

Fueling

! WARNING



Removing the cap on a pressurized fuel tank can result in gasoline, vapors and fumes being forcefully sprayed out from the tank in all directions. The escaping gasoline, vapors or fumes, sometimes referred to as fuel spraying or "geysering," can cause serious personal injury, including fire and burn injury, or property damage.

Fuel spraying can occur when the engine is hot and the tank is opened while under pressure. It can occur in hot environments even if the engine has not been running. Spraying is more likely to occur when the fuel tank is half full or more.

Avoid Injuries from Fuel Spraying.

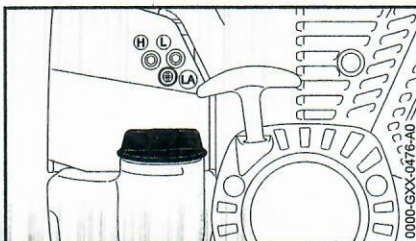
Always follow the fueling instructions in this manual:

- Treat every fuel tank as if it is pressurized, particularly if it is half full or more.
- Always allow the power tool to cool adequately before attempting to open the fuel tank or refueling; this will take longer in hot conditions.

- Never remove the cap by turning it directly to the open position. Turn it first approximately 1/2 of a turn counter-clockwise to relieve any residual pressure.
- Never open the fuel tank while the engine is still hot or running.
- Never open the fuel tank or re-fuel the power tool near any sparks, flames or other ignition sources.
- Pick the right fuel: use only good quality (89 octane or higher), fresh fuel blended for the season.
- Vapor lock: do not remove the fuel cap in an effort to relieve vapor lock. Removing the cap has no effect on vapor lock.
- Be aware that fuel spraying is more likely at higher altitudes.



Preparations

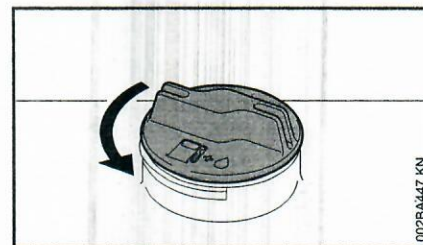


- Before fueling, clean the filler cap and the area around it to ensure that no dirt falls into the tank.
- Position the machine so that the filler cap is facing up.

! WARNING

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

Opening



! WARNING

After allowing the power tool to cool, remove the fuel filler cap slowly and carefully to allow any remaining pressure build-up in the tank to release:

- While maintaining steady, downward pressure, slowly turn the cap approximately a 1/2 turn counter-clockwise.
- If any significant venting occurs, immediately re-seal the tank by turning the cap clockwise to the closed position. Allow the power tool to cool further before attempting to open the tank.
- Turn the cap to the open position only after the contents of the tank are no longer under pressure.
- Remove the fuel filler cap.

Stihl
FS 91 GAS
Weed Trimmer

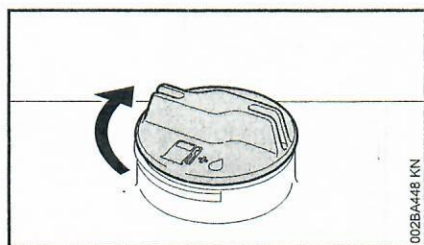
WARNING

Never remove the cap by turning it directly to the open position. First allow the power tool to cool adequately and then release any residual pressure by slowly turning the cap approximately 1/2 turn counter-clockwise. Never attempt to remove the cap while the engine is still hot or running.

Refueling

Take care not to spill fuel while fueling and do not overfill the tank – leave approximately 1/2" (13 mm) air space.

Closing



WARNING

An improperly tightened fuel filler cap can loosen or come off and spill quantities of fuel. To reduce the risk of fuel spillage and fire from an improperly installed fuel cap, tighten the fuel filler cap by hand with as much force as possible:

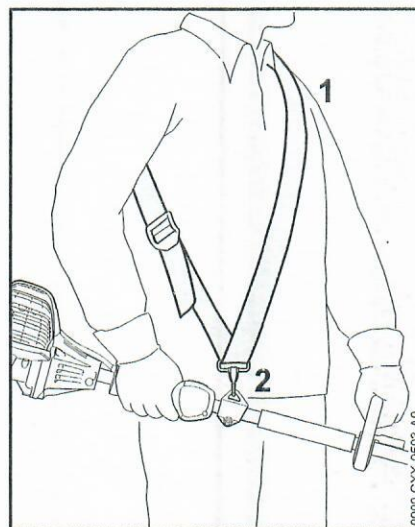
- If your fuel cap still does not tighten properly, it may be damaged or broken. Stop using the power tool and take it to your authorized STIHL dealer for repair or replacement.

Fitting the Harness

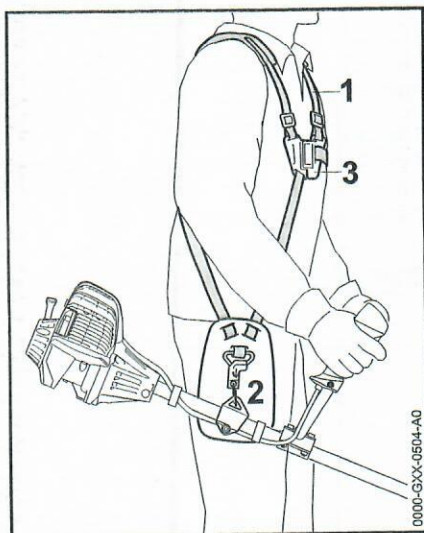
The type and style of the harness/shoulder strap depend on the market.

The use of the shoulder strap is described in the chapter on "Approved Combinations of Cutting Attachment, Deflector, Handle and Harness".

Shoulder Strap



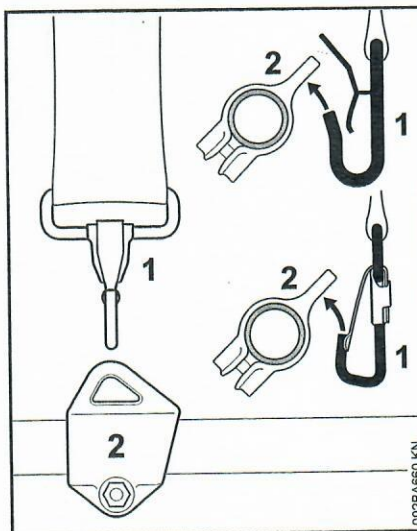
- Put on the shoulder strap (1).
- Adjust the length of the strap so that the carabiner (2) is about a hand's width below your right hip.
- Balance the machine – see "Balancing the Machine".



- Put on the harness (1) and close the locking plate (3).
- Adjust the length of the strap – with the machine attached, the carabiner (2) must be about a hand's width below your right hip.
- Balance the machine – see "Balancing the Machine".

Balancing the Machine

Attaching Machine to Harness



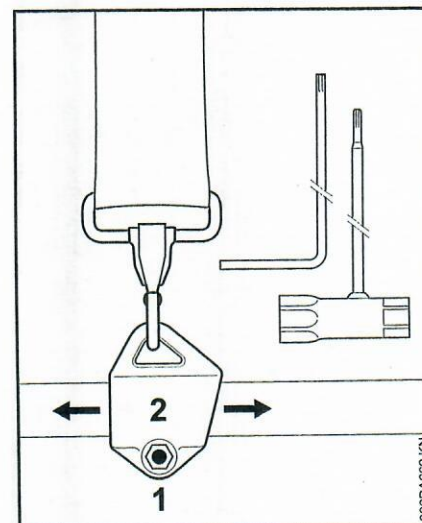
The type and style of the shoulder strap and carabiner depend on the market.

- Attach the carabiner (1) to the carrying ring (2) on the drive tube.

Balancing the Machine

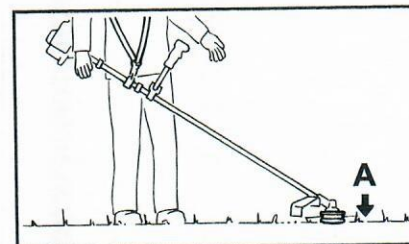
The unit is balanced differently depending on the cutting attachment used.

Proceed as follows until the conditions specified under "Floating positions" have been met:



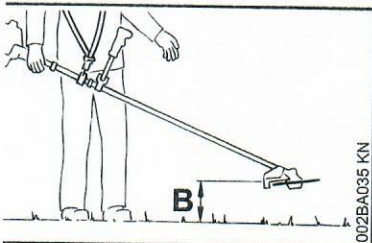
- Loosen the screw (1).
- Slide the carrying ring (2) along the drive tube.
- Tighten the screw (1) moderately.
- Allow the unit to hang freely.
- Check the position obtained:

Balanced positions



Mowing tools (A) such as mowing heads, grass cutting blades and brush knives

- should just touch the ground.



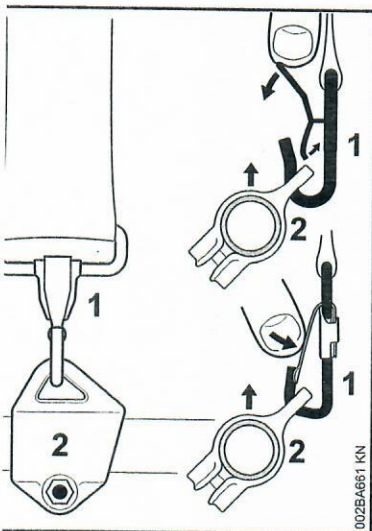
Parallel saw blades (B)

should "hover" about 20 cm (8 in) above the ground.

When the correct balanced position has been reached:

Tighten down the screw (1) on the carrying ring firmly.

Connecting Machine from Harness



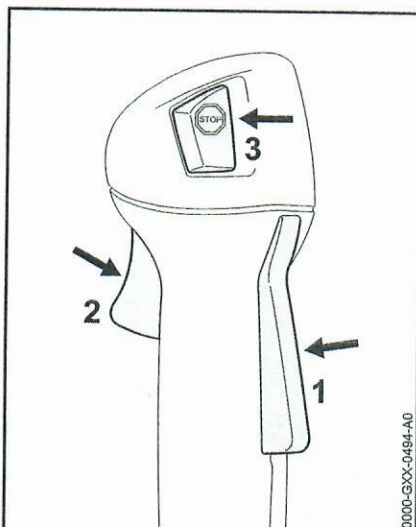
Press down the bar on the carabiner (1) and pull the carrying ring (2) out of the carabiner.

1, FS 91 R

Starting / Stopping the Engine

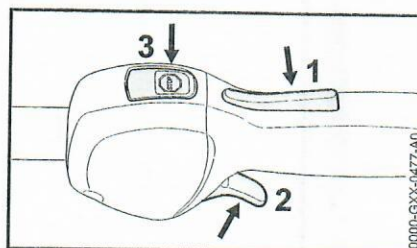
Controls

Version with Bike Handle



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

Version with Loop Handle

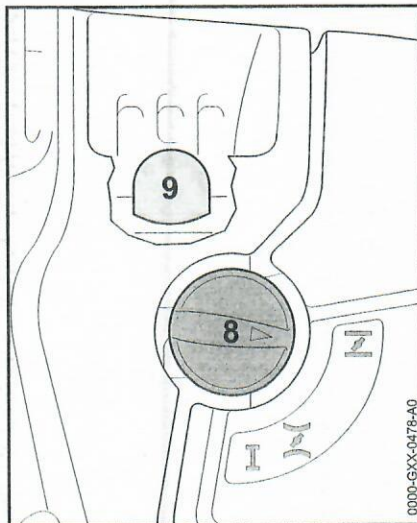


- 1 Throttle trigger lockout
- 2 Throttle trigger
- 3 Stop switch with Run and Stop positions. Depress the stop switch (⊖) to switch off the ignition – see "Function of stop switch and ignition system".

Function of stop switch and ignition system

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

Starting the Engine



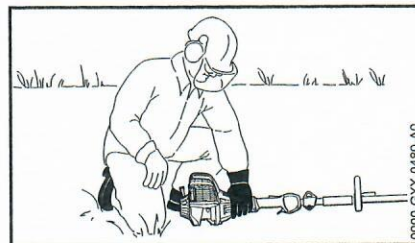
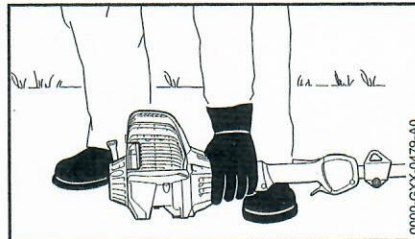
- Press the manual fuel pump bulb (9) at least five times – even if the bulb is already filled with fuel.
- Press in the choke knob (8) and turn it to the position that suits the engine temperature:

 if the engine is cold

 for warm start – also use this position if the engine has been running but is still cold.

The choke knob must engage in position.

Cranking



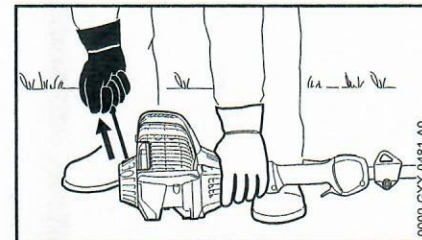
- Place the unit on the ground: It must rest securely on the engine support and the deflector.
- If fitted: Remove the transport guard from the cutting attachment.

To reduce the risk of accidents, check that the cutting attachment is not touching the ground of any other obstacles.

- Make sure you have a firm footing, either standing, stooping or kneeling.
- Hold the unit firmly on the ground with your left hand and press down – do not touch the throttle trigger or lockout lever – your thumb should be under the fan housing.

NOTICE

Do not stand or kneel on the drive tube.



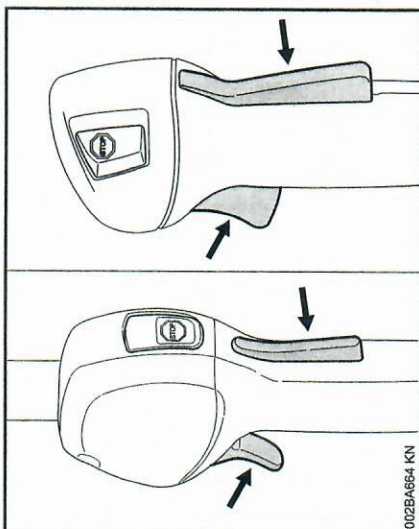
- Hold the starter grip with your right hand.
- Pull the starter grip slowly until you feel it engage and then give it a brisk strong pull.

NOTICE

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

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

As soon as the engine runs



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

WARNING

There is a risk of injury if the cutting attachment runs when the engine is idling. Adjust the carburetor so that the cutting attachment does not run when the engine is idling – see “Adjusting the Carburetor”.

Your machine is now ready for operation.

Stopping the Engine

- Depress the momentary contact stop switch – the engine stops – release the stop switch – it springs back to the run position.

Other Hints on Starting

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

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

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

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

If the engine does not start

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

Engine is flooded

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

Fuel tank run until completely dry

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