



EB-520G



Ø 100 mm



Ø 150 mm



Ø 200 mm



Art. No.: EB520G

D

original operating instructions
earth drill EB-520G



DANGER!

Before assembling and using the device, read the entire text of the operating instructions. Use these instructions to familiarize yourself with the device, its correct use and the safety instructions. Keep them in a safe place so that you can refer to the information at any time.

If you hand the device over to other people, please also hand over the complete manual.

A NOTICE

According to the applicable product liability law, the manufacturer of this device is not liable for damages caused to or by this device in the following cases:

- improper handling,*
- Failure to follow the operating instructions,*
- Repair by third parties, unauthorized specialists,*
- Installation and replacement of non-original spare parts,*
- improper use.*

The risk is borne solely by the user.

⚠ WARNING

Instructions on hazards, warnings and precautions must be strictly observed to minimize the risk of personal injury, property damage and improper servicing.

The applicable and relevant accident prevention regulations, as well as other generally accepted safety and occupational health rules must be observed.

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Type and design subject to change.

air filter

transmission

protective frame

vent valve

operating handle

**throttle lock
on/off switch**

throttle

drill unit

spark plug connector with cap

handle on the left

exhaust

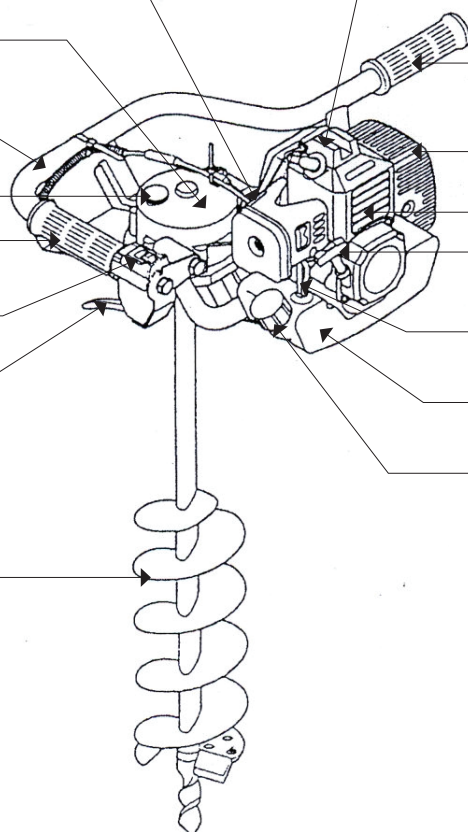
Motor

recoil starter

primer pump

fuel mixture tank

tank cap



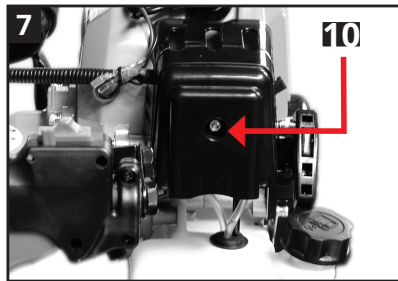
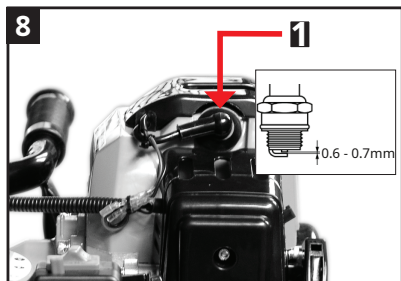
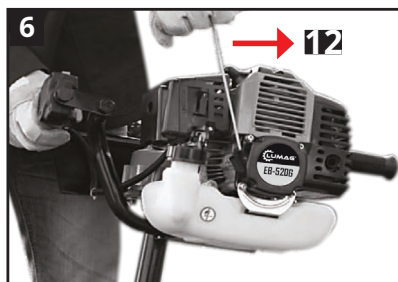
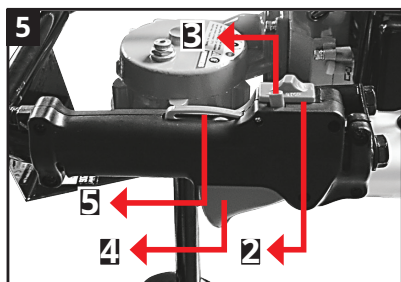
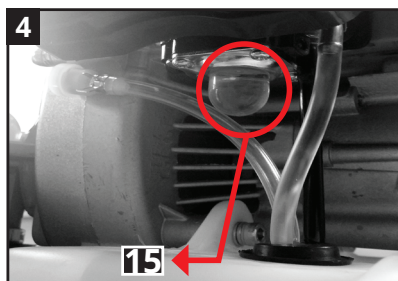
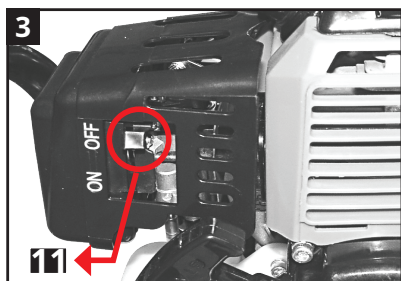
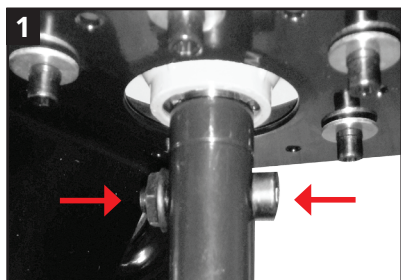


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1. SCOPE OF DELIVERY

After unpacking, check the contents of the box for completeness and possible transport damage. Report any complaints to the dealer or supplier immediately. Complaints made later will not be accepted.

- 1 drive unit
- 3 drill bits (Ø 100, 150 and 200 mm)
- fuel mixing tank
- tool bag

2. INTRODUCTION

This manual contains information and procedures for the safe operation and maintenance of this model. For your own safety and to prevent injury, carefully read, understand, and follow the safety instructions in this manual at all times.

3. INTENDED USE

The EB-520G model is a handy earth drill with a 2-stroke engine for one-man operation. The earth drill has a wide range of uses in private home and hobby gardens, such as digging planting holes, making holes for fence posts or pergolas up to a maximum diameter of 250 mm in easily accessible locations.

The device is only suitable to a limited extent for use on stony, hard and heavily rooted soils. In difficult soil conditions, the maximum cross-section of the holes can be significantly smaller for technical reasons.

The earth auger may only be used in the vertical position (drill pointing downwards).

This device is only intended for use in open areas (gardens) and must be held with both hands during work. The earth drill must not be used in public areas, parks, sports facilities or on roads or in agriculture and forestry.

4. SAFETY INSTRUCTIONS

When using the earth auger, the following basic safety measures must be observed to protect against the risk of injury, fire and property damage.

Read all of these instructions before using this appliance and keep them for future reference.

The information concerning your personal safety is highlighted by a warning triangle; information concerning property damage alone is provided without a warning triangle.

SAFETY INSTRUCTIONS

⚠ DANGER

Failure to follow these instructions may result in serious danger to life or death.

⚠ WARNING

Failure to follow these instructions may result in death or serious injury.

⚠ CAUTION

Failure to follow these instructions may result in minor to moderate injury.

A NOTICE

Failure to follow these instructions may result in damage to the engine or other property.

In addition, the operating instructions contain other important text passages marked with the word **DANGER** are marked.

4.1 General safety instructions**1. Keep your work area tidy**

- Disorder in the work area can lead to accidents.

2. Consider environmental influences

- Never operate the power tool in enclosed or poorly ventilated areas. When the engine is running, poisonous gases are produced. These gases may be odorless and invisible.
- Do not expose the power tool to rain.
- Do not use the power tool in damp or wet environments.
- Make sure you have a secure footing on uneven terrain.
- Make sure you have good lighting while you work.
- Do not use the power tool in easily flammable vegetation or where there is a risk of fire or explosion.
- In dry conditions, have fire extinguishers ready (risk of fire).

Keep other people away

- Do not allow other people, especially children, to use the power tool. Keep them away from your work area.

4. Store unused tools safely

- When not in use, tools should be stored in a dry, high or locked place, out of the reach of children.

5. Do not overload your machine

- You work better and more safely within the specified performance range.

6. Use the right tool

- Do not use low-power tools for heavy work.
- Use the tools only for the purposes for which they were designed.

SAFETY INSTRUCTIONS

- Always keep the tool clean.

7. Wear appropriate clothing

- Do not wear loose clothing or jewelry as they could get caught in moving parts.

- Wear sturdy work gloves, leather gloves provide good protection.
- Wear safety shoes with a non-slip sole and steel toe cap.
- If you have long hair, wear a hair net.

8. Use personal protective equipment

- Always wear safety glasses and hearing protection.
- Use a breathing mask when carrying out work that generates dust.

9. Avoid abnormal posture

- Ensure you have a secure footing and keep your balance at all times.

10. Do not leave any tool keys in the

- Before switching on, check that keys and adjustment tools are removed.

11. Be attentive

- Be careful what you are doing. Be sensible when working. Do not use power tools when you are not concentrating.

12. Filling up with fuel

- Always switch off the engine before filling.
- Always open the tank cap carefully so that the existing excess pressure can be released slowly.

- When working with the earth drill, high temperatures are generated on the housing. Allow the machine to cool down before filling it with fuel. The fuel could ignite and cause severe burns.

- Be careful not to overfill the tank with fuel. If you spill fuel, remove it immediately and clean the machine.

- Close the screw plug on the fuel tank tightly to prevent it from coming loose due to vibrations during work.

13. Take breaks from work in good time.

⚠ CAUTION

- Prolonged use of the power tool can lead to vibration-related circulatory problems in the fingers, hands or wrists. Symptoms such as numbness in body parts, tickling, pain, stinging, changes in skin color or skin may occur. **If these symptoms are noticed, consult a doctor.**

- However, suitable gloves and regular breaks can extend the duration of use. However, please note that personal predisposition to poor circulation and/or high grip forces when working will reduce the duration of use.

14. Check the motor device

- Before further use of the power tool, protective devices or slightly damaged parts must be carefully checked to ensure that they are functioning properly and as intended.

- Check that the moving parts are working properly and are not jammed or damaged. All parts must be correctly fitted and meet all the conditions to ensure the correct operation of the power tool.

- Damaged protective devices and parts must be repaired or replaced as intended by an approved specialist workshop, unless otherwise stated in the operating instructions.

- Defective switches must be replaced by a service workshop.

SAFETY INSTRUCTIONS

- Do not use any power tool where the switch cannot be turned on and off.

15th ⚠ WARNING

- The use of other drill bits, accessories and attachments that are not expressly recommended may pose a risk of injury to you.

16. Use only approved parts

- This machine complies with the relevant safety regulations. Repairs must only be carried out by an authorized service center or our service team using original spare parts; otherwise, accidents may occur to the user.

⚠ WARNING

Even when the tool is used as intended, the following residual risks may still occur:

- Risk of injury to fingers, hands and feet from rotating tools.
- Injuries caused by objects thrown out due to improper posture or handling.
- Injuries caused by touching live parts when electrical components are open or defective.
- Hearing impairment if adequate protection is not worn.
- Harmful dust or gases may be generated when the machine is used in enclosed spaces without wearing a suitable respiratory mask.
- Damage to the eyes if protective goggles are not worn.

Residual risks can be minimized if the "**Intended Use**" and **safety instructions**" and the operating instructions as a whole must be observed.

4.2 Operational safety**⚠ WARNING**

Children and young people under the age of 18 are not allowed to operate the machine. Young people aged 16 and over may use the machine as part of a training course and under the supervision of a trained person.

Read the operating instructions carefully and familiarize yourself with the controls.

Incorrect use or operation by inexperienced persons can be dangerous.

- **NEVER** touch the engine while it is running or shortly after it has been switched off. These areas become very hot and can cause burns.
- **ALWAYS** use original accessories. The use of other tools and accessories can lead to unforeseeable damage to the machine or pose a risk of injury to you.
- **ALWAYS** use flawless drill bits, i.e. free from deformation, cracks, breaks, etc. Faulty drill bits must be replaced immediately.
- **NEVER** leave the device running unattended.
- **NEVER** overload the auger, causing it to run slower and overheat.

SAFETY INSTRUCTIONS

- **ALWAYS** Ensure that the operator is familiar with the appropriate safety precautions, accident prevention regulations and operating procedures before using the earth auger.
- **ALWAYS** - if necessary - wear personal protective equipment (PPE).
 - Hearing protection to reduce the risk of hearing loss.
 - Respiratory protection to reduce the risk of inhaling hazardous dust.
 - Eye protection to reduce the risk of eye damage.
 - Helmets are compulsory to protect against flying debris.
 - Sturdy work gloves.
 - Safety shoes ensure a safe footing.
- **ALWAYS** Wear hearing protection when operating the machine.

WARNING: Noise can be harmful to health. If the permissible noise level of 80 dB(A) is exceeded, ear protection must be worn.

- **NEVER** use the choke lever to stop the engine.
- **ALWAYS** Store the machine properly when not in use. Choose a safe location so that the machine cannot be started by unauthorized persons. Do not place the device unprotected outdoors or in a damp environment.
- **ALWAYS** Before commissioning, check that protective devices and protective plates are functioning properly and as intended.
- Check that moving parts are working properly and are not jammed or damaged. All parts must meet all requirements to ensure the correct operation of the device.
- Damaged protective devices and parts must be repaired or replaced as intended by an approved specialist workshop, unless otherwise stated in the operating instructions.
- **ALWAYS** Read the operating instructions before operating the appliance. Instructions on dangers, warnings and precautions must be strictly observed in order to minimize the risk of personal injury, property damage and incorrect servicing.

4.3 Safety when using combustion engines

DANGER

Combustion engines pose a particular danger during operation and when refueling. Always observe the warnings and the additional safety instructions provided in this manual. Failure to observe these instructions may result in serious or even fatal injuries.

- Let the motor device **NOT** run indoors, in garages or enclosed areas. The engine exhaust contains poisonous carbon monoxide. Being in an atmosphere containing carbon monoxide can lead to unconsciousness and death.
- Operate the device **NOT** near an open flame.
- Do you smoke **NOT** when working with the earth drill.
- Check **ALWAYS** Check the fuel lines, tank cover and fuel tank for leaks or cracks. The device must not be operated if such damage occurs.
- Refuel the device **NOT** when the engine is still hot or while it is running.

SAFETY INSTRUCTIONS

- Fill the fuel tank **ALWAYS** in a well-ventilated area.
- Refuel the machine **NOT** near an open flame.
- Do you smoke **NOT** when refueling.
- Spill when refueling **NONE** Fuel.
- Make sure that after refueling you **ALWAYS** Put the tank cap on and close it tightly.

4.4 Service security

⚠ WARNING

Improper maintenance or failure to observe or resolve a problem can become a source of danger during operation. Only operate machines that have been regularly and correctly maintained. This is the only way you can be sure that you will operate your device safely, economically and without problems. And for a long time to come.

- The machine **NOT** Do not clean, maintain, adjust or repair the machine while it is running. Moving parts can cause serious injury.
- Before maintenance and repair work **ALWAYS** Remove the spark cap and take out the spark plug.
- **NO** Do not use gasoline or other flammable solvents to clean machine parts. Vapors from fuels and solvents can explode.
- Near the housing **NO** Stack paper, cardboard or similar materials. The hot housing can cause a fire.
- **ALWAYS** Make sure that the earth drill is in a safe operating condition, especially the function of the on/off switch and the tightness of the fuel system.
- Damaged or worn machine parts **ALWAYS** Replace with new original spare parts. Replace blunt or damaged drill bits.
- **ALWAYS** Check the tank cap regularly for leaks.
- The stickers on the machine warn of dangers. The machine **ALWAYS** Keep clean and replace damaged stickers if necessary.

⚠ WARNING

The earth drill only starts to rotate when the throttle lever (4) is operated. The drill does not rotate when idling!

4.5 Behavior in an emergency

If an accident occurs, initiate the necessary first aid measures and request qualified medical assistance as quickly as possible.

When requesting assistance, please provide the following information:

- *where it happened*
- *what happened*
- *how many injured*
- *what type of injury*
- *who reports*

4.6 Warning and information symbols used



Attention DANGER!

- * The engine exhaust contains poisonous carbon monoxide. Do not run the engine in an enclosed area.
- * Before use, read and observe the operating instructions and safety information.
- * Smoking prohibited.
- * Petrol is extremely flammable and explosive. Turn off the engine and allow it to cool before refueling.
- * Refueling, fuel mixture 1:25
- * Keep the engine away from heat, sparks and flames.



COMMANDMENTS:

- * Before commissioning, please read the operating instructions and safety instructions carefully. read
- * Wear helmet, eye and hearing protection.
- * Wear safety shoes with non-slip soles and steel toe caps.
- * Wear sturdy protective gloves.

PROHIBITIONS:

- * Do not touch rotating parts.
- * Protect the device from moisture and do not use it in rain.

WARNING:

- * Warning/Caution. Special care and attention.
- * Warning of dangerous electrical voltage. Never touch the spark plug connector or the spark plug when the engine is running. The spark plug connector must also be unplugged and the spark plug removed before carrying out any work.
- * Warning of hot surface! Danger of burns.
- * Warning of rotating parts.
- * Danger from flying parts. Keep people away.
- * Maintain a safety distance of at least 15 m.



Warning of hot surfaces! Danger of burns. Do not touch hot engine parts. These remain hot for a short time even after the machine has been switched off.



Determined sound power level LwA

SAFETY INSTRUCTIONS

4.7 Residual risks and protective measures*Mechanical residual***hazards capture, winding**

The auger can catch and pull in items of clothing, cords or wires.

→ Wear tight-fitting clothing, wear safety shoes with non-slip soles and steel toe caps, and wear a hair net if you have long hair.

residual risk - Hidden invisible foreign bodies

impact

On stony, hard and heavily rooted ground, the handles may recoil strongly.

→ Avoid using the device on stony, hard and heavily rooted soils. Hold the operating handles firmly and wear protective clothing.

*neglect of ergonomic principles***Negligent use of personal protective equipment (PPE)**

Careless use or omission of personal protective equipment can result in serious injury.

→ Wear prescribed protective equipment.

Human behavior, misconduct

→ Always be fully concentrated on all work.

residual risk - Can never be ruled out.

*Electrical Residual Hazards***Electrical contact**

Touching the spark plug connector while the engine is running may result in an electric shock.

→ Never touch the spark plug connector or spark plug while the engine is running.

*Thermal residual hazards***burns, chilblains**

Touching the exhaust/housing may cause burns.

→ Allow the motor device to cool down.

*danger from noise***hearing loss**

Prolonged unprotected work with the earth auger can lead to hearing damage.

→ Always wear hearing protection.

*Hazards from materials and other substances***contact, inhalation**

The exhaust fumes from the machine can cause health damage.

CONTROLS

→ Only use the power tool outdoors and take regular breaks.

fire, explosion

The machine's fuel mixture is flammable.

→ Smoking and open fires are prohibited during work and refueling.

Danger from vibration

whole-body vibration

Prolonged work with the earth drill can lead to physical impairments due to vibrations.

→ Take regular breaks.

Other hazards

Thrown objects or liquids

When drilling, stones or pieces of wood that are thrown out can injure people and animals.

→ Make sure that no persons or animals are in the danger area and wear appropriate protective clothing as well as eye and hearing protection.

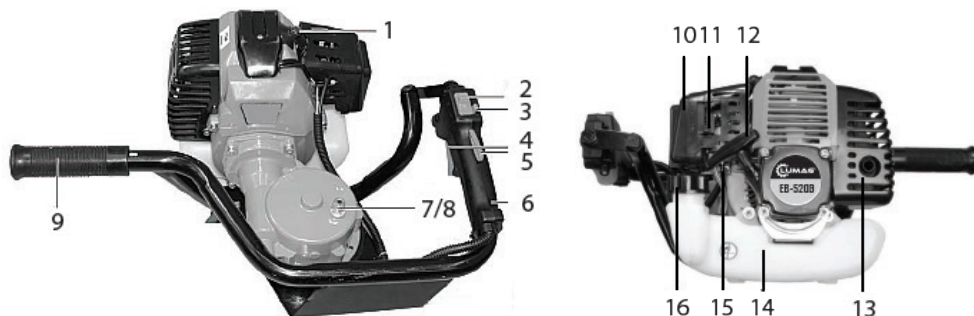
Slipping, tripping or falling of persons

On unstable surfaces, you may cause injury by tripping.

→ Be aware of obstacles in the work area. Always ensure you have a secure footing and wear non-slip shoes.

5. CONTROLS

drive unit



CONTROLS

- 1 spark plug
- 2 on/off switch
- 3 locking pin
- 4 throttle
- 5 throttle lock
- 6 operating handle
- 7/8 vent valve / transmission oil filler opening or drain plug handle
- 9
- 10 air filter
- 11 choke lever
- 12 recoil starter
- 13 exhaust
- 14 fuel mixture tank
- 15 primer pump
- 16 tank cap

*** Recoil starter (12)**

The engine is started by pulling the cable.

*** Primer pump (15)**

To make starting easier after a long period of downtime of the earth drill.

*** Slip clutch**

The slip clutch is a component of general mechanics. It connects two shafts in a force-locking manner until a defined transmitted torque is reached.

*** Centrifugal clutch**

A centrifugal clutch is a clutch in which frictional connection is established by weights moving outwards as the speed increases, thereby establishing contact with the inner wall of the clutch housing (clutch bell), which also serves as the output.

*** Choke lever (11)**

The choke lever closes and opens the choke valve in the carburetor. In the "OFF" position, the air-petrol mixture is enriched for cold starting of the engine. The "ON" position is used for operating the engine and for starting the warm engine.

*** Idle adjustment screw (next to the choke)**

The idle speed of the earth drill can be adjusted using the screw. If the idle speed is set a little too high (the drill attachment rotates by itself when idling), the idle speed can be reduced by slowly turning it anti-clockwise.

DANGER! Other work on the carburetor may only be carried out by a specialist workshop.

*** Throttle lever (4)**

The throttle lever regulates the speed of the engine.

*** vent valve (7)**

Always keep the transmission cooling vent valve open (ON). Only close the valve when the engine is not running (OFF).

6. TRANSPORT

WARNING

Before transporting the machine or storing it indoors, switch off the engine and allow it to cool down to avoid burns and to eliminate the risk of fire.

If you move the machine, even for a short distance, during work, you must switch off the engine.

Wait for the drilling tool to come to a standstill.

7. STORAGE

- Store unused appliances in a dry, locked place out of the reach of children, but not next to a stove, oven or hot water boiler with a pilot light or other devices that produce sparks.
- Allow the motor to cool down before storing the device.
- Thoroughly remove dirt, deposits and dust from the motor and drill.
- Clean the air filter or replace it if it is very dirty or damaged.
- Clean cylinder head fins.
- Treat all moving parts with an environmentally friendly oil. **Do not use fat!**
- During long-term storage, completely empty the fuel tank.
- Run the carburetor dry.
- Check that the earth auger is in perfect condition to ensure reliable use after a long period of storage.

8. ASSEMBLY

7.1 Installing the drill (Fig. 1)

1. Place the drive unit on a stable work surface.
2. Loosen the nut from the locking bolt on the drill and remove the bolt.
3. Insert the drill onto the shaft of the drive unit.
4. Insert the locking bolt through the drill shaft and drive shaft.
5. Screw the nut back on to the locking bolt. The drill is now secured.
6. Position the auger and check that all screws are firmly in place; tighten the screws again if necessary.

FUEL

9. REFUELLING



When handling petrol/oil, extra caution is required. Smoking and open flames are not permitted (risk of explosion!).

fuel mixture

The earth drill's engine is a two-stroke engine. It is powered by a fuel mixture of 1:25 two-stroke engine oil and fuel. The fuel required is unleaded regular gasoline with a research octane number of at least 91. The engine is lubricated by adding a high-quality two-stroke engine oil.

Do not mix the fuel mixture in the tank. Use the mixing cup provided or another suitable container. Only add the fuel mixture to the tank after pre-mixing and stirring well.

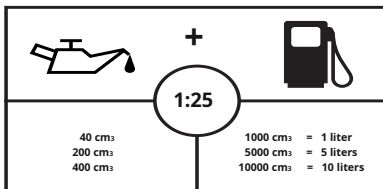
A NOTICE

Use only fresh, clean fuel. Water or impurities in the gasoline will damage the fuel system.



Tank volume: 1.2 liters

Examples of mixing ratio 1:25



- Fuels have a limited shelf life. Excessively stored fuels and fuel mixtures can lead to starting problems. Therefore, only mix as much fuel as you will use in a month.
- Only store fuel in approved and marked containers. Store fuel containers in a dry and safe place.
- Make sure that fuel containers are stored out of the reach of children.

10. COMMISSIONING

DANGER! Make sure that the device is completely and correctly assembled. Always observe the safety instructions when working on it.

10.1 Preparation for use

Check before use:

- the level of the transmission oil via the oil sight glass
- the drill is correctly seated
- the device for possible damage and
- loose fastening

Make sure that the on/off switch (2), the throttle lock (5), the throttle trigger (4) and the device are functioning properly.

A NOTICE

The engine of the device is not filled with petrol mixture when delivered. Fill the device as described under 'Fueling'.

⚠ WARNING

When starting, make sure that the drill can rotate freely.

- Do not work alone; someone must be nearby in case of emergencies.
- Make sure that there are no children or other people in the working area of the earth drill. Watch out for animals, stones or other objects that could hinder your work or endanger you or other people.
- Check the drilling site for cables, lines, etc.
- Check that the earth auger is functioning properly and is in a safe operating condition.
- Hold the auger firmly with both hands while the engine is running.
- Make sure you have a secure footing, even during the drilling process.
- Do not bend too far forward when working.
- Make sure that the machine is idling properly. The drill must not rotate when idling when the engine is warm. Switch the engine off immediately if you notice any changes in the machine's behavior.
- Do not place the hot auger in dry grass or on flammable objects. (Risk of fire!)
- Drill the hole in several sections to allow for the soil to be drained away. Dig the auger vertically, do not tilt it!
- Always secure drill holes, otherwise there is a risk of injury!
- Only use the earth drill to drill holes in the ground. Other uses are not permitted.

⚠ WARNING

When carrying out any work on the earth drill, always switch off the engine, pull the spark plug connector and wear protective gloves. The earth drill may only be started after it has been completely assembled and tested.

COMMISSIONING

10.2 Filling the device (Fig. 2)

Refuel in a well-ventilated area with the engine stopped. If the engine has been running immediately before, allow it to cool down first. Never refuel the engine inside a building where gasoline vapors can reach flames or sparks.

⚠ DANGER

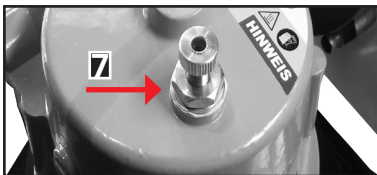
Gasoline is extremely flammable and explosive. You can suffer burns or other serious injuries when handling fuel.

- Switch off the engine and allow it to cool down. Keep the device away from heat, sparks and flames.
- Wear protective gloves!
- Avoid skin and eye contact!
- Only refuel outdoors
- Wipe up spilled gasoline immediately

1. Clean the filling area. Contamination in the tank causes malfunctions.
2. Carefully unscrew the tank cap (16) to release any excess pressure.
3. Fill in the fuel mixture using a funnel. Take into account the expansion of the fuel; do not fill the tank completely.
4. Screw the tank cap back on securely and clean the area of any spilled fuel mixture.

⚠ WARNUNG

To start the auger, move at least three meters away from the refueling area.

10.3 Vent valve**DANGER!**

Before operating the device, please open the valve (7) on top of the gearbox and do not close it again until you have switched off the engine.

CAUTION! Risk of burns from hot liquid.

10.4 Starting with a cold engine (Fig. 3, 4, 5 and 6)

1. When cold, set the choke lever (11) to "OFF" (= cold start position). (Fig. 3)
2. Operate the primer pump (15) until the fuel is visible flowing through the transparent return line. Operate the pump 4 to 5 more times. (Fig. 4)
3. Set the on/off switch (2) to the rear position. (Fig. 5)
4. Press the throttle lock (5) and simultaneously operate the throttle (4). (Fig. 5)
5. Lock the throttle lever with the locking pin (3). (Fig. 5)
6. Pull the recoil starter (12) slowly until you feel resistance, then pull the cable a little faster. (Fig. 6)

ATTENTION! Do not pull the cable out completely and slowly move the handle back so that the cable is wound up correctly.

Repeat the process until the engine starts.

7. Move the choke lever (11) halfway back as soon as the engine has started.

A NOTICE

If the throttle lever (4) is released, the engine runs at idle.

8. When the engine runs smoothly, move the choke lever (11) to "ON".
9. Allow the engine to warm up for half a minute before starting work.

⚠ WARNING

The drill bit must not rotate when idling. If the part rotates, contact a specialist workshop, otherwise serious injuries may occur.

10.5 Starting with a warm engine

Start the device as described in 'Starting with a cold engine', but leave the choke lever (11) in the 'ON' position and operate NOT the throttle lever (4)

A NOTICE

If the engine does not start after pulling it 5 times, proceed as for a "cold start".

10.6 Turning off the engine

1. Release the throttle lever (4) and bring the engine back to idle.
2. Set the on/off switch (2) to the front position, to 'STOP'. When you want to start the engine again, push the on/off switch back to the rear position.

⚠ WARNING

If the engine continues to run even though the on/off switch (2) is in the front position ('STOP'), close the choke, ie set it to "OFF" (cold start position) to stop the engine. Have the on/off switch repaired by your specialist workshop before using the device again.

COMMISSIONING

10.7 Working with the earth drill

⚠ WARNING

Hold the handles of the drill at a maximum height of chest height, otherwise you could lose control of the device and seriously injure yourself.

DANGER!

Always keep the transmission cooling vent valve open (ON). Only close the valve when the engine is not running (OFF).

Caution! Hot liquid after operation.

- Only use drill bits recommended by the manufacturer.
- Take a firm and secure stance. Make sure you have enough distance from the auger.
- Hold the auger firmly by both handles to safely absorb any shocks that may occur.
- Place the drill bit in position and slowly operate the throttle lever (4) so that the clutch engages and the drill bit starts rotating. Gradually increase the speed so that the drill bit can penetrate the soil without any problems.
- Drill without exerting too much force. Let the drill do the work under its own weight. Lift the drill at regular intervals to remove drilling debris from the hole.
- Adjust the throttle according to the ground conditions to ensure optimal progress.
- Do not use the device on excessively rocky ground.

A NOTICE

*If the soil conditions are optimal and allow a consistent working speed, you can use the locking pin (3) to set the throttle (**in middle throttle position**) lock to make work easier.*

⚠ WARNING

The drill bit may twist suddenly and violently when drilling if it encounters large rocks, roots or other hidden obstacles. In this case, immediately release the throttle, turn off the engine and turn the drill bit anti-clockwise out of the hole. To avoid damage, remove the obstacles before starting work again.

11. MAINTENANCE



⚠ DANGER

Before all cleaning, maintenance and repair work

- Turn off the engine
- Wait for the tool to stop
- Disconnect the spark plug connector from the spark plug.

Wear protective gloves to avoid injury.

Do not carry out maintenance work near open flames. Fire hazard!

Any cleaning, maintenance and repair work other than that described in this chapter may only be carried out by an authorized specialist workshop.

Safety devices removed for cleaning, maintenance and repair must be properly reinstalled and checked.

Use only original parts. Other parts may cause unforeseeable damage or injury.

11.1 Maintenance plan

Please follow this machine and engine maintenance table!

Task		Daily before Operation	if necessary/ Be- damage	All 25 BTS	All 50 BTS	Every season
cleaning the machine		after each use				
Check that the fastening screws are tight		X				X
Check fuel tank: - fill level - tightness - lines - tank cap		X				
Check external fasteners: - throttle - transmission shaft - air filter cover - exhaust cover - Spark plug cap		X				X
throttle, safety safety lock, on/off switch	check	X				
	exchange		X			
cable pull	check	X				
	exchange		X			
air filter element	check/clean			X		X
	exchange		X			X
transmission oil	check	X				
	change				X*	
fuel tank	clean					X
spark plug	check/clean			X		
	exchange					X
exhaust	check/clean	X			X	X
carburetor at idle (Drill must not run along)	control	X				
	have it adjusted		X*		X*	

BTS = operating hours

* by an authorized specialist workshop.

11.2 Carburettor

The carburetor is factory-set to the correct idle speed so that the correct fuel-air mixture is supplied to the engine.

The idle speed must be corrected in the following cases:

- Drill continues to run idle > speed is too high
- if running irregularly or acceleration is lacking > idle speed too low

Every 50 hours of operation, have the carburetor pan, the main jet and the idle setting checked and cleaned or corrected if necessary. Please ensure that neither the gears nor the drill rotate when idling.

A NOTICE

Contact an authorized workshop and have the carburetor adjusted.

11.3 Spark plug (Fig. 7)

Clean the spark plug and check the electrode gap (0.6-0.7 mm) every 25 hours of operation. Replace the spark plug if necessary.

⚠ WARNING



The exhaust/housing becomes very hot during operation and remains hot for some time after the engine is turned off. NEVER touch the hot engine.

Check, clean and replace spark plug

1. Remove the spark plug connector (1) and remove any dirt in the spark plug area.
2. Unscrew the spark plug and check.
3. Check the insulator. If there is any damage such as cracks or splinters, replace the spark plug.
4. Clean the spark plug electrodes with a wire brush.
5. Check and adjust the electrode gap. For gap, see "Technical Data".
6. Screw in the spark plug and tighten it with the spark plug wrench.
7. Place the spark plug connector onto the spark plug.

A NOTICE

A loose spark plug can overheat and damage the engine. And over-tightening the spark plug can damage the threads in the cylinder head.

11.4 Air filter (Fig. 8)

Frequent cleaning of the air filter prevents carburetor malfunctions.

Every 8 hours of operation, carefully clean the air filter housing inside and out and the filter element with a brush and mild soap solution and then dry. Replace the air filter element if necessary.

Clean the air filter and change the filter element

1. Loosen the screw on the air filter housing, remove the air filter cover and check for holes or cracks. Replace any damaged element.
2. Remove dirt from the inside of the filter housing with a clean, damp cloth

wipe off.

3. Carefully remove the filter element and check for damage. Replace if necessary.
4. Wash the filter element in lukewarm soapy water. Rinse thoroughly with clean water, allow to dry well and reinsert.
5. Replace the air filter cover and screw it tight.

⚠ WARNING

NEVER use gasoline or low flash point cleaning solvents to clean the air cleaner element. A fire or explosion could result.

A NOTICE

Never run the engine without an air filter element or with a damaged one. This will allow dirt to enter the engine, which can cause serious engine damage. In this case, the seller and manufacturer will not provide any warranty.

11.5 Screws and nuts

Before each use, check that all screws and nuts are tight and tighten if necessary.

11.6 Exhaust

Check the exhaust (13) regularly and remove any deposits from the outlet opening. Pay particular attention to ensure that no slag gets into the cylinder.



⚠ WARNING

Do not clean the exhaust top when the engine is hot. Risk of burns!

11.7 Gearbox

The device is already filled with transmission oil at the factory.

The transmission oil should be changed every 50 hours. Drain the old oil and then fill with approx. 250-300 ml of new transmission oil with viscosity SAE 80W-90.

A NOTICE

Contact an authorized workshop and have the transmission oil changed.

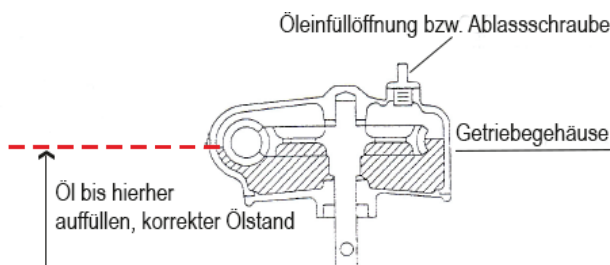
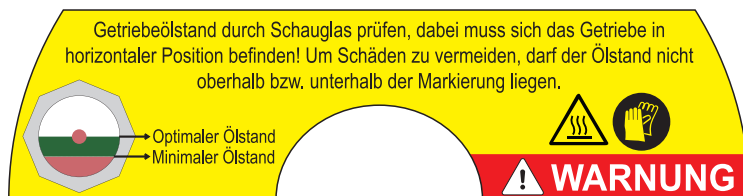
Check transmission oil level through sight glass

The oil level can be read at a glance from the sight glass on the gearbox.

1. Switch off the engine.
2. Stand the machine upright with the gearbox in a horizontal position.
3. Allow the engine to cool down for about 10 minutes.
4. Check the oil level. The correct oil level is reached when the sight glass shows approximately 1/2 full.

Optimal oil level: If oil is visible in the middle of the sight glass, then the amount is correct.

Minimum oil level: If oil is visible at the bottom of the sight glass, then oil must be added.



A NOTICE

A transmission oil level that is too low or too high can cause damage to the transmission. In this case, the seller and manufacturer will not provide any warranty.

Recommended gear oil: SAE 80W-90

Quantity: approx. 250-300 ml



A NOTICE

Used gear oil must be disposed of in an environmentally friendly manner. We recommend that you hand over used oil in a closed container to a recycling center or a collection point for used oil. Do not pour used oil into the garbage can, into the sewer system, into a drain or onto the ground.

TROUBLESHOOTING

NOTE ON ENVIRONMENTAL PROTECTION

12. TROUBLESHOOTING

Disturbance	Caused	remedy
Engine won't start.	Spark plug or spark plug cap defective	Check the ignition cable, spark plug and spark plug connection
	fuel supply	Check tank contents, fuel line for kinks or damage
	Mechanical error	Contact a specialist workshop
Engine does not deliver full power.	carburetor setting incorrect	Contact a specialist workshop
	exhaust clogged	Contact a specialist workshop
	Air filter dirty or damaged	Clean air filter and replace if necessary
	Fuel mixture contains too much oil	Prepare fuel mixture according to 1:25
Engine dies.	Choke setting	Check and adjust the correct position
	fuel line	For damage or Check for blockage
	On/off switch in wrong position or damaged	Set correct position, contact specialist workshop if defective
Drill cuts slowly	blunt drill	Replace or sharpen drill bits
Drill rotates in idle	Idle speed too high	Set idle speed lower
	Broken clutch spring	Replace spring
Drill rotates but has no power	choke to OFF carburetor defective Broken Translation Worn clutch disc	Choke to ON after the engine is running Contact a specialist workshop Contact a specialist workshop Replace clutch disc and spring

If these measures do not resolve the problem or if errors occur that are not listed here, have the device checked by a specialist.

13. NOTE ON ENVIRONMENTAL PROTECTION



Old electrical/motor devices are recyclable materials and therefore do not belong in household waste! Please dispose of the components in an environmentally friendly manner. Ask your local waste disposal authority about options for environmentally friendly and proper disposal.

14. TECHNICAL DATA

Model:		EB-520G
drive motor:		2-stroke engine
displacement:	cm ³	52
Rated power:	kW	1.75 at 7,500 rpm
Idle speed:	1/min	3,000 ± 200
Rated speed, drill:	1/min	0-300
Fuel:		unleaded regular gasoline
tank capacity:	l	1.2
Mixing ratio: <i>2-stroke engine oil / fuel</i>		1:25
Gear oil:	variety	SAE 80W-90
Spark plug:		JLBM6A or other equivalent spark plug
Electrode gap:	mm	0.6 – 0.7
Drill:	mm	Ø 100, 150 and 200; L/800
Weight without drill (tank empty):	kg	8.8 kg
Sound pressure level LPA:	dB(A)	88.4
Sound power level LWA:	dB(A)	113

The values given are emission values and do not necessarily represent safe workplace values. Although there is a correlation between emission and immission levels, this cannot be used to reliably determine whether or not additional precautionary measures are necessary. Factors that influence the current immission level at the workplace include the nature of the work area, other noise sources, e.g. the number of machines and other adjacent work processes. The permissible workplace values can also vary from country to country. However, this information is intended to enable the user to make a better assessment of hazard and risk.

15. ACCESSORIES

Article	Dimensions	EAN
5EB250 / Drill attachment	Ø 250 mm, L/800 mm	40 47424 00554 5
5EBV600 / Shaft extension	L/600 mm	40 47424 00555 2

WARRANTY / GUARANTEE

16. WARRANTY / GUARANTEE / CUSTOMER SERVICE**16.1 Warranty**

The statutory warranty period applies to the device. Any defects that can be proven to be due to material or assembly errors must be reported to the seller immediately. Proof of purchase of the device must be provided by presenting the invoice and receipt when making a warranty claim.

The warranty is excluded with regard to parts if defects have arisen due to natural wear and tear, temperature or weather influences or due to defects resulting from negligent assembly, faulty connection, incorrect fuel/fuel mixture, installation, operation, maintenance, lubrication or force.

Furthermore, no warranty is provided for damage caused by inappropriate or improper use of the machine, such as improper modifications or repair work carried out by the owner or third parties, or by intentional overloading of the machine.

Wear parts with a limited service life (e.g. V-belts, clutch, throttle cable, spark plug, air filter, battery, blades, hoses, wheels, tools and other aids) as well as all setting and adjustment work are excluded from the warranty.

16.2 Warranty

LUMAG guarantees flawless quality and, without prejudice to the statutory warranty, provides a guarantee in the event of material or manufacturing defects. The guarantee for LUMAG products is 24 months for exclusively private use, and 12 months from the delivery date for commercial or professional use or rental. Warranty claims must always be proven by the buyer using the original purchase receipt. A copy of this must be enclosed with the warranty application. The buyer's address and machine type must be clearly identifiable for professional or commercial use. Without the original purchase receipt, we can only carry out the repair for a fee.

Please do not send any devices back to us without a SERVICE NUMBER that you have received from our service department. If we receive devices unsolicited, we cannot accept and process them. To request a SERVICE NUMBER, please contact our service team at: info@lumag-maschinen.de

Please clearly label the shipping box with the SERVICE NUMBER to ensure quick identification.

Warranty work is carried out exclusively by our LUMAG service workshop. Defects that occur within the warranty period due to material or manufacturing defects must be remedied by repair if they have occurred despite proper use and care of the device. We reserve the right to make two repairs if the same defect occurs. If repair fails or is impossible, the device can be exchanged for an equivalent device. If the exchange is also unsuccessful or impossible, there is the option of a replacement.

Normal wear and tear, natural aging, improper use, and cleaning, maintenance and adjustment work are generally not covered by the guarantee (e.g. cutting device, air and fuel filters, spark plugs and recoil starters, drive belts, etc.). Due to operation and use, some components are subject to normal wear and tear, even when used as intended, and may need to be replaced in good time.

16.3 Customer Service

If you have any technical questions, information about our products or would like to order spare parts, our service team is available as follows:

Service time: Monday to Thursday from 7.30 a.m. to 12 p.m. and 1 p.m. to 5 p.m.
Friday from 7.30 a.m. to 12.30 p.m.

Phone: 0049 / (0)8571 / 92 556-0
Fax: 0049 / (0)8571 / 92 556-19

E-mail: info@lumag-maschinen.de

EC DECLARATION OF CONFORMITY

17. EC DECLARATION OF CONFORMITY

In accordance with the provisions of the EC directives

- Electromagnetic Compatibility 2004/108 EC
- Machinery Directive 2006/42/EC

the company explains:

LUMAG GmbH
 Robert-Bosch-Ring 3
 D-84375 Kirchdorf/Inn
 Phone: 0049 / (0)8571 / 92 556-0
 Fax: 0049 / (0)8571 / 92 556-19

that the product

Device type: auger
Device type: EB-520G

meets the essential protection requirements of the above-mentioned EC directives. Conformity is based on the following standards:

EN ISO 12100:2010
 PPP 58068A:2013
 ZEK 01.4-08

Person authorized to compile the technical documentation: Christopher
 Weißenhorner

The declaration of conformity refers only to the machinery in the condition in which it was placed on the market; it does not take into account any parts and/or interventions subsequently fitted by the end user.

Kirchdorf, January 7, 2016

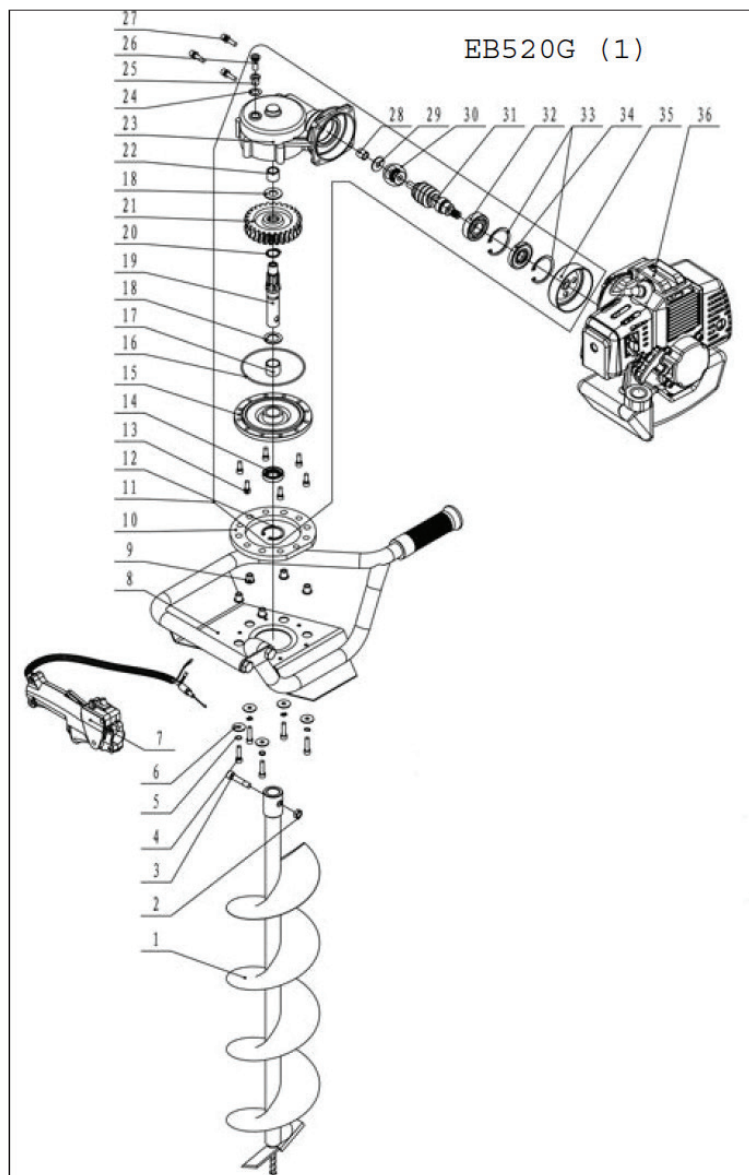
Manfred Weißenhorner, Managing Director

Place, date

distributor, authorized representative

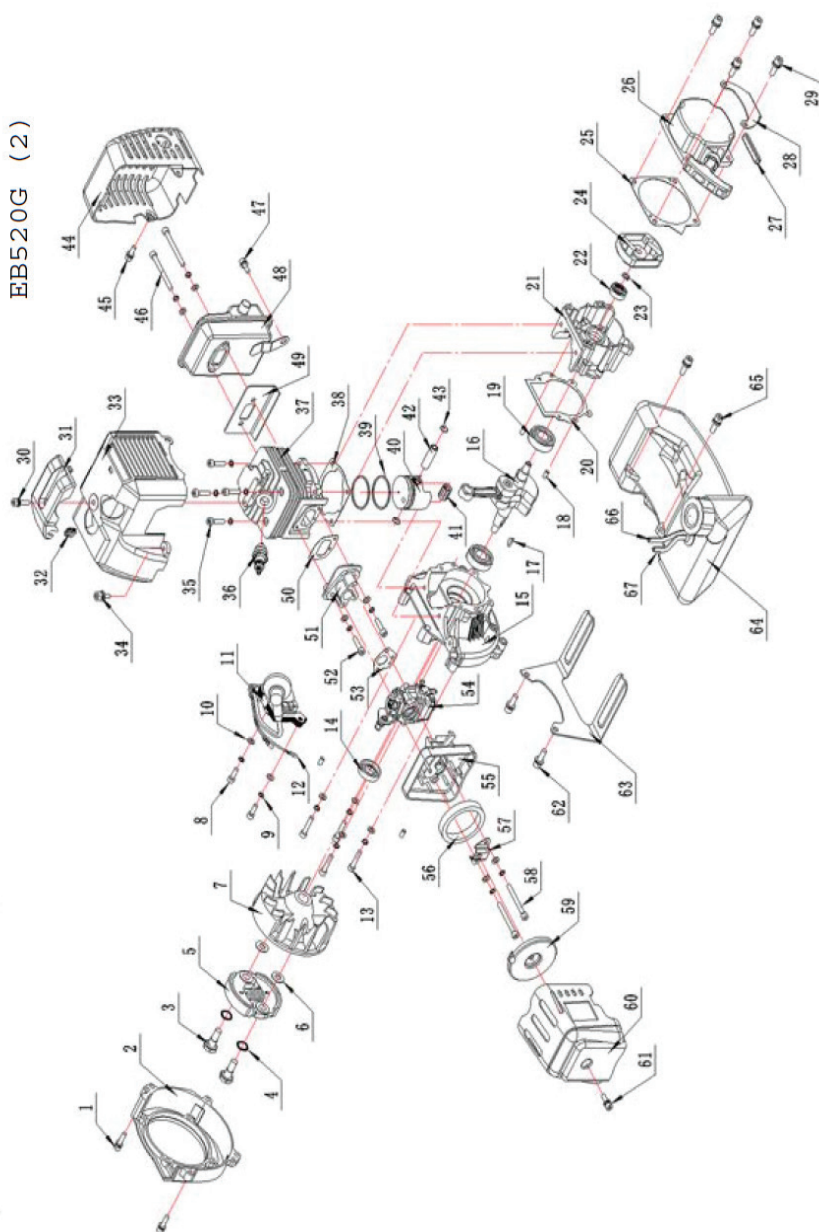


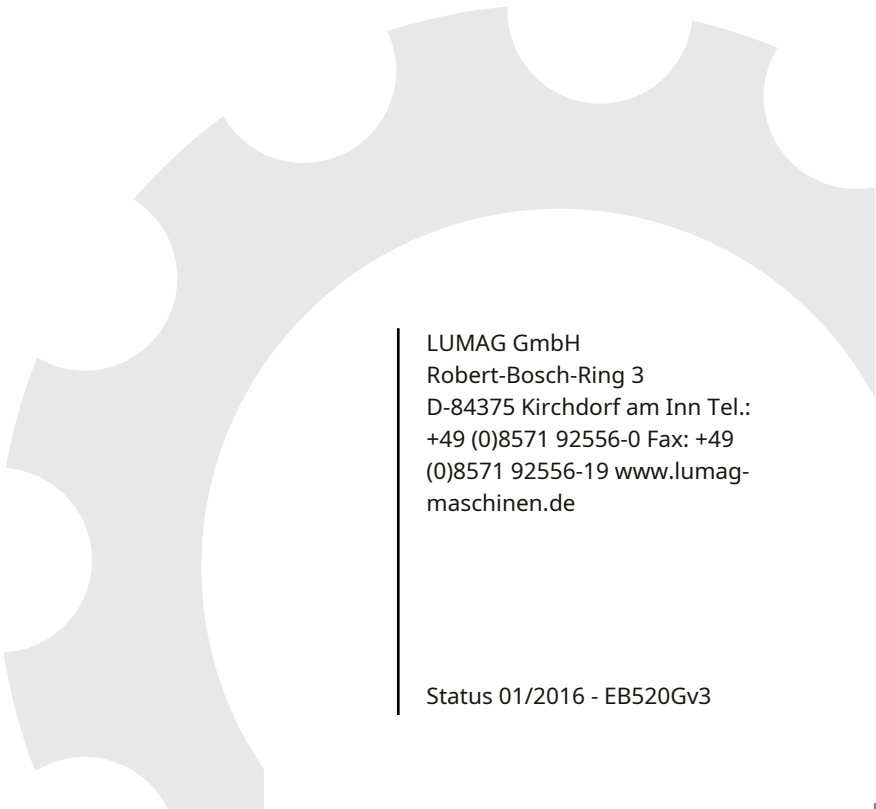
18. COMPONENTS OF THE MACHINE



COMPONENTS OF THE MACHINE

EB520G (2)





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Status 01/2016 - EB520Gv3