STIHL®

STIHL BT 131

Instruction Manual



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Dear Customer,

Thank you for choosing a quality engineered STIHL product.

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

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

Your



Dr. Nikolas Stihl

Original Instruction Manual

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Guide to Using this Manual

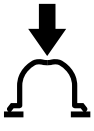
Pictograms

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

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



Fuel tank; fuel mixture of gasoline and engine oil



Operate manual fuel pump



Auger brake

Symbols in text

WARNING

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

NOTICE

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

Engineering improvements

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

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

Safety Precautions and Working Techniques



Special safety precautions must be observed when working with this power tool because of its high torque and the high speed of the auger bit in certain applications, and because the auger bits have sharp edges.



It is important that you read the instruction manual before first use and keep it in a safe place for future reference. Non-observance of the instruction manual may result in serious or even fatal injury.

Observe all applicable local safety regulations, standards and ordinances.

If you have not used this type of power tool before: Have your dealer or other experienced user show you how it is operated or attend a special course in its operation.

Minors should never be allowed to use a power tool.

Keep bystanders, especially children, and animals away from the work area.

When the power tool is not in use, shut it off so that it does not endanger others. Secure it against unauthorized use.

The user is responsible for avoiding injury to third parties or damage to their property.

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

The use of noise emitting power tools may be restricted to certain times by national or local regulations.

To operate the power tool you must be rested, in good physical condition and mental health.

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

Persons with pacemakers only: The ignition system of your power tool produces an electromagnetic field of a very low intensity. This field may interfere with some pacemakers. STIHL recommends that persons with pacemakers consult their physician and the pacemaker manufacturer to reduce any health risk.

Do not operate the power tool if you are under the influence of any substance (drugs, alcohol) which might impair vision, dexterity or judgment.

Use your power tool only for drilling holes in soil and wood – depending on the drilling tool mounted. Select drilling axis so that the auger brake lever is always in a position to be activated by the operator's thigh.

Do not use your power tool for any other purpose.

Before drilling, make sure there are no buried power cables or supply pipes in the work area (e.g. for gas, water, electricity):

- Contact your local utility company for information on cable and pipe locations.
- Where necessary, confirm actual location with cable detectors and/or by carefully dug trenches.

Only use drilling tools and accessories that are explicity approved for this power tool by STIHL or are technically identical. If you have any questions in this respect, consult a servicing dealer. Use only high quality tools and accessories in order to avoid the risk of accidents and damage to the machine.

STIHL recommends the use of genuine STIHL tools and accessories. They are specifically designed to match the product and meet your performance requirements.

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

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

Clothing and Equipment

Wear proper protective clothing and equipment.



Clothing must be sturdy but allow complete freedom of movement. Wear snug-fitting clothing, an overall and jacket combination, do not wear a work coat.

Avoid clothing that could get caught on branches or brush or moving parts of the machine. Do not wear a scarf, necktie or jewelry.



Tie up and confine long hair (e.g. with a hair net, cap, hard hat, etc.).



Wear sturdy shoes with non-slip soles.

WARNING



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

Wear hearing protectors, e.g. earplugs or ear muffs.

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



Wear heavy-duty work gloves made of durable material (e.g. leather).

STIHL offers a comprehensive range of personal protective clothing and equipment.

Transporting the Power Tool

Always shut off the engine.

Remove the auger before transporting the power tool long distances. **To reduce the risk of burn injury**, carry the unit by the handle frame with hot parts of the machine (e.g. gearbox) away from your body.

Transporting by vehicle: Properly secure your power tool to prevent turnover, fuel spillage and damage.

Fueling



Gasoline is an extremely flammable fuel. Keep clear of naked flames. Do not spill any fuel – do not smoke.

Always **shut off the engine** before refueling.

Do not fuel a hot engine – fuel may spill and **cause a fire**.

Open the fuel cap carefully to allow any pressure build-up in the tank to release slowly and avoid fuel spillage.

Fuel your power tool only in well-ventilated areas. If you spill fuel, wipe the machine immediately – if fuel gets on your clothing, change immediately.



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

This reduces the risk of unit vibrations causing the fuel cap to loosen or come off and spill quantities of fuel.



Check for leakage. To reduce the **risk of serious of fatal burn injuries**, do not start or run the engine until leak is fixed.

Before Starting

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

- Check the fuel system for leaks, paying special attention to visible parts such as the tank cap, hose connections and the manual fuel pump (on machines so equipped). If there are any leaks or damage, do not start the engine – **risk of fire**. Have your machine repaired by a servicing dealer before using it again.
- The stop switch must move freely.
- Auger brake in good working order.
- Check smooth action of choke knob, throttle trigger lockout and throttle trigger – the throttle trigger must return automatically to the idle position. The choke knob must spring back from the $\overline{\mathbf{I}}$ and $\overline{\mathbf{I}}$ positions to the run position $\mathbf{I}$ when the throttle trigger lockout and throttle trigger are squeezed.
- Check that the spark plug boot is secure – a loose boot may cause arcing that could ignite combustible fumes **and cause a fire**.
- Never attempt to modify the controls or safety devices in any way.
- Keep the handles dry and clean – free from oil and dirt – for safe control of the power tool.

To reduce the risk of accidents, operate your power tool only if it is in a safe condition.

Starting the Engine

Start the engine at least 3 meters from the fueling spot, outdoors only.

Place the power tool on level ground, make sure you have secure footing.

Engage the auger brake before starting. The drilling tool may otherwise rotate and cause the user to lose control of the machine.

Your power tool is designed to be operated by one person only. Do not allow other persons in the work area – even when starting.

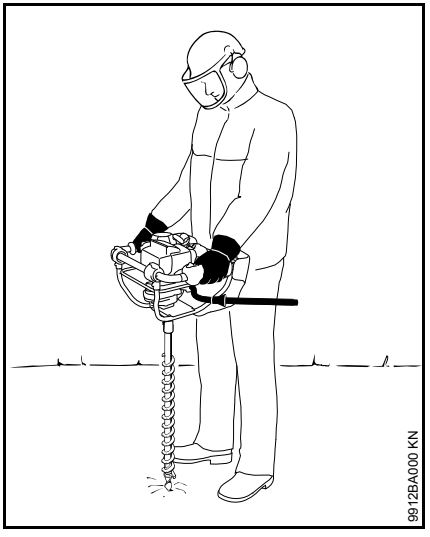
To reduce the risk of injury, avoid contact with the drilling tool.

Do not drop start the power tool – start the engine as described in the instruction manual.

Check idle speed setting: The drilling tool must not rotate when the engine is idling with the throttle trigger released.

To reduce the risk of fire, keep hot exhaust gases and hot muffler away from easily combustible materials (e.g. wood chips, bark, dry grass, fuel).

Holding and Controlling the Power Tool



Always hold the power tool firmly with both hands on the handles.

Make sure you always have good balance and secure footing – auger brake lever against your left thigh.

Wrap you fingers and thumbs tightly around the handles – left hand on the control handle.

During Operation

Make sure you always have good balance and secure footing.

In the event of imminent danger or in an emergency, switch off the engine immediately – operate the stop switch.

Do not allow any other persons in the work area. To **reduce the risk of injury**, keep a sufficiently safe distance away from other persons.

The correct engine idle speed is important to ensure that the drilling tool stops rotating when you let go of the throttle trigger.

Check and correct the idle speed setting regularly. If the drilling tool continues to rotate when the engine is idling, have the machine checked by your servicing dealer. STIHL recommends an authorized STIHL servicing dealer.

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

Watch out for obstacles: Roots and tree stumps which **could cause you to trip or stumble**.

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

To reduce the risk of accidents, take a break in good time to avoid tiredness or exhaustion.

Work calmly and carefully – in daylight conditions and only when visibility is good. Stay alert so as not to endanger others.



Your power tool produces toxic exhaust fumes as soon as the engine is running. These fumes may be colorless and odorless and contain unburned hydrocarbons and benzol. Never run the engine indoors or in poorly ventilated locations, even if your model is equipped with a catalytic converter.

Ensure proper ventilation when working in trenches, hollows or other confined locations. **This reduces the risk of serious or fatal injury from breathing toxic fumes.**

To reduce the risk of accidents, stop work immediately in the event of nausea, headache, visual disturbances (e.g. reduced field of vision), problems with hearing, dizziness, deterioration in ability to concentrate. Apart from other possibilities, these symptoms may be caused by an excessively high concentration of exhaust gases in the work area.

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

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

The dusts, vapor and smoke produced during operation may be dangerous to health. If the work area is very dusty or smoky, wear a respirator.

If your power tool is subjected to unusually high loads for which it was not designed (e.g. heavy impact or a fall), always check that it is in good condition before continuing work – see also "Before Starting".

Check the fuel system in particular for leaks and make sure the safety devices are working properly. Do not continue operating your power tool if it is damaged. In case of doubt, consult your servicing dealer.

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

To reduce the risk of injury, do not touch the auger or drilling spindle unless the engine is stopped and the drilling tool is at a standstill.



Avoid contact with electrical cables or wires – **risk of electric shock**.

Hold the machine firmly in order to control sudden jolts and reactive forces – keep feed pressure relatively low.



Work particularly carefully in rocky ground or ground with a heavy root structure.

Cover and clearly mark boreholes.

To reduce the risk of injury, shut off the engine and engage the auger brake before changing the auger.

To avoid serious burn injuries, avoid touching hot parts of the machine, especially the muffler.

Always shut off the engine before leaving the machine unattended.

Check drilling tools at regular short intervals during operation or immediately if there is a noticeable change in operating behavior: Replace damaged or dull drilling tools and blades immediately.

Vibrations

Prolonged use of the power tool may result in vibration-induced circulation problems in the hands (whitefinger disease).

No general recommendation can be given for the length of usage because it depends on several factors.

The period of usage is prolonged by:

- Hand protection (wearing warm gloves)
- Work breaks

The period of usage is shortened by:

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

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

Maintenance and Repairs

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

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

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

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

To reduce the risk of injury from unintentional engine startup, **always shut off the engine and disconnect the spark plug boot** before performing any repairs, maintenance or cleaning work. – Exception: Carburetor and idle speed adjustments.

Do not turn the engine over on the starter with the spark plug boot or spark plug removed since there is otherwise a **risk of fire** from uncontained sparking.

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

Check the fuel filler cap for leaks at regular intervals.

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

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

Check the condition of the muffler.

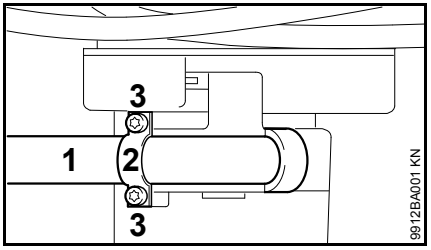
To reduce the **risk of fire and damage to hearing**, do not operate your machine if the muffler is damaged or missing. –

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

Vibration behavior is influenced by the condition of the AV elements – check the AV elements at regular intervals.

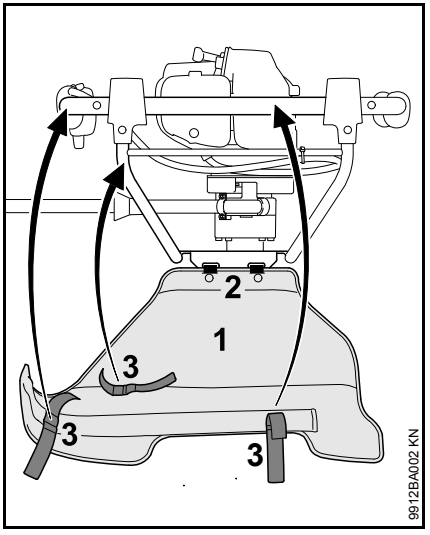
Assembling the Unit

Fitting activating lever for auger brake

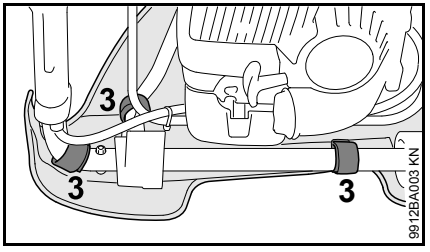


- Insert the activating lever (1) into the clamp
- Place the holder (2) onto the activating lever
- Screw in the fastening screws (3) and tighten

Fit the padding



- Hook the padding (1) with the tabs (2) into the oblong holes in the handle frame
- Fold up the padding

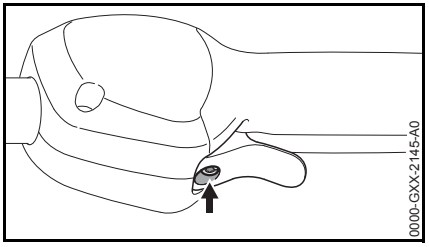


- Secure the padding to the handlebar with the cling strips (3) – do not jam the throttle cable

Adjusting the Throttle Cable

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

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



- Set the throttle trigger to the full throttle position.
- Rotate the screw in the throttle trigger clockwise until you feel initial resistance. Then rotate it another half turn in the same direction.

Fuel

Your engine requires a mixture of gasoline and engine oil.

WARNING

For health reasons, avoid direct skin contact with gasoline and avoid inhaling gasoline vapor.

STIHL MotoMix

STIHL recommends the use of STIHL MotoMix. This ready-to-use fuel mix contains no benzol or lead, has a high octane rating and ensures that you always use the right mix ratio.

STIHL MotoMix uses STIHL HP Ultra two-stroke engine oil for an extra long engine life.

MotoMix is not available in all markets.

Mixing Fuel

NOTICE

Unsuitable fuels or lubricants or mix ratios other than those specified may result in serious damage to the engine. Poor quality gasoline or engine oil may damage the engine, sealing rings, hoses and the fuel tank.

Gasoline

Use only high-quality **brand-name** gasoline with a minimum octane rating of 90 – leaded or unleaded.

Gasoline with an ethanol content of more than 10% can cause running problems in engines with a manually adjustable carburetor and should not be used in such engines.

Engines equipped with M-Tronic deliver full power when run on gasoline with an ethanol content of up to 25% (E25).

Engine Oil

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.

Mix Ratio

STIHL 50:1 two-stroke engine oil: 50 parts gasoline to 1 part oil

Examples

Gasoline	STIHL engine oil 50:1	
Liters	Liters	(ml)
1	0.02	(20)
5	0.10	(100)
10	0.20	(200)
15	0.30	(300)
20	0.40	(400)
25	0.50	(500)

- Use a canister approved for storing fuel. Pour oil into canister first, then add gasoline and mix thoroughly.

Storing Fuel

Store fuel only in approved safety-type fuel canisters in a dry, cool and safe location protected from light and the sun.

Fuel mix ages – only mix sufficient fuel for a few weeks work. Do not store fuel mix for longer than 30 days. Exposure to light, the sun, low or high temperatures can quickly make the fuel mix unusable.

STIHL MotoMix may be stored for up to 2 years without any problems.

- Thoroughly shake the mixture in the canister before fueling your machine.

WARNING

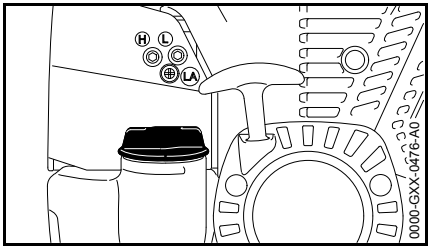
Pressure may build up in the canister – open it carefully.

- Clean the fuel tank and canister from time to time.

Dispose of remaining fuel and cleaning fluid properly in accordance with local regulations and environmental requirements.

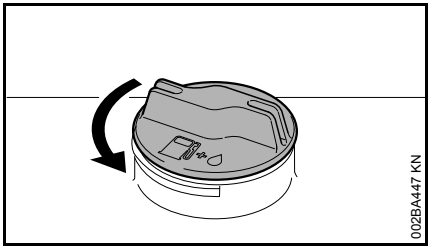
Fueling

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 tank cap faces up.

Opening the Tank Cap



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

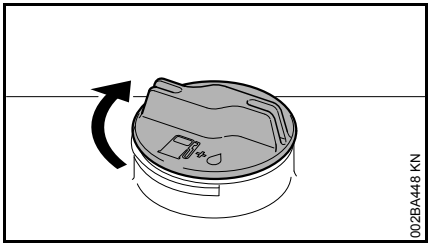
Filling Up with Fuel

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

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

- Fill up with fuel.

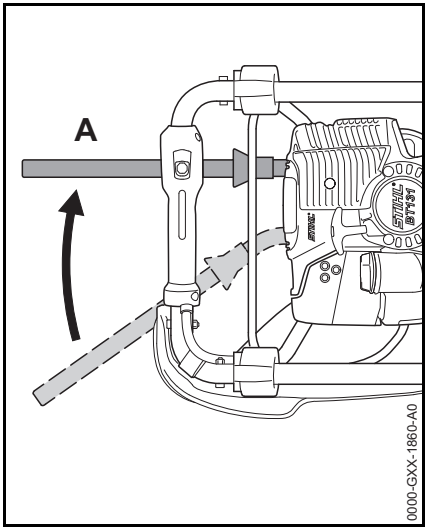
Closing the Tank Cap



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

Auger Brake

Engaging the Auger Brake



- Move the activating lever to position **A** .

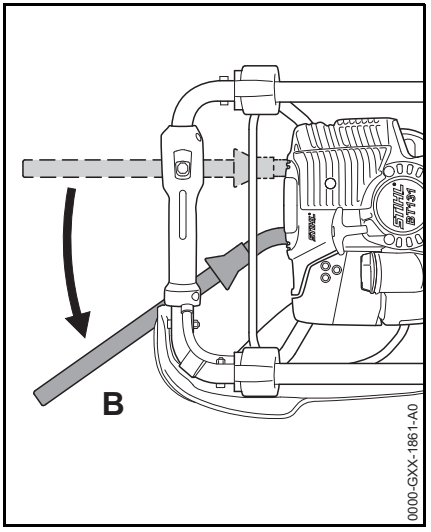
– when starting

– at idling speed

– to unwind a trapped auger

If the auger snags on an obstacle in the hole (e.g. roots or stones) the machine will begin to turn counterclockwise – the activating lever is pressed against the operator's thigh and thus engages the auger brake.

Disengaging the Auger Brake



- Move the activating lever to position **B**

Checking Operation of Auger Brake

The auger brake is subject to normal wear and tear. Regularly check that it is operating properly before you start work and after releasing a trapped auger.

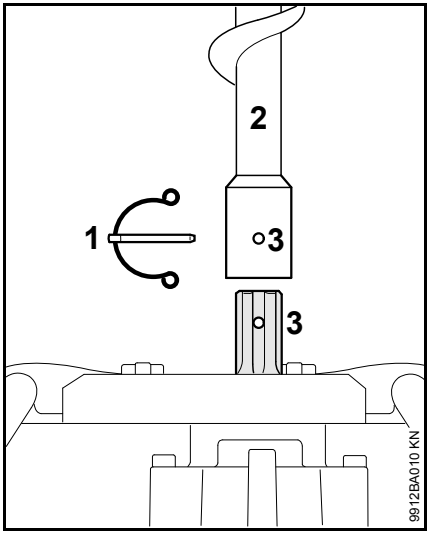
Before starting work and after releasing a trapped auger

- With the engine running at idle speed, engage the auger brake and then open the throttle wide for no more than 3 seconds – the auger must not rotate.

If the auger brake fails, have it repaired immediately by your dealer – STIHL recommends that this work be performed by a STIHL servicing dealer.

Fitting the Auger

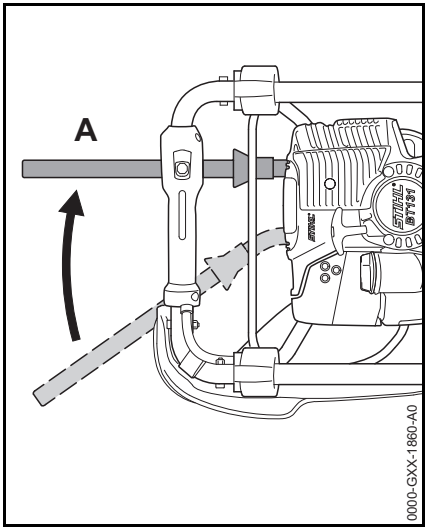
- Shut off the engine and engage the auger brake – see "Auger Brake".
- Put the machine down.



- Pull the retaining pin (1) out of the auger's shank.
- Push the auger (2) onto the drilling spindle so that the holes (3) line up.
- Push the retaining pin into the hole.
- Spring clip on the retaining pin must fit snugly around the auger's shank.

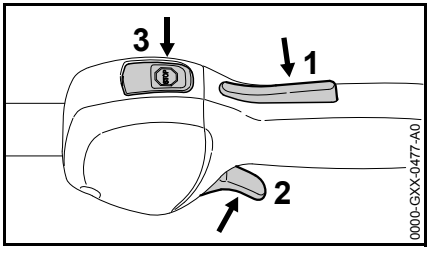
Starting / Stopping the Engine

Engaging the Auger Brake



- Move the activating lever to position **A** . Auger brake is engaged and auger is blocked.

Controls

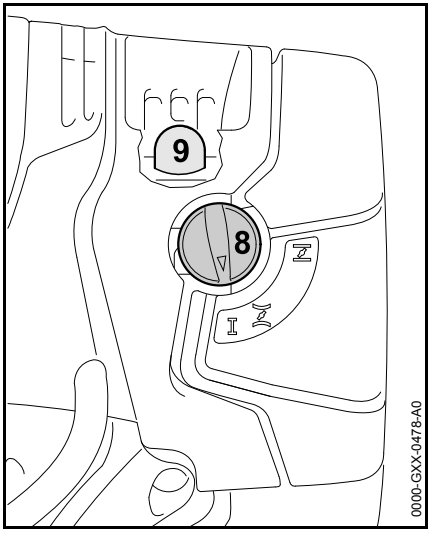


1 Throttle trigger lockout
2 Throttle trigger
3 Stop switch with **Run** and **Stop** positions. Depress the stop switch (⏻) to switch off the ignition – see "Function of Stop Switch and Ignition System".

Function of Stop Switch and Ignition System

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

Starting the Engine



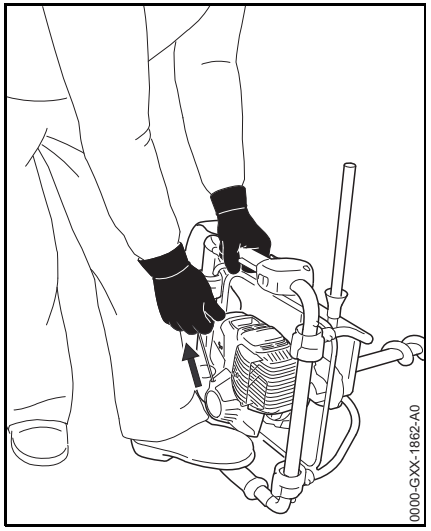
- Press the manual fuel pump bulb (9) at least five times – even if the bulb is already filled with fuel.

- Press home the choke knob (8) and turn it to the required position – it must engage

⌇ if the engine is cold

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

Cranking



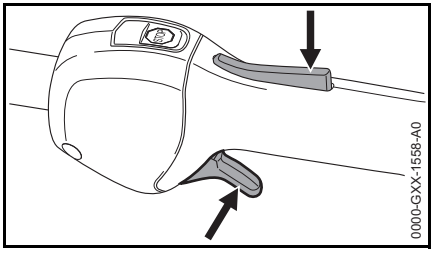
- Place the unit on the ground:
- Check that the auger brake is engaged.
- Make sure you have a safe and secure footing.
- Put your left foot on the handle frame.
- Left hand on the handle frame – do not touch the throttle trigger or lockout lever – your thumb should be under the fan housing.
- Hold 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.

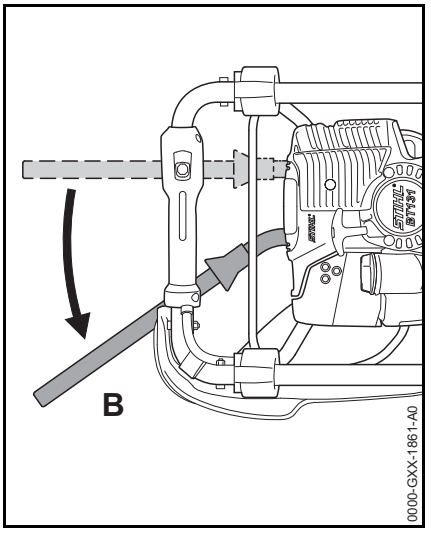
As Soon As the Engine Runs



- Depress throttle trigger lockout and immediately blip the throttle trigger – the choke knob moves to the run **I** position.

NOTICE

Since the auger brake is still engaged, the engine must be returned to idling speed **immediately** – or the clutch might otherwise be damaged.



- Stand the machine on the tip of the auger.
- Disengage the auger brake by moving the activating lever to position **B**. Your earth auger is now ready for operation.

WARNING

Make sure the carburetor is correctly adjusted. The auger must not rotate when the engine is idling.

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 ⚡ or under acceleration.

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

Engine does not start in warm start position ⚡

- Move the choke knob to ⚡ 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, depress the manual fuel pump bulb at least 5 times – even if the bulb is already filled with fuel.
- Set the choke knob to suit the engine temperature.
- Now start the engine.

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

After Finishing Work

Storing for a short period: Wait for the engine to cool down. To avoid condensation, fill the fuel tank and keep the machine in a dry place, well away from sources of ignition, until you need it again. For longer out-of-service periods – see "Storing the Machine".

Working with shaft extension (special accessory)

Do not fit the shaft extension until the full length of the auger is in the hole.

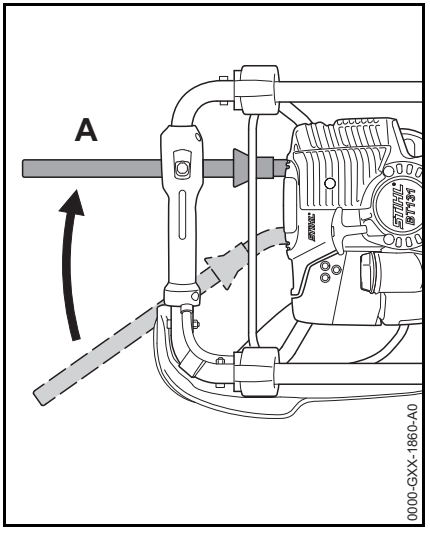
⚠ WARNING

Starting a hole with the shaft extension fitted increases the risk of personal injury because the unit is then at chest height and cannot be controlled properly. For the same reason the shaft extension must be removed before the full length of the auger is pulled out of the hole.

Releasing a Trapped Auger

If the auger jams in the drill hole

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



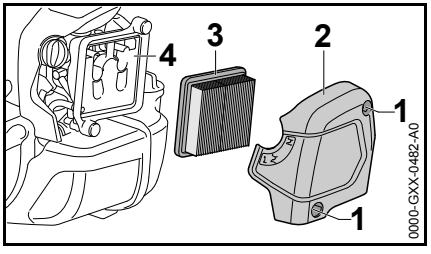
- Engage the auger brake by moving the activating lever to position **A**.
- Rotate the whole machine counterclockwise to unwind the auger from the ground.
- After releasing the trapped auger, check operation of the auger brake – see “Auger Brake”.

Replacing the Air Filter

Filters have an average life of more than a year. Do not remove the filter cover or replace the air filter as long as there is no noticeable loss of power.

If there is a noticeable loss of engine power.

- Remove padding from the handle frame.



- Turn the choke knob to .
- Take out the screws (1).
- Remove the filter cover (2).
- Clean away loose dirt from around the filter.
- Remove the filter element (3).
- Replace dirty or damaged filter.
- Replace any damaged parts.

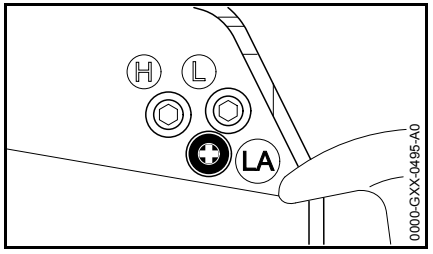
Installing the Filter Element

- Install the filter element in the filter housing and fit the cover.
- Fit the screws and tighten them down firmly.
- Fit the padding – see "Assembling the Unit".

Adjusting the Carburetor

The carburetor has been set at the factory to provide an optimum fuel-air mixture under most operating conditions.

Adjusting Idle Speed



Engine stops while idling

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

Auger rotates when engine is idling

- Turn the idle speed screw (LA) slowly counterclockwise until the auger stops rotating and then turn the screw about another 1/2 to 3/4 turn in the same direction.

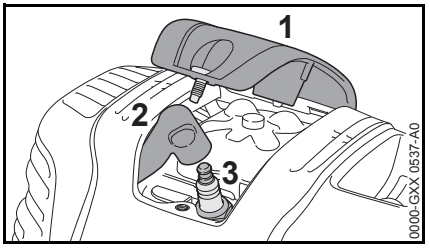
WARNING

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

Spark Plug

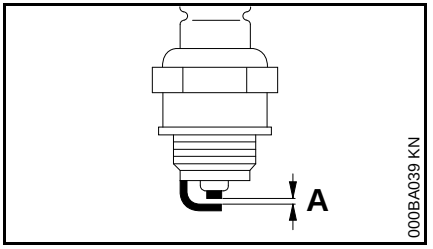
- If the engine is down on power, difficult to start or runs poorly at idle speed, first check the spark plug.
- Fit a new spark plug after about 100 operating hours – or sooner if the electrodes are badly eroded. Install only suppressed spark plugs of the type approved by STIHL – see "Specifications".

Removing the Spark Plug



- Remove the cover (1).
- Pull off the spark plug boot (2).
- Unscrew the spark plug (3).

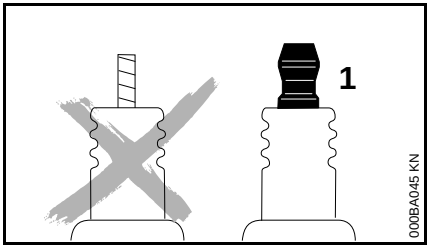
Checking the Spark Plug



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

Possible causes are:

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



WARNING

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

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

Installing the Spark Plug

- Screw the spark plug (3) into the cylinder.
- Tighten down the spark plug (3) with the combination wrench.
- Press the boot (2) firmly onto the spark plug.
- Fit the cover (1) and screw it down firmly.

Engine Running Behavior

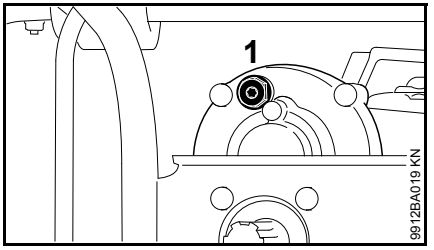
If engine running behavior is still unsatisfactory after the air filter has been serviced and the carburetor and throttle cable have been adjusted correctly, the cause may also be in the muffler.

Have the muffler checked for contamination (coking) by a servicing dealer!

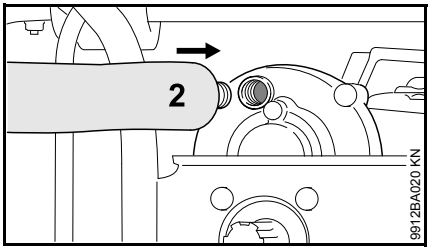
STIHL recommends that maintenance and repair work be carried out only by authorized STIHL dealers.

Lubricating the Gearbox

Check grease level after every 50 hours of operation and re-lubricate if necessary.



- Remove the screw plug (1).



- If no grease can be seen on the inside of the screw plug (1): Screw the tube (2) of STIHL gear lubricant (special accessory) into the filler hole.
- Squeeze about 5 - 10 g (1/5 - 2/5 oz) grease into the gearbox.

NOTICE

Do not completely fill the gearbox with grease.

- Unscrew the tube (2).
- Insert the screw plug (1) and tighten it down firmly.

Storing the Machine

For periods of about 3 months or longer

- Remove the auger.
- Drain and clean the fuel tank in a well ventilated area.
- Dispose of fuel properly in accordance with local environmental requirements.
- Run the engine until the carburetor is dry – this helps prevent the carburetor diaphragms sticking together.
- Thoroughly clean the machine.
- Store the machine in a dry and secure location Keep out of the reach of children and other unauthorized persons.

Maintenance and Care

The following intervals apply to normal operating conditions only. If your daily working time is longer 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	every 12 months	if problem	if damaged	as required
Complete machine	Visual inspection (condition, leaks)	X		X						
	Clean		X							
	Replace any damaged parts	X							X	
Auger brake	Check operation	X		X						
	Have serviced by dealer[1)]									X
Control handle	Check operation	X		X						
Air filter	Visual inspection					X		X		
	Replace[2)]								X	X
Manual fuel pump (if fitted)	Check	X								
	Have repaired by servicing dealer[1)]								X	
Pickup body in fuel tank	Have checked by servicing dealer[1)]							X		
	Have replaced by servicing dealer[1)]						X		X	X
Fuel tank	Clean							X		X
Carburetor	Check idle adjustment – drilling spindle must not rotate	X		X						
	Adjust idle speed									X
Spark plug	Adjust electrode gap							X		
	Replace after every 100 operating hours									
Cooling inlets	Visual inspection		X							
	Clean									X
Cylinder fins	Have cleaned by servicing dealer[1)]						X			
Valve clearance	If power is low or cranking effort very high, have valve clearance checked and, if necessary, adjusted by servicing dealer[1)]									X

The following intervals apply to normal operating conditions only. If your daily working time is longer 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	every 12 months	if problem	if damaged	as required
Combustion chamber	Have cleaned after every 150 hours of operation by servicing dealer[1)]									X
Spark arresting screen in muffler, not all markets	Check		X					X		
	Clean or replace								X	X
All accessible screws and nuts (not adjusting screws)	Retighten									X
Anti-vibration elements	Check	X						X		X
	Have replaced by servicing dealer[1)]								X	
Gearbox lubrication	Check				X					
	Replenish									X
Drilling spindle	Clean		X							
Auger	Check	X								
	Replace								X	X
Auger blade	Check	X								
	Turn over or replace								X	X
Safety labels	Replace								X	

1) STIHL recommends an authorized STIHL servicing dealer.

2) Only if there is a noticeable loss of engine power

Minimize Wear and Avoid Damage

Observing the instructions in this manual helps reduce the risk of unnecessary wear and damage to the power tool.

The power tool must be operated, maintained and stored with the due care and attention described in this owner's manual.

The user is responsible for all damage caused by non-observance of the safety precautions, operating and maintenance instructions in this manual. This includes in particular:

- Alterations or modifications to the product not approved by STIHL.
- Using tools or accessories which are neither approved or suitable for the product or are of a poor quality.
- Using the product for purposes for which it was not designed.
- Using the product for sports or competitive events.
- Consequential damage caused by continuing to use the product with defective components.

Maintenance Work

All the operations described in the "Maintenance Chart" must be performed on a regular basis. If these maintenance operations cannot be performed by the owner, they should be performed by a servicing dealer.

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

If these maintenance operations are not carried out as specified, the user assumes responsibility for any damage that may occur. Among other parts, this includes:

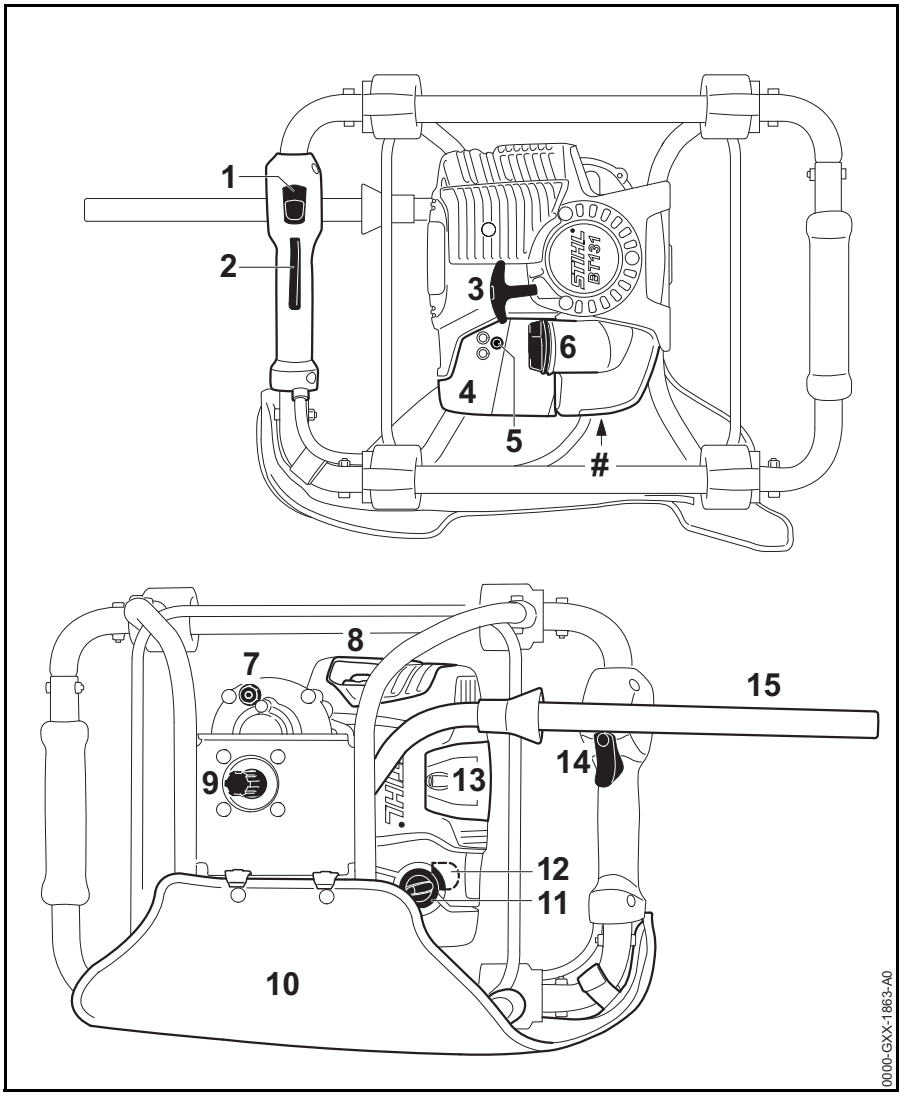
- Damage to the engine due to neglect or deficient maintenance (e.g. air and fuel filters), incorrect carburetor adjustment or inadequate cleaning of cooling air inlets (intake ports, cylinder fins).
- Corrosion and other consequential damage resulting from improper storage.
- Damage to the machine resulting from the use of poor quality replacement parts.

Parts Subject to Wear and Tear

Some parts of the power tool are subject to normal wear and tear even during regular operation in accordance with instructions and, depending on the type and duration of use, have to be replaced in good time. Among other parts, this includes:

- Auger brake
- Clutch
- Augers
- Filters (air, fuel)
- Rewind starter
- Spark plug
- Damping elements of anti-vibration system

Main Parts



1 Stop switch
2 Throttle trigger lockout
3 Starter grip
4 Filter cover
5 Carburetor adjusting screw
6 Tank cap
7 Screw plug
8 Muffler with spark arresting screen[1)]
9 Drilling spindle
10 Hip padding
11 Choke knob
12 Manual fuel pump
13 Spark plug cover
14 Throttle trigger
15 Auger brake lever
Serial Number

1) Spark arresting screen not fitted on all markets

Specifications

Engine

STIHL single cylinder four-stroke engine with mixture lubrication

Displacement:	36.3 cc
Bore:	43 mm
Stroke:	25 mm
Engine power to ISO 8893:	1.4 kW (1.9 bhp) at 8,500 rpm
Idle speed:	2,800 rpm
Cut-off speed:	9,500 rpm
Valve clearance	
Inlet valve:	0.10 mm
Exhaust valve:	0.10 mm

Ignition System

Electronic magneto ignition

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

Fuel System

All position diaphragm carburetor with integral fuel pump

Fuel tank capacity:	710 cc (0.71 l)

Drilling gear

Two-stage spur gear drive

Gear ratio:	47.5:1
Max. spindle speed:	200 rpm
Max. torque at drilling spindle:	81 Nm
Lubrication:	STIHL gear lubricant for brushcutters

Weight

Dry, without drilling tool (auger):	10 kg

Dimensions

Length with handle frame:	400 mm
Width with handle frame:	530 mm
Height without drilling tool (auger):	365 mm

Noise and Vibration Data

Noise and vibration data are measured at idling and maximum rated speed in a ratio of 1:4.

For further details on compliance with Vibration Directive 2002/44/EC see www.stihl.com/vib.

Sound pressure level L_p to ISO 11201

92 dB(A)

Sound power level L_w to ISO 3744

100 dB(A)

Vibration measurement $a_{hv,eq}$ to ISO 20643

90 mm earth auger bit

Left handle:	1.7 m/s^2
Right handle:	2.0 m/s^2

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

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 (EC) No. 1907/2006 see www.stihl.com/reach.

Exhaust Emissions

The CO_2value measured in the EU type approval procedure is specified at www.stihl.com/co2.

The measured CO_2value 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.

Maintenance and Repairs

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

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

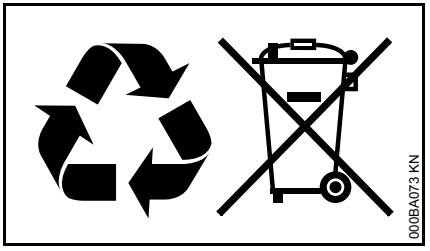
When repairing the machine, only use replacement parts which have been approved by STIHL for this power tool or are technically identical. Only use high-quality replacement parts in order to avoid the risk of accidents and damage to the machine.

STIHL recommends the use of original STIHL replacement parts.

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

Disposal

Observe all country-specific waste disposal rules and regulations.



STIHL products must not be thrown in the garbage can. Take the product, accessories and packaging to an approved disposal site for environment-friendly recycling.

Contact your STIHL servicing dealer for the latest information on waste disposal.

EC Declaration of Conformity

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

Germany

Declare in exclusive responsibility that the product

Category:	Earth auger
Make:	STIHL
Model:	BT 131
Serial identification:	4313
Displacement:	36.3 cc

conforms to the relevant provisions of Directives 2006/42/EC and 2014/30/EC and has been developed and manufactured in compliance with the following standards in the versions valid on the date of production:

EN ISO 12100, EN 55012,
EN 61000-6-1

Technical documents deposited at:

ANDREAS STIHL AG & Co. KG
Produktzulassung (Product Licensing)

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

Done at Waiblingen, 27.07.2016

ANDREAS STIHL AG & Co. KG



Thomas Elsner

Director Product Management and Services

CE

0458-529-0121-A

englisch

GB

www.stihl.com

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