



GC-PM 46 S HW-E

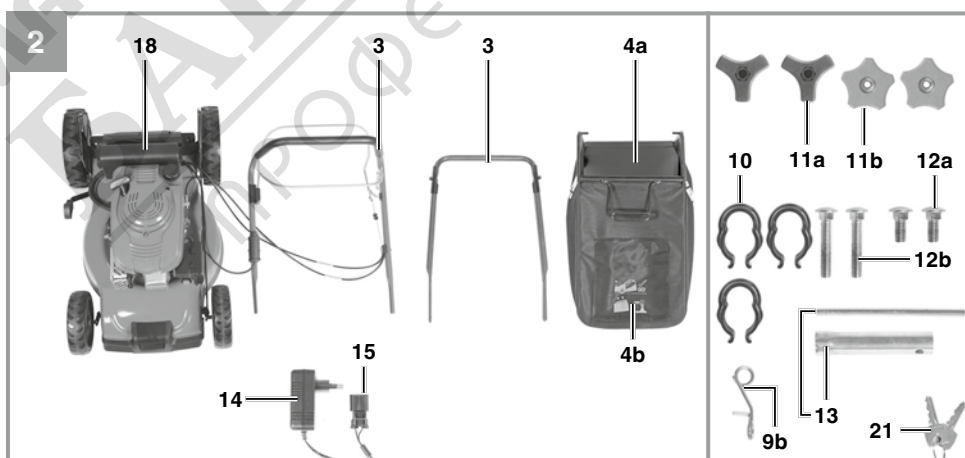
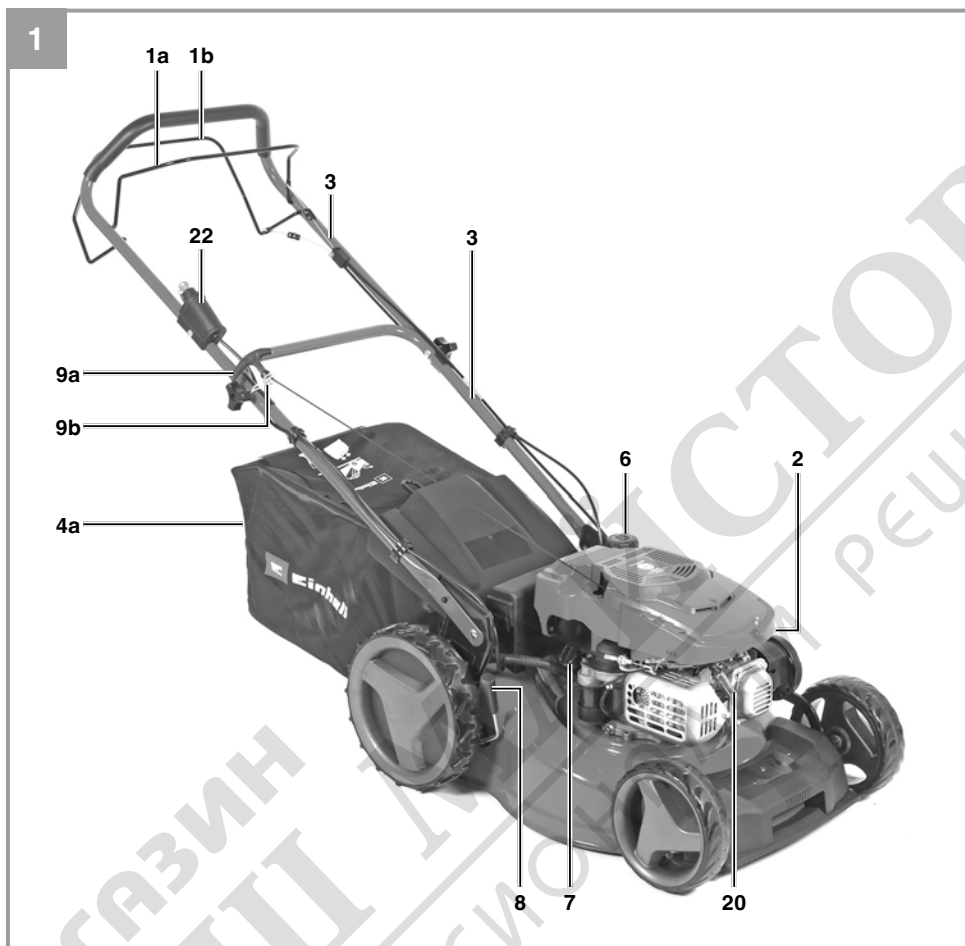
D	Originalbetriebsanleitung Benzin-Rasenmäher	FIN	Alkuperäiskäyttöohje Bensiinikäyttöinen ruohonleikkuri
GB	Original operating instructions Petrol Lawn Mower	SLO	Originalna navodila za uporabo Bencinska kosilnica za travo
F	Instructions d'origine Tondeuse à gazon à essence	H	Eredeti használati utasítás Benzin-fűnyírógép
I	Istruzioni per l'uso originali Tosaerba a benzina	P	Manual de instruções original Corta-relvas a gasolina
DK/ N	Original betjeningsvejledning Benzindreven græsslåmaskine	HR/ BIH	Originalne upute za uporabu Benzinska kosilica za travu
S	Original-bruksanvisning Bensindriven gräsklippare	RS	Originalna uputstva za upotrebu Benzinska kosilica za travu
CZ	Originální návod k obsluze Benzínová sekačka	PL	Instrukcja oryginalną Kosiarka spalinowa
SK	Originálny návod na obsluhu Benzínová kosačka	TR	Orijinal Kullanma Talimatı Benzin Motorlu Çim Bıçme Makinesi
NL	Originele handleiding Benzinemaaiër	EE	Originaalkasutusjuhend Bensiinimootoriga muruniiduk
E	Manual de instrucciones original Cortacésped con motor de gasolina		

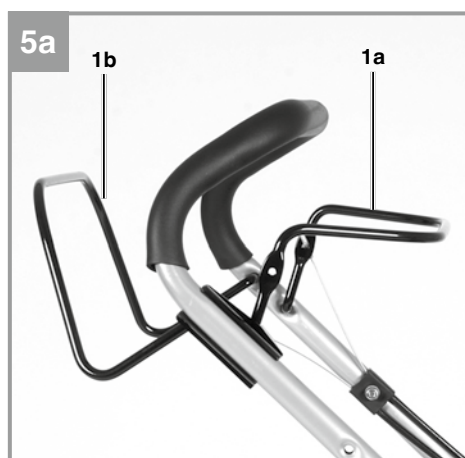
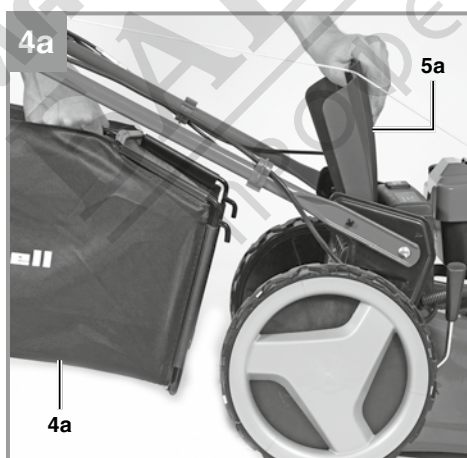
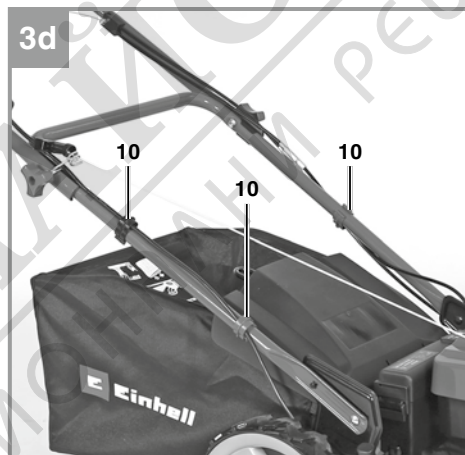
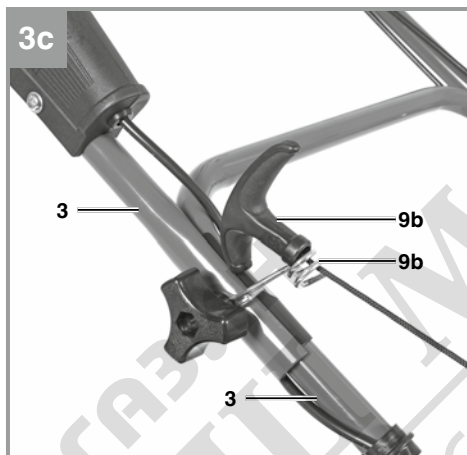
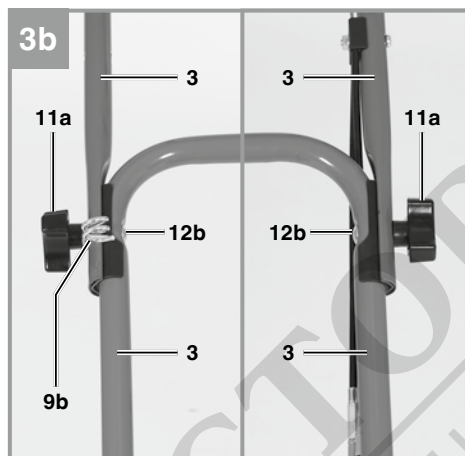
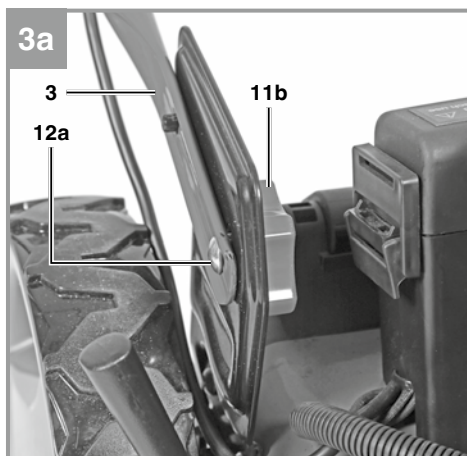
13

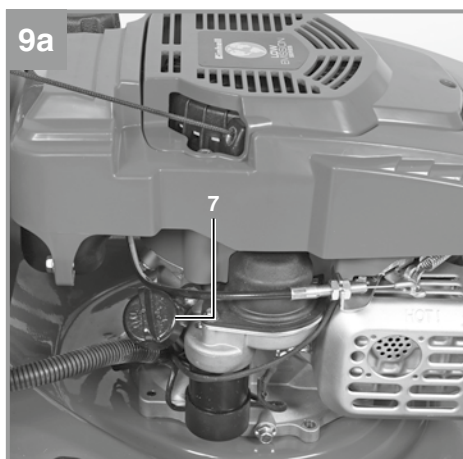
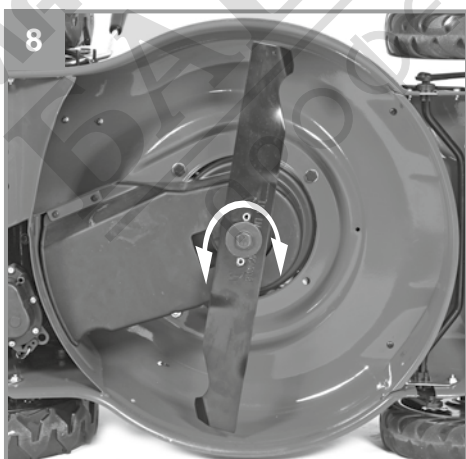
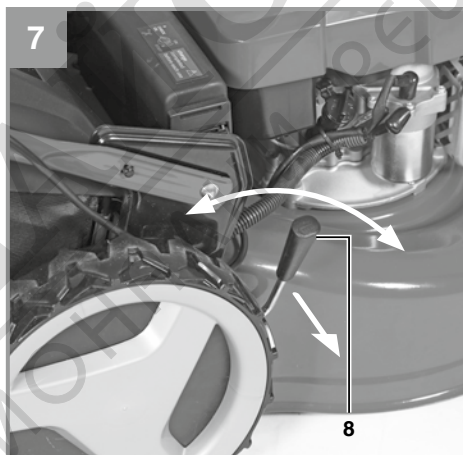
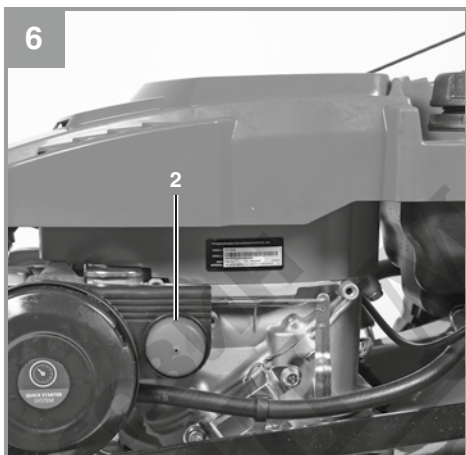


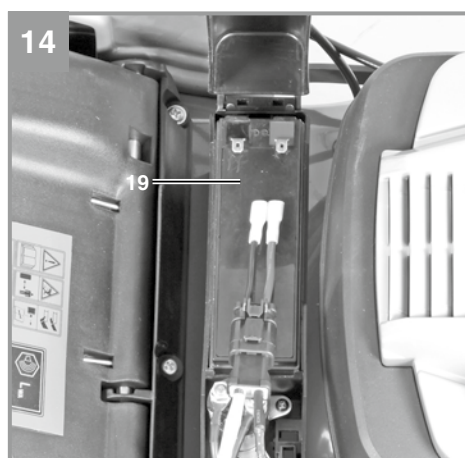
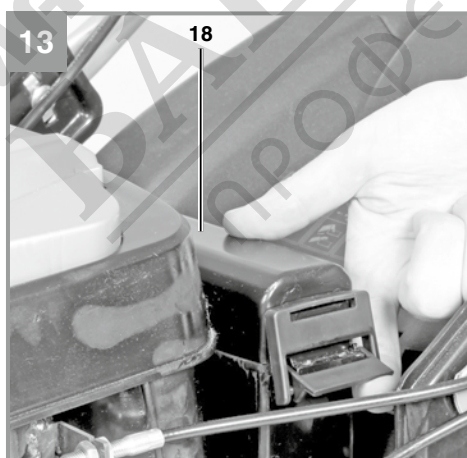
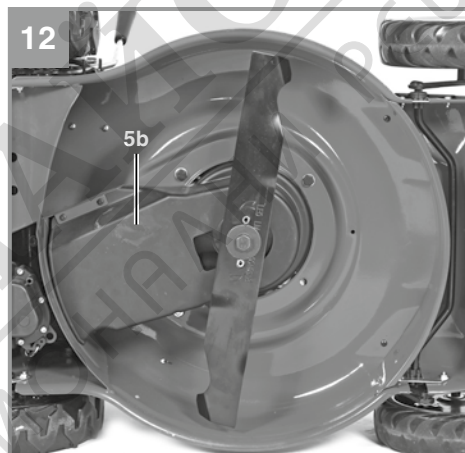
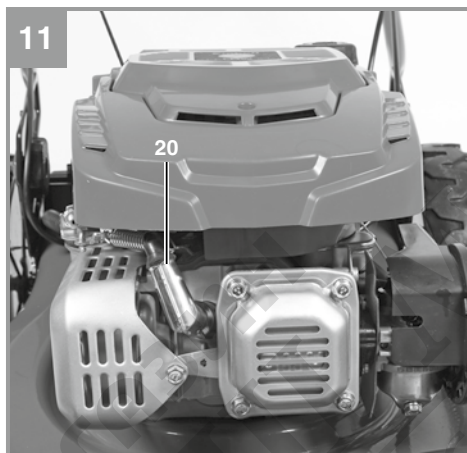
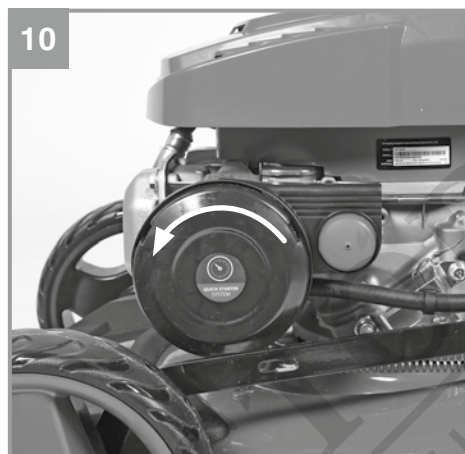
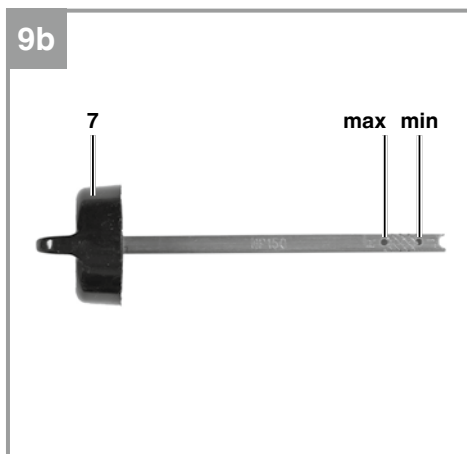
Art.-Nr.: 34.075.70

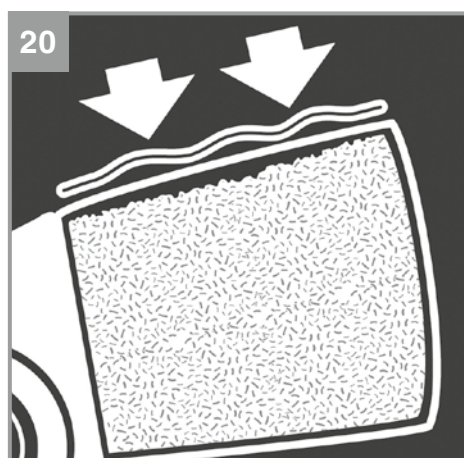
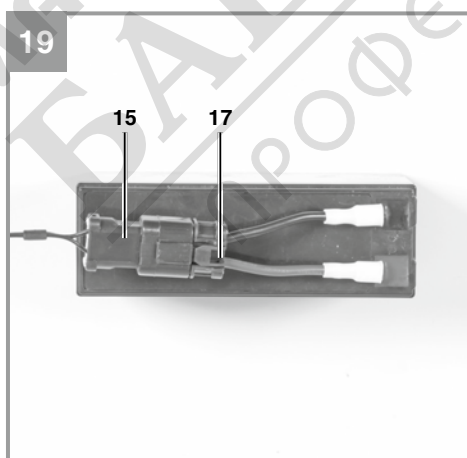
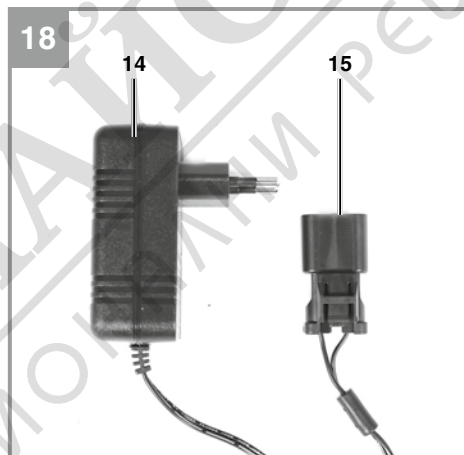
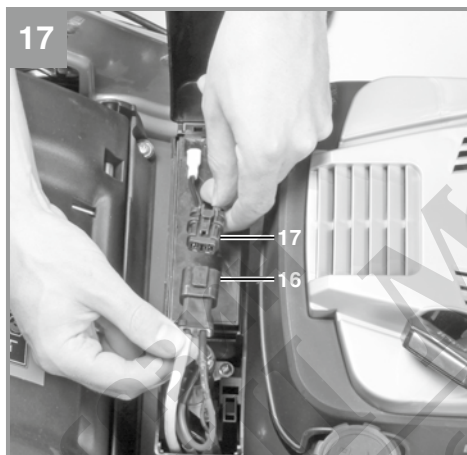
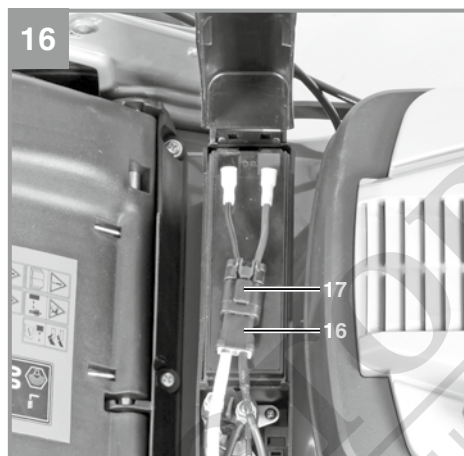
I.-Nr.: 21024











21



Danger!

When using the equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating instructions and safety regulations with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, hand over these operating instructions and safety regulations as well. We cannot accept any liability for damage or accidents which arise due to a failure to follow these instructions and the safety instructions.

1. Safety instructions for hand mower

Note

1. Read the directions with due care. Familiarize yourself with the settings and proper operation of the machine, engine and accessories (if provided).
2. Never allow children or other persons who are not familiar with the operating instructions to use the mower. Contact your local governmental agency for information regarding minimum age requirements for the user.
3. Never mow in the direct vicinity of persons - especially children - or animals. Keep children and other persons away from the mower during operation. Always keep in mind that the operator or user of the equipment is responsible for accidents involving other persons and/or their property.
4. If you give the equipment to any other persons, hand over these operating instructions and the safety information as well.

Preliminary measures

1. Always wear sturdy, non-slip footwear and long trousers when mowing. Never mow barefoot or in open sandals.
2. Check the ground on which the equipment will be used and remove all objects that could be caught up and flung out, e.g. stones, toys, sticks and wire.
3. **Warning:**
Petrol is highly flammable! Therefore:
 - Only store petrol in containers designed to hold petroleum-based liquids.
 - Only refuel out in the open and do not smoke during the refueling process.
 - Use a funnel and a measuring vessel. Wipe off any spilled petrol.

- Always refuel before starting the engine. Do not open fuel tank cap and do not refuel when the engine is running or when the scythe is hot.

- If petrol has escaped, do not under any circumstances attempt to start the engine. Instead, remove the equipment from the affected area. Avoid starting the engine until the petrol fumes have completely evaporated.

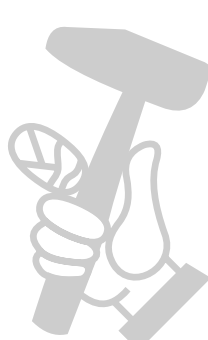
- For safety reasons, the petrol tank and other tank closures must be replaced if they are damaged.

- Keep petrol away from children.

4. Replace defective mufflers.
5. Before using the scythe, visually inspect it to ensure that the blade, mounting bolts and the entire cutting apparatus are in good working order (i.e. not worn out or damaged). To carry out this check, first switch off the engine and pull off the spark plug connector. To prevent any imbalance, replace worn out or damaged blades and mounting bolts as a set only (if applicable). Only original parts or parts approved by the manufacturer may be used for repairs.
6. Please note that where equipment has more than one blade, the rotation of one of the blades can cause the others to rotate as well.
7. Make sure that all the guards are fitted and that they are in good working order. Never remove any safety-related components.

Handling

1. Do not let the combustion engine run in enclosed areas, as dangerous carbon monoxide gas can build up. Start the engine only when you are out in the open.
2. Only mow in broad daylight or in well-lit conditions. If possible, avoid using the equipment on wet grass.
3. Always maintain good footing on inclines. Wear shoes with non-slip, high-grip soles. Use extra caution when mowing on inclines and steep grades.
4. Only operate the equipment at a walking pace.
5. For machines with wheels: Always mow across slopes, i.e. never straight up or straight down.
6. Be particularly careful when you change direction on a slope or incline.
7. Do not mow on overly steep inclines. For safety reasons, the lawn mower may not be used to mow inclines whose gradient exceeds 15 degrees.

- 
8. Use special caution when backing up and pulling the lawn mower. Tripping hazard! Always be extra careful when turning the mower around and when pulling it towards you.
 9. Ensure that the blade has stopped rotating whenever the mower has to be tilted, transported over areas other than lawns, or moved from or to the area you want to mow.
 10. Never use the lawn mower if the blade or safety grilles are damaged, or without the attached guards, e.g. deflectors and/or grass catching devices.
 11. Do not adjust or overlock the engine speed settings.
 12. Release the engine brake, before you start the engine.
 13. Start the engine with caution as described in the manufacturer's instructions. Make sure that your feet are far enough away from the mower blade.
 14. Do not tilt the lawn mower when you start the engine unless the mower must be raised slightly in order to start it. In this case, tilt it as little as absolutely necessary and only raise the side opposite to that of the user.
 15. Do not start the engine if you are positioned in front of the chute.
 16. Never move your hands or feet toward or under any rotating parts. Keep clear of the chute opening at all times.
 17. Never lift or carry a lawn mower with the engine running.
 18. Switch off the engine, pull off the spark plug connector, and make sure that all moving parts have stopped completely:
 - Before you dislodge any blockages or clogs in the chute.
 - Before you carry out any checks, cleaning, maintenance or other work on the lawn mower.
 - If you have struck a foreign object. Examine the mower for signs of damage and carry out any necessary repairs before restarting and continuing to work with the mower. If the lawn mower begins to experience exceptionally strong vibrations, immediately switch it off and check it.
 19. Switch off the engine and make sure that all moving parts have stopped completely:
 - when you leave the lawn mower
 - before you refuel.
 20. When you switch off the engine, move the throttle lever to the „Stop“ position. Close the petrol cock (if fitted).
 21. Operating the equipment at excessive speed may increase the risk of accidents.
 22. Carry out adjustment work on the equipment with care and avoid jamming your fingers between the moving blades and rigid parts of the equipment.
 23. Beware of hot parts. A hot engine, exhaust or drive unit can burn the skin if touched. Do not touch.
 24. Always ensure that a safe distance (provided by the length of the long handles) is maintained between the user and the mower housing.
 25. Check the mower, the blade and other parts if they have struck a foreign object or if the equipment vibrates more than usual.
 26. It is prohibited to work when there is a risk of bad weather or lightning.
 27. Never use the lawnmower if you are tired, ill or under the influence of drugs, alcohol or medication.
 28. Be particularly carefully when mowing on the banks of streams, ponds or similar.
 29. Pay attention to ensure that you do not run into or over anything that could damage the mower. The lawn mower could be damaged and/or the machine could inflict bodily injury.
 30. Look out for road traffic if you are mowing alongside or near a road. Always keep the grass chute pointed away from the street.
 31. Avoid mowing in places where the wheels have trouble gripping or mowing is unsafe in any other way. Before you move backwards, make sure there are no little children behind you.
 32. When mowing thick high grass, select the highest cutting level and mow at a slower speed.

Maintenance and storage

1. Make sure that all nuts, bolts and screws are tightened securely and that the equipment is in a safe working condition. Tighten all screws which were slackened.
2. Never store the mower (with petrol in the tank) inside a building in which petrol fumes could come into contact with open flames or sparks. Petrol fumes can lead to explosions.
3. Allow the engine to cool before you put the lawn mower in an enclosed area.
4. In order to avoid fire hazards, keep the engine, exhaust and the area around the fuel tank free from grass, leaves and leaking grease (oil).

5. Routinely check the grass basket for signs of wear and impaired functionality.
6. For your own safety, replace worn or damaged parts without delay.
7. Disconnect the spark plug connector to prevent unauthorized use.
8. Remove grass, foliage, grease and oil before storing the mower. Do not place any objects on top of the mower.
9. If you are not intending to use the mower for an extended period of time, empty the petrol tank with a petrol extraction pump (available from your DIY store) out in the open.
10. Tell children not to use the mower. It is not a toy.

1.1 Safety information for the charger

- Wear safety goggles and gloves when charging the battery. The caustic acid presents a high risk of injury.
- Do not wear any items of clothing made of synthetic materials so as to avoid spark formation caused by electrostatic discharge when charging the battery.
- CAUTION! Explosive gases – avoid flames and sparks
- The charger contains components such as the switch and fuse which may generate arcs and sparks. It is essential to ensure that there is good ventilation in the garage or room.
- The charger is suitable for maintenance-free 12V batteries only.
- Do not charge any "non-rechargeable batteries" or defective batteries.
- Refer to the instructions supplied by the battery manufacturer.
- Disconnect the equipment from the mains supply before you connect or disconnect the battery.
- Important. Avoid flames and sparks.
- Explosive gas is released during the charging process.
- Store the equipment in a dry indoor location only.
- Caution! Battery acid is aggressive.
- Should any acid splash onto hands or clothing, wash off immediately with soap solution. Should any acid splash into your eyes, wash it out immediately with water (for 15 minutes) and seek the advice of a doctor.
- Do not charge any non-rechargeable batteries.
- Refer to the information and instructions provided by the battery manufacturer relating to charging the battery.

- Do not charge more than one battery at any one time.
- The mains connection lead and the charging cables must be in perfect condition.
- Keep children away from the battery and charger.
- Important. If you smell an acrid odor of gas, this indicates that there is an acute danger of explosion. Do not switch off the equipment. Do not disconnect the battery from the power supply! Ventilate the room immediately. Have the battery checked by customer service staff.
- Do not use the cable for purposes other than that for which it is designed.
- Do not carry the charger by its cable and do not use the cable to pull the plug out of the socket. Protect the cable from heat, oil and sharp edges.
- Check the equipment for damage.
- Unless otherwise stated in the operating instructions, defective or damaged parts must be repaired or replaced by a customer service workshop.
- Only ever use the supply voltage specified.
- Keep the connectors clean and protect them from corrosion.
- Disconnect the equipment from the mains supply before starting any cleaning or maintenance work.
- Wear acid-resistant gloves and safety goggles when connecting and charging the battery.
- Important. Do not exceed the charging time. After the end of the charging time pull the plug out of the socket and disconnect the charger from the battery.

1.2 Safety precautions for batteries

1. Make sure at all times that the batteries are fitted with the + and – terminals on the batteries correctly positioned as shown on the battery.
2. Do not short-circuit the batteries.
3. Do not recharge non-rechargeable batteries.
4. Do not over-discharge the battery.
5. Do not heat batteries.
6. Do not do any welding or soldering directly on batteries.
7. Do not disassemble batteries.
8. Do not deform batteries.
9. Do not throw batteries into a fire.
10. Keep batteries out of the reach of children.
11. Do not allow children to change batteries without supervision.
12. Do not store batteries near fire, stoves or

other sources of heat. Do not expose the battery to direct sunlight. Do not use or store it in vehicles in hot weather.

13. Keep unused batteries away from metallic objects. This could cause the battery to short-circuit and may therefore cause damage to the battery, burns and even the risk of fire.
14. Take the batteries out of the equipment if the equipment is not going to be used for some time.
15. NEVER touch batteries which have leaked unless you have taken suitable precautions for protection. If the fluid which has leaked should come into contact with your skin, rinse down the affected area of skin immediately with running water. Make sure in any event that your eyes and mouth do not come into contact with the fluid. If this should happen, consult a doctor immediately.
16. Clean the contacts on both the batteries and the equipment before inserting the batteries.

This equipment can be used by children of 8 years and older and by people with limited physical, sensory or mental capacities or those with no experience and knowledge if they are supervised or have received instruction in how to use the equipment safely and understand the dangers which result from such use. Children are not allowed to play with the equipment. Unless supervised, children are not allowed to clean the equipment and carry out user-level maintenance work.

Waste disposal

Batteries: Only dispose of these items through motor vehicle workshops, special collection points or special waste collection points. Ask your local council.

Warning!

Before you ever tilt the lawn mower, you must remove the battery first. Battery acid may leak out.

Residual risks:

Even if you use the equipment in accordance with the instructions, certain residual risks cannot be eliminated. The following hazards may arise in connection with the equipment's construction and layout:

1. Damage to hearing if no suitable ear protection is applied.
2. Health damage caused by hand-arm vibrations if the equipment is used over a longer period or is not properly guided and maintained.

ned.

Danger!

Read all safety regulations and instructions.

Any errors made in following the safety regulations and instructions may result in an electric shock, fire and/or serious injury.

Keep all safety regulations and instructions in a safe place for future use.

Explanation of the warning signs on the equipment (see Fig. 21)

- 1) Read the operating instructions.
- 2) Take care of the danger from catapulted parts. Keep a safe distance.
- 3) Danger! Sharp blades - Switch off the engine and pull the spark plug boot before doing any maintenance, repair, cleaning or adjustment work.
- 4) Fill with oil and fuel before starting the mower.
- 5) Caution: Wear ear protection and safety goggles.
- 6) Guaranteed sound power level.
- 7) Caution! Hot parts. Keep your distance.
- 8) Fill in fuel only when the engine is switched off.
- 9) Risk of cut injuries. Caution: rotating cutters.
- 10) Starting procedure
- 11) Engine start/stop lever (I=Engine on; 0=Engine off)
- 12) Drive lever (clutch lever)
- 13) For use in dry rooms only
- 14) Safety class II

2. Layout and items supplied

2.1 Layout (Fig. 1-20)

- 1a. Engine start/stop lever (engine brake)
- 1b. Drive lever (clutch lever)
2. Fuel pump (primer)
3. Top and bottom push bar
- 4a. Catch basket
- 4b. Level indicator
- 5a. Ejector flap
- 5b. V-belt
6. Tank filler cap
7. Oil filler screw
8. Cutting height adjuster lever
- 9a. Starter cable
- 9b. Hook for starter cable
10. Cable clip (3x)
- 11a. Star nut (2x)
- 11b. Star nut (2x)

- 12a. Short screw (2x)
- 12b. Long screw (2x)
- 13. Spark plug wrench
- 14. Charging unit
- 15. Charging plug
- 16. Electrical system plug
- 17. Battery plug
- 18. Battery cover
- 19. 12V / 7 Ah battery
- 20. Spark plug connector
- 21. Ignition key (2x)
- 22. Ignition lock

2.2 Items supplied

Please check that the article is complete as specified in the scope of delivery. If parts are missing, please contact our service center or the nearest branch of the DIY store where you made your purchase at the latest within 5 work days after purchasing the article and upon presentation of a valid bill of purchase. Also, refer to the warranty table in the warranty provisions at the end of the operating instructions.

- Open the packaging and take out the equipment with care.
- Remove the packaging material and any packaging and/or transportation braces (if available).
- Check to see if all items are supplied.
- Inspect the equipment and accessories for transport damage.
- If possible, please keep the packaging until the end of the guarantee period.

Important

The equipment and packaging material are not toys. Do not let children play with plastic bags, foils or small parts. There is a danger of swallowing or suffocating!

- Petrol lawn mower
- Top and bottom push bar
- Catch basket
- Cable clip (3x)
- Star nut (4x)
- Short screw (2x)
- Long screw (2x)
- Spark plug wrench
- Charger
- Ignition key (2x)
- Battery
- Hook for starter cable (1x)
- Maintenance booklet for petrol lawn mower
- Safety information on the battery
- Original operating instructions

3. Intended use

The equipment may only be used for the tasks it is designed to handle. Any other use is deemed to be a case of misuse. The user/operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of this.

The petrol lawn mower is intended for private use i.e. for use in home and gardening environments.

Private use of the lawn mower refers an annual operating time generally not exceeding that of 50 hours, during which time the machine is primarily used to maintain small-scale, residential lawns and home/hobby gardens. Public facilities, sporting halls, and agricultural/forestry applications are excluded.

The charger is designed for charging maintenance-free 12V starter batteries.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the equipment is used in commercial, trade or industrial businesses or for equivalent purposes.

The operating instructions as supplied by the manufacturer must be kept and referred to in order to ensure that the lawn mower is properly used and maintained. The instructions contain valuable information on operating, maintenance and servicing conditions.

Important. Due to the high risk of bodily injury to the user, the petrol lawn mower must not be used to carry out the following work: Trim bushes, hedges or shrubs, to cut scaling vegetation, planted roofs, or balcony-grown grass, to clean (suck up) dirt and debris off walkways, or to chop up tree or hedge clippings. Moreover, the lawn mower may not be used as a power cultivator to level out high areas such as molehills.

For safety reasons, the lawn mower may not be used as a drive unit for other work tools or toolkits of any kind.

4. Technical data

Engine type.....One-cylinder four-stroke engine,
 149 cc/2.5 kW
 Working speed n_0 :.....2900 $\pm$ 100 min⁻¹
 Fuel:.....Petrol (E10)
 Tank capacity:..... approx. 0.9 l
 Engine oil:..... approx. 0.4 l
 Spark plug:..... F5RTC
 Cutting height adjustment: ... Central, (25-80 mm)
 Cutting width:..... 460 mm
 Weight:.....31 kg

Battery charger

Mains voltage:..... 100-240V AC ~ 50/60Hz
 Nominal output voltage: 14,5 V DC
 Nominal output current:..... 0.8 A
 Battery capacity: 7 Ah
 Protection class:..... II / 
 Battery voltage:..... 12V

Sound and vibration

L_{pA} sound pressure level 81.5 dB(A)
 K_{pA} uncertainty 3 dB
 L_{WA} sound power level 96 dB(A)
 K_{WA} uncertainty 1.87 dB

Wear ear-muffs.

The impact of noise can cause damage to hearing.

Vibration emission value $a_h = 4.521 \text{ m/s}^2$
 K uncertainty = 1.5 m/s²

Long work periods should be avoided due to the development of high noise and vibration levels.

Keep the noise emissions and vibrations to a minimum.

- Only use appliances which are in perfect working order.
- Service and clean the appliance regularly.
- Adapt your working style to suit the appliance.
- Do not overload the appliance.
- Have the appliance serviced whenever necessary.
- Switch the appliance off when it is not in use.

5. Before starting the equipment

5.1 Assembling the components

Some parts of the mower come disassembled. For quick and easy assembly, read and follow the instructions below.

Important. You will need the following additional tools (not supplied) for assembly, and also for maintenance work:

- A flat oil drip tray (for changing the oil)
- A 1 liter measuring jug (oil/petrol resistant)
- A petrol can
- A funnel (suitable for the tank's petrol filler neck)
- Household wipes (to wipe up oil/petrol residue; dispose of these at a filling station)
- A petrol suction pump (plastic, available from DIY stores)
- An oil can with hand pump (available from DIY stores)
- Engine oil

Assembly

1. Fit the lower and upper push bar (Item. 3) as shown in Fig. 3a-3b. For fastening choose one of the holes to suit the required height of the push bar. **Important!** The identical height must be set on both sides.
2. Insert the grip of the starter cord (Item 9a) into the hook provided for that purpose as shown in Figure 3c.
3. Fasten the cords to the push bar with the supplied cable clips (Item 10).
4. Lift the ejector flap (Item 5a) with one hand and hook in the grass bag (Item 4a) as shown in Figure 4a..

Important. Whenever you do any work on the battery and when you dispose of the battery, you must observe the safety regulations of the manufacturer.

Warning! The person entrusted with inserting the battery should remove all metal armbands, wrist-watches, rings and similar before starting to insert the battery. There is a risk of burns if any of these objects should come into contact with the battery poles or current-conducting cables.

Warning! Check the insulation on the cables and plugs each time before use. If there are any defects in the insulation, the equipment must not be used.

Warning! Have repairs carried out only by an authorized workshop or by the manufacturer.

5.2 Inserting and removing the battery (Fig. 13-16)

Important. Use the mower only with a maintenance-free 12V battery.

Open the battery cover (Fig. 13/Item 18). Place the battery (Item 19) on the base (Fig. 14). First connect the red cable (+) and then the black cable (-) (Fig. 15). Connect the battery plug (Fig. 16/Item 17) to the electrical system plug on the mower (Fig. 16/Item 16). Remove it in reverse order.

Important. Do not disconnect the battery from the electrical system during operation as this may destroy the charge electronics.

5.4 Charging the battery with the charger (Fig. 17-19)

If the battery has lost its charge, it can be charged up with the charger (supplied) via the household mains system. Disconnect the battery by pulling the battery plug (Item 17) from the electrical system plug (Item 16).

When you charge the battery, refer to the safety regulations supplied by the battery manufacturer. After the battery has been connected to the charger by connecting the battery plug (Item 17) and the charging plug (Item 15) to the charger, you can connect the charger to a socket supplying 230V~50Hz. Do not connect it to a socket that supplies any other mains voltage.

The red lamp on the charger will indicate that the battery pack is being charged. After 8-9 hours the battery will be fully charged. This will be indicated by the green lamp on the charger.

When charging is completed (the green lamp shines), disconnect the charger from the mains power supply. Connect the battery plug to the mower's electrical system plug and fit the battery cover.

Important. Charging may create dangerous explosive gas and therefore you should avoid spark formation and naked flames whilst the battery is charging.

Calculating the charging time:

The charging time depends on the charge status of the battery. If the battery is fully discharged, the approximate charging time can be calculated using the following formula:

Charging time/h =
Battery capacity in Ah/Amp. (arithmetic charging current)

Example = 4 Ah/0.4 A = 10 h max.

A high initial current, approximately equal to the rated current will flow in a normally discharged battery. As the charging time increases, the charging current will fall.

5.4 Setting the cutting height

Important. Adjust the cutting height only when the engine is switched off and the plug boot has been pulled.

- Before you begin to mow, check to ensure that the blade is not blunt and that none of the fasteners are damaged. To prevent any imbalance, replace blunt and/or damaged blades as a set only (if applicable). To carry out this check, first switch off the engine and pull the spark plug boot.
- The cutting height is centrally adjusted with the cutting height adjustor lever (Fig. 7/Item 8). Different cutting heights can be selected.
- Actuate the cutting height adjustor lever and pull it to the required position. Let the cutting height adjustor lever click into position.

6. Operation

Important.

The engine is supplied without oil and petrol. Therefore, be sure to add oil and petrol before starting the engine.

The battery is not connected when you take delivery of the machine. Please connect the battery as described in section 5.2 before you use the machine for the first time.

If the machine has not been used for some time, charge the battery fully (section 5.3) before using it again.

1. Check the oil level (see 7.2.3).
2. Use a funnel and measuring jug to fill the tank with petrol. Make sure that the petrol is clean.

Warning: Never use more than one safety petrol can. Do not smoke when refueling. Switch off the engine before refueling and allow the engine to cool down for a few minutes.

3. Ensure that the ignition cable is connected to the spark plug.

Carrying out a safety test on the engine start/stop lever

The lawn mower comes equipped with an engine start/stop lever (Fig. 5a/Item 1a) in order to prevent it from starting up unintentionally and to ensure that the engine and blade stop quickly in case of danger. The lever must be actuated (Fig. 5b) before the lawn mower is started. When the engine start/stop lever is released, it must return to its initial position (Fig. 5a).

Before you start mowing, you should run through this process several times in order to ensure that the lever and actuator cables are working properly.

Repeat the test several times after the engine has started up. When the engine start/stop lever is released, the engine must stop within a few seconds. If not, contact Customer Service.

Danger: The blade begins to rotate as soon as the engine is started.

6.1 Starting the engine

6.1.1 Starting up with the electric starter

1. Ensure that the ignition cable is connected to the spark plug.
2. Press the fuel pump (primer) (Fig. 6/Item 2) three times. You can skip this point if the engine has already warmed up.
3. Stand behind the lawn mower. Actuate the engine start/stop lever (Fig. 5b) with one hand. The other hand must be on the ignition lock.
4. Start the engine by turning the ignition key in the ignition lock (Fig. 1/Item 22). Once the engine has started, turn the ignition key immediately back to its initial position. If you actuate the ignition key again while the engine is running, you will damage the starting system.

Important! In cold weather, it may be necessary to repeat the starting process several times.

6.1.2 Starting up with the reversing starter

1. Ensure that the ignition cable is connected to the spark plug.
2. Press the fuel pump (primer) (Fig. 6/Item 2) three times. You can skip this point if the engine has already warmed up.
3. Stand behind the lawn mower. Actuate the engine start/stop lever (Fig. 5b) with one hand. The other hand must be on the starter handle.
4. Start the engine using the reversing starter (Fig. 1/Item 9a). To do this, pull out the handle by approx. 10-15 cm (until you feel a resistance) and then start the engine with a sharp tug. If the engine does not start, tug the handle again.

Important! Never allow the actuator cable to snap back.

Important! In cold weather, it may be necessary to repeat the starting process several times.

Drive unit

Drive lever/clutch lever (Fig. 5a/Item 1b):

If you press this (Fig. 5c) the clutch for the drive will be closed and the lawnmower will start to move with the engine running. Release the drive lever in good time to stop the moving lawnmower. Practice starting and stopping before you use the mower for the first time until you are familiar with controlling the mower.

6.2 Tips on mowing properly

Danger!

Never open the chute flap when the grass bag has been detached (to be emptied) and the engine is still running. The rotating blade can cause serious injuries!

Always carefully fasten the chute flap and debris bag. Switch off the engine before you remove them.

Whenever you need to perform any kind of adjustment, maintenance or repair work, switch off the engine and wait until the blade no longer rotates. Pull off the spark plug connector.

6.3 Before mowing

Important information:

1. Make sure that you are properly dressed when mowing. Wear sturdy footwear; do not wear sandals or tennis shoes.
2. Inspect the blade. Blades, that are bent or otherwise damaged, must be exchanged for a genuine Einhell replacement blade.
3. Do not fill the fuel tank indoors, but rather out in the open. Use a funnel and a measuring vessel. Wipe off any spilled petrol.
4. Read and follow in the instructions in the operating manual as well as the information regarding the engine and accessory equipment. Store the manual in a place where it can be readily accessed by other users of the equipment.
5. Exhaust gas is dangerous. Only start the engine out in the open.
6. Make sure that all the guards are fitted and that they are in good working order.
7. The equipment should only be operated by persons who are well informed with the way it works and who are in reasonably good physical condition.
8. Mowing wet grass can be dangerous. Mow the grass when it is as dry as possible.
9. Tell other persons and children to stay away from the mower.
10. Never mow in conditions of poor visibility.
11. Pick up any loose objects and debris on the lawn prior to mowing.

6.4 Tips on mowing properly

Important. Never open the chute flap when the grass bag has been detached to be emptied and the motor is still running. The rotating blade can cause serious injuries!

Always carefully fasten the chute flap and grass basket. Switch off the engine before emptying the grass basket.

Always ensure that a safe distance (provided by the length of the long handles) is maintained between the user and the mower housing. Be especially careful when mowing and changing direction on slopes and inclines. Maintain a solid footing and wear sturdy, non-slip footwear and long trousers. Always mow along the incline (not up and down).

For safety reasons, the lawn mower may not be used to mow inclines whose gradient exceeds 15 degrees.

Use special caution when backing up and pulling the lawn mower. Tripping hazard!

6.5 Mowing

Only use a sharp blade that is in good condition. This will prevent the grass blades from fraying and the lawn from turning yellow.

Try to mow in straight lines for a nice, clean look. The swaths should overlap each other by a few centimeters in order to avoid stripes.

Keep the underside of the mower housing clean and remove grass build-up. Deposits not only make it more difficult to start the mower; they decrease the quality of the cut and make it harder for the equipment to bag the grass. Always mow along inclines (not up and down). You can prevent the lawn mower from slipping down by holding a position at an angle upwards. Select the cutting height according to the length of the grass. If necessary, mow a number of times so that you never cut more than 4cm of grass in one go.

Switch off the engine before doing any checks on the blade. Keep in mind that the blade continues to rotate for a few seconds after the engine has been switched off. Never attempt to manually stop the blade. Regularly check to see if the blade is securely attached, is in good condition

and is sharp. If the contrary is the case, sharpen the blade or replace it. In the event that the blade strikes an object, immediately switch off the lawn mower and wait for the blade to come to a complete stop. Then inspect the condition of the blade and the blade mount. Replace any parts that are damaged.

Tips for proper mowing:

1. Pay attention to ensure that you do not run into or over anything that could damage the mower. The lawn mower could be damaged and/or the machine could inflict bodily injury.
2. A hot engine, exhaust or drive unit can burn the skin if touched. Do not touch these parts.
3. Use extra caution when mowing on inclines and steep grades.
4. Insufficient daylight or an insufficient level of artificial light is one reason not to mow.
5. Check the mower, the blade and other parts if they have struck a foreign object or if the equipment vibrates more than usual.
6. Do not make any adjustments or repairs until the engine has been switched off. Pull the plug boot.
7. Pay special attention if you are mowing directly next to a street or are close by one (traffic). Always keep the grass chute pointed away from the street.
8. Avoid mowing in places where the wheels have trouble gripping or mowing is unsafe in any other way. Before you back up, ensure that nobody is standing behind you (especially little children, who are more difficult to see).
9. When mowing over thick, high grass, select the highest cutting level and mow at a slower speed. Before you remove any grass or blockages of any kind, switch off the engine and pull the plug boot.
10. Never remove any safety-related parts.
11. Never fill the engine with petrol when it is hot or is running.

6.6 Emptying the grass basket

When the debris bag is full, the air throughput will be low and the level indicator (4b) will be up close against the debris bag (Fig. 21). Empty the debris bag and clear out the ejector chute.

Danger! Before taking off the debris bag, switch off the engine and wait until the blade has come to a stop.

To take off the grass basket, use one hand to lift up the chute flap and the other to grab onto the basket carry-handle. Remove the basket (Fig. 4a). For safety reasons, the chute flap automatically falls down after removing the grass basket and closes off the rear chute opening. If any grass remains in the opening, it will be easier to restart the engine if you pull the mower back approximately 1m.

Do not use your hands or feet to remove clippings in or on the mower housing, but instead use suitable tools such as a brush or a hand broom.

In order to ensure that the majority of grass clippings are picked up, the inside of both the grass bag and especially the air grill must be cleaned after each use.

Reattach the grass bag only when the engine is switched off and the blade is stopped.

Using one hand, lift up the chute flap, while grabbing onto the basket handle with the other. Hang in the basket from the top.

6.7 After mowing

1. Allow the engine to cool before you put the lawn mower in an enclosed area.
2. Remove grass, foliage, grease and oil before storing the mower. Do not place any objects on top of the mower.
3. Before using the mower again, retighten all nuts and screws. Tighten all screws which were slackened.
4. Also be sure to empty the grass basket.
5. Disconnect the spark plug boot to prevent unauthorized use.
6. Ensure that you do not park the mower next to any source of danger. Petrol fumes can lead to explosions.
7. Only original parts or parts approved by the manufacturer may be used for repairs (see address on the warranty certificate).
8. Empty the petrol tank with a petrol extraction pump if you are not intending to use the mower for an extended period of time.
9. Tell your children not to use the mower. It is not a toy.
10. Never place petrol near an ignition source. Always use a can that is approved to store petrol. Keep petrol away from children.
11. Oil and maintain the equipment.
12. **How to switch off the engine:**
All you have to do to switch off the engi-

ne is release the engine start/stop lever (Fig. 5a/Item 1a). Pull the ignition cable from the spark plug boot in order to prevent the engine from restarting. Before you start the engine again, check the cord for the engine brake. Check that the cord is correctly fitted. If the cord is kinked or damaged, it should be replaced.

7. Cleaning, maintenance, storage, transport and ordering of spare parts

Important:

Never work on or touch any current-conducting parts of the ignition system while the engine is running. Pull the spark plug boot from the spark boot before doing any maintenance or assembly work. Never carry out any work on the equipment while the engine is running. Work that is not described in these operating instructions, should only be carried out by authorized workshops.

7.1 Cleaning

The lawn mower should be cleaned thoroughly every time after it has been used. This applies in particular to its underside and the blade mount. Tilt the lawn mower to the rear by pressing down the push bar.

Note: Do not tilt the lawn mower by more than 90 degrees. It is easiest to remove dirt and grass immediately after mowing. Dried grass remnants and dirt may impair the mowing operation. Check if the grass ejector chute is free of grass remnants and remove any if necessary. Never clean the mower using a water jet or a high-pressure cleaner. Ensure that no water can get into the interior of the equipment. Do not use aggressive cleaning agents such as cold cleaners or petroleum ether.

7.2 Servicing

Please refer to the supplied petrol service manual for information on the maintenance intervals.

Important: Dispose of soiled maintenance material and media at the appropriate collection point

7.2.1 Axles and wheel hubs

A thin coating of grease should be applied to the axles and wheel hubs once per season.

To do so, remove the wheel caps with a screwdriver and loosen the fastening screws on the wheels.

7.2.2 Blades

For safety reasons, have all blade sharpening, balancing and mounting work carried out by an authorized service center. To achieve optimal results, we recommend to have the blades checked once a year.

Changing the blades (Fig. 8)

When changing the cutting unit, be sure to use only genuine replacement parts. The identification mark on the blade must correspond with the number specified in the spare parts list.

Never install a blade from a different manufacturer.

Damaged blades

If, in spite of all caution, the blade comes into contact with an obstacle, switch off the engine immediately and pull the spark plug boot.

Tilt the mower to the side and check the blade for damage. Damaged or bent blades must be replaced. Never straighten a bent blade. Never work with bent or heavily worn blades as this will result in vibrations, causing further damage to the mower.

Important: Risk of injury when working with a damaged blade.

Resharpener the blade

The blade edges can be resharpener with a metal file. To avoid imbalance, the blade resharpener work should only be carried out by an authorized service center.

7.2.3 Oil level check

Important: Never run the engine with no or too little oil. This can cause serious damage to the engine.

Checking the oil level

Place the lawn mower on a level and straight surface. Unscrew the oil dipstick (Fig. 9a/Item 7) by turning it counter-clockwise and wipe the dipstick. Re-insert the dipstick into the filler opening as far as it will go but do not screw it in. Pull out the dipstick, hold it horizontally and read off the oil level. The oil level must be between the two marks min. and max. on the oil dipstick (Fig. 9b).

Change the oil

The engine oil is best changed at room temperature.

1. Make sure that the debris bag has been removed.
2. Empty the petrol tank with a petrol suction pump and run the engine until the remaining fuel is fully consumed.
3. Place an oil drip tray alongside the mower.
4. Open the oil filler plug (Item 7) and tilt the mower 90° sideways.
5. The hot oil will flow through the open oil filler opening into the oil drip tray.
6. After the old oil has drained out, set the mower upright again.
7. Fill in engine oil up to the top mark on the oil dip stick.
8. Important! Do not screw in the oil dipstick to check the oil level – only insert it as far as the thread.
9. Dispose of the used oil in accordance with applicable regulations.

7.2.4 Care and adjustment of the cable pulls

Oil the cable pulls at regular intervals and check that they move easily.

7.2.5 Maintenance of the air filter (Fig. 10)

Soiled air filters reduce the engine output by supply too little air to the carburetor. If the air contains a lot of dust, the air filter should be checked more frequently.

Important: Never clean the air filter with petrol or inflammable solvents. Clean the air filter only with compressed air or by tapping it.

7.2.6 Maintenance of the spark plug

Clean the spark plug with a copper wire brush.

- Pull off the spark plug boot (Fig. 11/Item 20) with a twist.
- Remove the spark plug using a spark plug wrench.
- Assemble in reverse order.

7.2.7 Inspecting the V-belt

To inspect the V-belt, remove the V-belt cover (Fig. 12/Item 5b) as shown in Figure 12.

7.2.8 Repair

After carrying out repair or maintenance work, ensure that all safety parts are installed and in perfect condition.

Store potentially hazardous parts out of the reach of other persons and children.

Important: In accordance with the German Product Liability Act, we are not liable for any damages if they result from improper repairs to the product or if parts are replaced by items other than genuine parts or parts approved by us. Furthermore, we are not liable for any damages if they result from improper repairs to the product. Arrange for your customer service or an authorized workshop to do the work. The same applies to accessory parts.

7.2.9 Operating times

Please observe the regulations concerning lawn mower operating times, which may differ from town to town.

7.2.10 Maintenance and care of the battery

- Ensure that your battery is always fitted securely.
- A perfect connection to the cable network of the electrical system must be ensured at all times.
- Keep the battery clean and dry.

7.3 Preparing the mower for long-term storage

Warning: Do not empty the petrol tank in enclosed areas, near fire or when smoking. Petrol fumes can cause explosions and fire.

1. Drain the petrol tank using a petrol extraction pump.
2. Start the engine and run it until the tank and fuel line are completely empty and the engine stalls.
3. Change the oil after each season. To do so, remove the used engine oil when the engine is warm and refill new oil.
4. Remove the spark plug from the cylinder head. Use an oil can to fill the cylinder with approx. 20 ml of oil. Slowly pull back the starter handle, which will bathe the cylinder wall with oil. Screw the spark plug back in.
5. Clean the cooling fins of the cylinder and the housing.
6. Be sure to clean the entire equipment to protect the paint.

7. Store the equipment in a well-ventilated place or location.
8. Remove the battery if you intend to put the lawn mower into storage for any longer than 3 months.

Please read the safety information on the batteries (point 3) for information concerning the storage of the battery.

7.4 Preparing the mower for transport

1. Empty the petrol tank (refer to point 7.3/1)
2. Always let the engine run until it has used up the remainder of petrol in the tank.
3. Empty the engine oil from the warm engine.
4. Remove the spark plug boot from the spark plug.
5. Clean the cooling fins of the cylinder and the housing.
6. Unhook the starter cable from the hook (Fig. 3c). Slacken the star nuts and fold down the upper push bar. Make sure that the cables do not get kinked when the bar is pulled up.
7. Wedge a few layers of corrugated cardboard between the upper and lower push bars and the engine in order to prevent any chafing.

7.5 Consumables, wear materials and spare parts

Spare parts, consumables and wear materials such as engine oil, V-belts, spark plugs, air filter inserts, petrol filters, batteries and blades are not covered by the warranty.

7.6 Ordering replacement parts

Please provide the following information on all orders for spare parts:

- Model/type of the equipment
- Article number of the equipment
- ID number of the equipment
- Part number of the required spare part

For our latest prices and information please go to www.Einhell-Service.com

8. Disposal and recycling

The equipment is supplied in packaging to prevent it from being damaged in transit. The raw materials in this packaging can be reused or recycled. The equipment and its accessories are made of various types of material, such as metal and plastic. Defective components must be disposed of as special waste. Ask your dealer or your local council.

Disposal



Power tools, rechargeable batteries, accessories and packaging should be sorted for environmental-friendly recycling.

Do not dispose of power tools and batteries/rechargeable batteries into household waste!

Only for EU countries:

According to the Directive 2012/19/EU on waste electrical and electronic equipment and its transposition into national law, power tools that are no longer usable, and, according to the Directive 2006/66/EC, defective or drained batteries must be collected separately and disposed of in an environmentally correct manner.

If disposed incorrectly, waste electrical and electronic equipment may have harmful effects on the environment and human health, due to the potential presence of hazardous substances.

Only for United Kingdom:

According to The Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) and the Waste Batteries and Accumulators Regulations 2009 (SI 2009/890) (as amended), products that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

The reprinting or reproduction by any other means, in whole or in part, of documentation and papers accompanying products is permitted only with the express consent of the Einhell Germany AG.

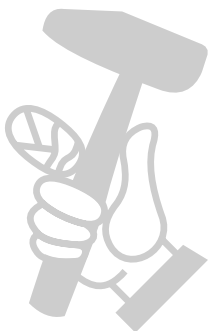
Subject to technical changes

9. Troubleshooting guide

Warning: Switch off the engine and pull out the spark plug boot before making any checks or adjustments.

Warning: If, after making an adjustment or repair to the engine, you let it run for a few minutes, remember that the exhaust and other parts will get hot. Do not touch these parts as they may burn you.

Fault	Possible cause	Remedy
The equipment does not operate smoothly and vibrates intensively	- Bolts loose - Blade attachment is loose - Blade imbalanced	- Check bolts - Check blade attachment - Replace blade
The engine does not start	- Engine start/stop lever is not pressed - Spark plug defective - Fuel tank empty	- Press the engine start/stop lever - Replace spark plug - Top up fuel
Engine does not run smoothly	- Air filter dirty - Spark plug dirty	- Clean the air filter - Clean the spark plug
Lawn turns yellow, uneven cut	- Blade is not sharp - Cutting height too small	- Sharpen blade - Adjust to the proper height
Grass chute is not clean	- Cutting height too small - Blade is worn - Grass bag is clogged	- Set properly - Replace the blade - Empty the grass bag
The battery does not charge up	- Poor plug contact to the battery - Battery defective	- Clean the contacts - Have the battery checked by an expert and replace it if necessary
Starter does not turn	- Battery discharged - Battery not connected - No plug-in connections	- Charge the battery - Connect the battery - Check the plug-in connections



Service information

We have competent service partners in all countries named on the guarantee certificate whose contact details can also be found on the guarantee certificate. These partners will help you with all service requests such as repairs, spare and wearing part orders or the purchase of consumables.

Please note that the following parts of this product are subject to normal or natural wear and that the following parts are therefore also required for use as consumables.

Category	Example
Wear parts*	Air filter, Bowden cables, grass basket, tires, drive clutch
Consumables*	Blades
Missing parts	

* Not necessarily included in the scope of delivery!

In the event of defects or faults, please register the problem on the internet at www.Einhell-Service.com. Please ensure that you provide a precise description of the problem and answer the following questions in all cases:

- Did the equipment work at all or was it defective from the beginning?
- Did you notice anything (symptom or defect) prior to the failure?
- What malfunction does the equipment have in your opinion (main symptom)? Describe this malfunction.