- ▶ Perform the following operations:
 - ▶ Replace air filter.
 - ▶ Clean or replace the spark plug.
 - ▶ Carry out the standard setting.
 - ▶ Adjust idle speed.
 - ▶ Adjust carburetor for operation at high altitude.
- ▶ If the malfunction still exists: Take the action described in the following table.

Condition	Cause	Remedy
Engine does not start.	Insufficient fuel in the tank.	▶ Prepare fuel mix and refuel the trimmer.
	Engine is flooded.	▶ Clear the combustion chamber.
	Carburetor is too hot.	▶ Allow trimmer to cool down. ▶ Before starting the engine: Depress the manual fuel pump bulb at least ten times.
	Carburetor is iced up.	▶ Allow trimmer to warm up to +10°C.
Engine idles erratically.	Carburetor is iced up.	▶ Allow trimmer to warm up to +10°C.
Engine stops while idling	Carburetor is iced up.	▶ Allow trimmer to warm up to +10°C.

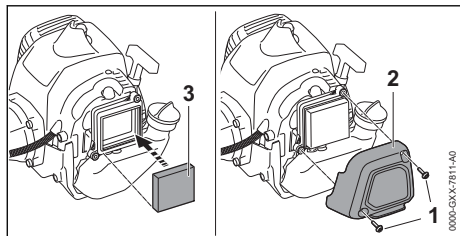
18.2 Replacing the Air Filter

The air filter cannot be cleaned. The air filter must be replaced if there is a loss of engine or the air filter is damaged.

- ▶ Shut off the engine.
- ▶ Move the choke lever to position **H**.



- ▶ Take out the screws (1) and remove the filter cover (2).
- ▶ Clean the area around the air filter (3) with a damp cloth or a soft brush.
- ▶ Take out the air filter (3).

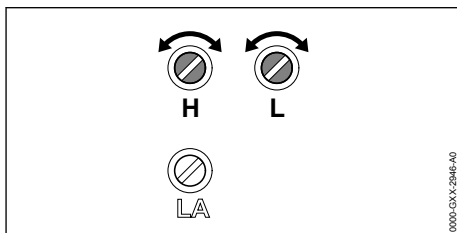


- ▶ Install the new air filter (3).
- ▶ Fit the filter cover (2).

- ▶ Insert and tighten down the screws (1) firmly.

18.3 Standard Setting

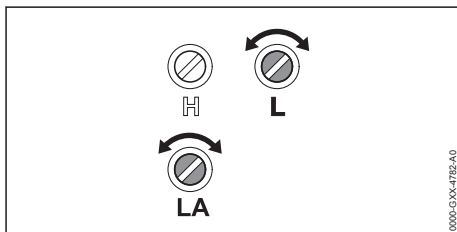
- ▶ Shut off the engine.



- ▶ Turn the high speed screw (H) counterclockwise as far as stop.
- ▶ Turn the low speed screw (L) clockwise as far as stop.
- ▶ Turn the low speed screw (L) 3/4 of a turn counterclockwise.

18.4 Adjusting Idle Speed

- ▶ Carry out the standard setting.
- ▶ Start the engine.
- ▶ Warm up the engine by opening and closing the throttle for about 1 minute.



Engine stops while idling

- ▶ Turn the idle speed screw (LA) clockwise until the cutting attachment begins to rotate.
- ▶ Turn the idle speed screw (LA) one full turn counterclockwise.

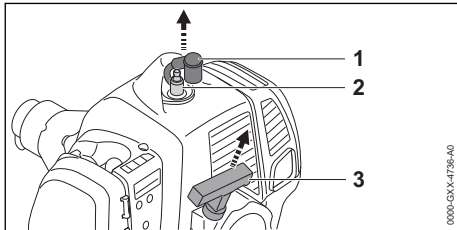
Erratic idling behavior or poor acceleration

- ▶ Turn the low speed screw (L) clockwise or counterclockwise until the engine runs and accelerates smoothly.

Cutting attachment rotates when engine is idling

- ▶ Turn the idle speed screw (LA) counterclockwise until the cutting attachment stops rotating.
- ▶ Turn the idle speed screw (LA) one full turn counterclockwise.

18.5 Clearing the Combustion Chamber



- ▶ Pull off the spark plug boot (1).
- ▶ Unscrew the spark plug (2).
- ▶ Dry the spark plug (2).

**WARNING**

- Unconfined sparks may occur if the starter grip is pulled after the spark plug boot has been removed. Sparks may cause a fire or an explosion in an easily combustible or explosive environment. This can result in serious or fatal injuries and damage to property.

- ▶ Move the slide control to position **STOP-0** before pulling the starter grip.

- ▶ Move the slide control to position .
- ▶ Pull the starter grip (3) several times and guide it back slowly.
The combustion chamber is cleared.
- ▶ Insert and tighten down the spark plug (2) firmly.
- ▶ Connect the spark plug boot (1) and press it down firmly.

19 Specifications

19.1 STIHL FS 235 Trimmer

- Displacement: 36.3 cc
- Engine power to ISO 8893: 1.55 kW (2.1 bhp) at 9,000 rpm
- Idle speed: 2,800 rpm
- Max. output shaft speed: 7,900 rpm
- Approved spark plug: Bosch WSR 6 F from STIHL
- Electrode gap: 0.5 mm
- Dry weight without cutting attachment and deflector: 6.8 kg
- Length without cutting attachment: 1807 mm
- Max. fuel tank capacity: 810 cc (0.81 l)

19.2 Sound Values and Vibration Values

The K-value for sound pressure levels is 2 dB(A).
K-value for sound power levels is 2 dB(A). The K-value for vibration level is 2 m/s².

Using with a mowing head

- Sound pressure level L_{pA} measured according to ISO 22868: 99 dB(A).
- Sound power level L_{wA} measured according to ISO 22868: 111 dB(A).
- Vibration level a_{hv} measured according to ISO 22867:
 - Control handle: 4.1 m/s².
 - Left handle: 5.1 m/s².

Using with a metal cutting attachment

- Sound pressure level L_{pA} measured according to ISO 22868: 99 dB(A).
- Sound power level L_{wA} measured according to ISO 22868: 111 dB(A).
- Vibration level a_{hv} measured according to ISO 22867:
 - Control handle: 2.9 m/s².
 - Left handle: 4.3 m/s².

For information on compliance with Employers' Vibration Directive 2002/44/EC see www.stihl.com/vib.

19.3 REACH

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

For information on compliance with the REACH regulation see www.stihl.com/reach.

19.4 Exhaust Emissions

The CO₂ value measured in the EU type approval procedure is specified at www.stihl.com/co2.

The measured CO₂ value was determined on a representative engine in accordance with a standardized test procedure under laboratory conditions and does not represent either an

explicit or implied guarantee of the performance of a specific engine.

The applicable exhaust emission requirements are fulfilled by the intended usage and maintenance described in this instruction manual. The type approval expires if the engine is modified in any way.


20 Combinations of Cutting Attachments, Deflectors and Carrying Systems

20.1 Combinations of Cutting Attachments, Deflectors and Carrying Systems

Cutting attachment	Deflector	Carrying system
<ul style="list-style-type: none"> – AutoCut C 26-2 mowing head – AutoCut 36-2 mowing head – DuroCut 20-2 mowing head – SuperCut mowing head 20-2 	<ul style="list-style-type: none"> – Universal deflector with skirt and line limiting blade 	<ul style="list-style-type: none"> – Shoulder strap – Full harness with quick release system
<ul style="list-style-type: none"> – Grass cutting blade 230-2 (230 mm dia.) – Grass cutting blade 230-4 (230 mm dia.) – Grass cutting blade 230-8 (230 mm dia.) – Grass cutting blade 260-2 (260 mm dia.) 	<ul style="list-style-type: none"> – Universal deflector without skirt 	<ul style="list-style-type: none"> – Shoulder strap – Full harness with quick release system
<ul style="list-style-type: none"> – Brush knife 250-3 (Ø 250 mm) 	<ul style="list-style-type: none"> – Universal deflector without skirt 	<ul style="list-style-type: none"> – Shoulder strap – Full harness with quick release system
<ul style="list-style-type: none"> – Circular saw blade 200-22, chisel tooth (200 mm dia.) – Chisel tooth circular saw blade 200-22 HP (200 mm dia.) 	<ul style="list-style-type: none"> – Limit stop 	<ul style="list-style-type: none"> – Full harness with quick release system

21 Spare Parts and Accessories

21.1 Spare parts and accessories

STIHL  These symbols indicate original STIHL spare parts and original STIHL accessories.

STIHL recommends the use of original STIHL spare parts and accessories.

Despite ongoing market observation, STIHL is unable to judge the reliability, safety and suitability of other manufacturers' spare parts and accessories; accordingly, STIHL cannot warrant for the use of those parts.

Original STIHL spare parts and original STIHL accessories are available from STIHL dealers.

22 Disposal

22.1 Disposing of Trimmer

Contact your STIHL servicing dealer for information on disposal.

- Dispose of the trimmer, deflector, cutting attachment, fuel mix, gasoline, two-stroke engine oil, accessories and packaging in accordance with local regulations and environmental requirements.

23 EC Declaration of Conformity

23.1 STIHL FS 235 Trimmer

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

declare under our sole responsibility that

- Category: Brushcutter
- Manufacturer's brand: STIHL
- Type: FS 235
- Serial number: 4151

conforms to the relevant provisions of Directives 2011/65/EU, 2006/42/EC, 2014/30/EU and 2000/14/EC and has been developed and manu-

factured in compliance with the following standards in the versions valid on the date of production: EN ISO 11806-1, EN 55012 and EN 61000-6-1.

The measured and guaranteed sound power levels were determined according to Directive 2000/14/EC, Annex VIII.

- Measured sound power level: 111 dB(A)
- Guaranteed sound power level: 113 dB(A)

The technical documents are stored at ANDREAS STIHL AG & Co. KG Produktzulassung.

The year of manufacture, country of manufacture and serial number are specified on the rating plate of the brushcutter.

Done at Waiblingen, 03.02.2020

ANDREAS STIHL AG & Co. KG



pp

Dr. Jürgen Hoffmann, Head of Product Data,
Regulations and Licensing

www.stihl.com



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