

Original operating instructions

Floor saw FS-500 B



Device designation: Floor cutter FS-500 B

Device number: Type plate

Year of manufacture: _____

Country of origin: Czech Republic

Read the operating instructions before each use

CE

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1 General

1.1 operating manual

The operating instructions provide important information for the safe and efficient use of the machine. It is part of the machine and must be accessible at all times in its immediate vicinity and kept in a legible condition for the staff working on it.

A prerequisite for safe work on the machine is compliance with all specified safety instructions and instructions.

The personnel must therefore have read these operating instructions carefully before starting any work. The operating instructions are the basis for all actions on the machine. It is the basis of all training courses that take place on the machine.

In addition, the national accident prevention regulations and general safety regulations applicable at the place of use of the machine must be observed.

1.2 conventions

In order to be able to work optimally with the operating instructions, the following explanations of the typographical conventions must be observed.

Chapter

A chapter is the structure level within a part of the operating instructions. It appears as a heading and is listed in the table of contents.

subheading

The subheading is used for subdivision into chapters and is not part of the table of contents.

Count

- Texts presented in this way are bullet points of the first level.
 - Texts presented in this way are second-level bullet points.

work sequence

1. Step 1 of the work sequence
2. Step 2 of the work sequence
3. Step 3 of the work sequence

The order of the work steps must be observed.

highlights

Highlighted text is italic or bold.

header

Each header contains: the first line, the main heading, the second line, the subheading.

glossary

The glossary in the appendix explains technical terms. For this purpose, there is a reference to the glossary after the technical term.

Example: ...the fluids (Glossary)...

Characters used

Tabelle 1: Signs and terms used

signs, terms	Explanation
➤	Tip, note (not machine/system damage)

1.3 address

dr Schulze sro
Hulínská 1814/1B
76701 Kromeriz
Czech Republic
Phone: +420 573 331 309
Email: info@dr-schulze.cz
Fax: +420 573 336 101
Website: www.dr-schulze.de

1.4 revision status

Tabelle 2: revision status

Date	Chapter	Ground	version	Responsible
05/25/2018	Complete document	rebuild	1.0	Technical documentation CE

1.5 Customer service

Our customer service is available for technical information.

Information about the regionally responsible contact person can be obtained by telephone and can be called up at any time by fax, e-mail or via the Internet.

In addition, our employees are always interested in new information and experiences that result from the application and can be valuable for improving our products.

dr Schulze sro

Hulínská 1814/1B

76701 Kromeriz

Czech Republic

Phone: +420 573 331 309

Email: info@dr-schulze.cz

Fax: +420 573 336 101

Website: www.dr-schulze.de

1.6 purpose of the operating instructions

The operating instructions provide important information for the safe and efficient use of the machine. It is part of the machine and must be kept in its immediate vicinity and accessible to the personnel working on it at all times.

A prerequisite for safe work on the machine is compliance with all specified safety instructions and instructions.

The personnel must therefore have carefully read through and understood these operating instructions before starting any work.

In addition, the local accident prevention regulations and general safety regulations applicable at the place of use of the machine must be observed.

1.7 Limitation of Liability

All information and instructions in these instructions have been compiled taking into account the applicable standards and regulations, the state of the art and our many years of knowledge and experience.

The manufacturer accepts no liability for damage due to:

- non-compliance with the instructions
- Improper use
- Use of untrained and untrained personnel
- Unauthorized modifications
- technical changes
- Use of unapproved spare parts

The actual scope of delivery may deviate from the explanations and illustrations described here in the case of special designs, the use of additional order options or due to the latest technical changes.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations valid at the time of the conclusion of the contract apply.

We reserve the right to make technical changes within the scope of improving the functional properties and further development.

1.7.1 Scope and other safety regulations

These operating instructions are only valid for the machine specified in the title.

In addition to these operating instructions, country-specific and company-specific safety regulations for handling the machine/system are binding.

1.7.2 conformity

The conformity assessment is based on the applicable directives (with their associated amendment directives) in the version at the time of commissioning. The individual directives can be found in the declaration of conformity.

The declaration of conformity can be found in the appendix.

1.8 copyright protection

The operating instructions are copyright of the Dr. Schulze GmbH protected.

The operating instructions contain regulations and drawings or drawing excerpts of a technical nature, which may not be reproduced, distributed or used without authorization for competition purposes or communicated to others, either in whole or in part.

The operator of the machine is expressly only permitted to make copies – including excerpts – for internal use in connection with the operation of the machine.

Dr. Schulze GmbH.

A claim for damages by the manufacturer arises from violations. We reserve the right to make further claims.

1.9 location

The operating instructions must be kept in a place that is accessible to all persons working with the machine.

The operator is responsible for internal distribution of the operating instructions. The latter must inform the qualified personnel who work on or with the machine about the storage location.

The operating instructions are part of the machine.

1.10 sale

The operating instructions are part of the machine.

If the machine is sold, the operating instructions must be supplied with it.

1.11 personnel requirement

1.11.1 basic

Any work on the floor saw FS-500 B may only be carried out by people who can carry out their work properly and reliably and who meet the specified requirements.

- Individuals whose ability to react is affected, e.g. B. through drugs, alcohol or medication, may not carry out any work.
- When deploying personnel, always observe the age and job-specific regulations applicable at the place of work.



warning

Danger of injury due to insufficient qualification!

Improper work can lead to significant personal injury and damage to property.

- Any activities may only be carried out by persons who have the necessary training, knowledge and experience.

1.11.2 instruction

Instructed personnel are persons who have been extensively and verifiably instructed by the operator about the tasks assigned to them and the possible dangers.

1.11.3 professional staff

Skilled personnel are those who, based on their professional training, knowledge and experience as well as knowledge of the relevant regulations, are able to carry out the assigned work properly, independently recognize possible dangers and avoid personal injury or damage to property.

1.11.4 qualified electricians

All work on the electrical equipment may only be carried out by qualified electricians.

Qualified electricians are people who, due to their technical training, knowledge and experience as well as knowledge of the relevant regulations, are able to carry out work on electrical systems properly, independently recognize possible dangers and avoid personal injury and damage to property through electrical current.

1.11.5 unauthorized persons



warning

Risk of injury for unauthorized persons!

Untrained persons do not know the dangers in the work area and are considered unauthorized.

- Keep unauthorized persons away from the work area, speak to the persons concerned in case of doubt and direct them out of the work area.
- Interrupt work as long as unauthorized persons are in the work area.

2 Security

This section gives an overview of important safety aspects to protect the operator and the operator from possible dangers and to ensure safe and trouble-free operation.

Failure to comply with the instructions, warnings and safety instructions listed can result in considerable danger.

2.1 Intended Use

The floor saw FS-500 B is used exclusively for cutting (wet and dry) slots (joints) in asphalt, concrete and stone with a maximum depth of 200 mm (with cutting disc Ø500 mm).

The floor saw FS-500 B has a Honda petrol engine GX390 (9.6 kW / 13 hp) . Due to the emission of exhaust gases from the combustion engines of the construction machinery, use in closed rooms is prohibited. The machine may only be operated by one person.

Features

- Large 30l tank with wide filling opening
- Convenient cutting depth adjustment via hand crank
- Clear operating terminal
- Height adjustable handle
- Perimeter protection
- Water supply via blade guard
- Honda GX390 with 13 hp

This machine is only intended for commercial purposes and may only be operated by trained personnel.

Intended use also includes compliance with the instructions:

- For safety
- To the operation
- For maintenance/maintenance
- To technical specifications that are described in the operating instructions

Any other use or use that goes beyond this is considered to be improper. The operator alone is liable for any resulting damage.

2.2 misuse

Misuse of the machine can lead to dangerous situations for people and cause serious damage to property.

Any misuse of the machine is prohibited.

Misuse occurs when

- the floor saw FS-500 B cannot be used according to your application profile.

2.3 responsibility of the operator

2.3.1 operator

The operator is any natural or legal person who uses the machine or allows third parties to use it and who is responsible for the safety of the user, staff or third parties during use.

2.3.2 Obligations of the operator

Personal safety can only be guaranteed if all necessary measures have been taken. It is the responsibility of the operator of the machine to organize and implement these measures and to control their execution.

In particular, the operator must:

- find out about the applicable health and safety regulations.
- identify possible additional hazards through a risk assessment that result from the special application conditions at the place of use of the machine.
- implement the necessary behavioral requirements for operating the machine on site in operating instructions.
- regularly check during the entire service life of the machine whether the operating instructions they have drawn up correspond to the current status of the regulations.
- Adapt the operating instructions, if necessary, to new regulations, standards and conditions of use.
- clearly and unambiguously regulate the responsibilities for the installation, operation, maintenance and cleaning of the machine.
- ensure that all employees working on the machine have read and understood the operating instructions. In addition, he must train the staff at regular intervals in how to use the machine and inform them about the possible dangers.
- provide the personnel assigned to work on the machine with the prescribed and recommended protective equipment.

Furthermore, the operator is responsible for ensuring that the machine

- is always in perfect technical condition.
- is maintained according to the specified maintenance intervals.
- all safety devices of the machine are regularly checked for completeness and functionality.

2.4 responsibility of staff

The machine is in commercial use. The staff is therefore subject to the legal obligations regarding occupational safety.

In addition to the warning and safety instructions in this manual, the safety, accident prevention and environmental protection regulations applicable to the area of application must be observed.

In particular, the staff:

- find out about the applicable health and safety regulations.
- complies with the behavioral requirements given in the operating instructions for operating the machine at the place of use.
- correctly assumes the assigned responsibilities for the operation, maintenance and cleaning of the machine.
- must have read and understood the operating instructions completely before starting work.
- uses the prescribed and recommended protective equipment.

Furthermore, everyone who works on the machine is responsible within his or her scope of responsibility for ensuring that the machine

- is always in perfect technical condition.
- is maintained according to the specified maintenance intervals.
- all safety devices are regularly checked for completeness and functionality.

2.5 Explanation of symbols

2.5.1 Warning and Safety Instructions

Warning and safety instructions in the manual are identified by pictograms and highlighted in a block with a gray background.

Warning and safety instructions that draw attention to basic dangers are also introduced with signal words that express the extent of the damage. These are structured as follows:



Danger

... indicates an imminent danger that will result in death or serious injury if not avoided.



warning

... indicates a potentially dangerous situation that can cause death or serious injury if not avoided.



Caution

... indicates a potentially dangerous situation that can lead to minor injuries if not avoided.



Danger

... indicates a potentially dangerous situation that can lead to property damage if not avoided.



Notice

... highlights tips and recommendations as well as information for efficient and trouble-free operation.

2.5.2 Danger and information signs



Caution

Risk of injury due to illegible signs!

Stickers and signs that have become unclear no longer adequately identify danger areas and cannot point out possible risks of injury.

- Always keep pictograms, safety, warning and operating instructions in a legible condition.
- Replace damaged or unrecognizable pictograms, inscriptions, signs or stickers immediately.
- Attach pictograms to the machine where they are clearly visible.

2.5.3 Special safety instructions



... indicates hazards from electrical current.

If the safety instructions are ignored, there is a risk of serious or fatal injuries.



... indicates hazards from hot surfaces.

If the safety instructions are not observed, there is a risk of burns and severe skin injuries from heat.



... indicates a risk of being drawn in.

If the safety instructions are ignored, there is a risk of serious or fatal injuries.



... indicates hazards from sharp edges/knives.

If the safety instructions are not observed, there is a risk of cuts and serious injuries from sharp edges.



... indicates a risk of cuts on the floor area.

If the safety instructions are not observed, there is a risk of cuts and serious injuries from sharp edges.



... denotes an operating ban for people with pacemakers.

If the safety instructions are not observed, there is a risk of damage to persons with cardiac pacemakers.



... denotes a ban on carrying metallic parts.

It is forbidden to carry metal parts, watches, magnetic or electronic data carriers, as magnetic charging can damage or destroy parts.

2.6 Personal protective equipment

Wearing personal protective equipment is required at work to minimize health hazards. For this reason:

- Put on the protective equipment properly before starting any work and wear it during the work.



protective clothing

Close-fitting work clothing with low tear resistance, with narrow sleeves and no protruding parts, mainly to protect against being caught by moving machine parts.

Do not wear rings, chains or other jewelry.



Solid protective gloves

to protect hands from abrasions, abrasions, scratches, scrapes, cuts, punctures or similar superficial skin injuries.



safety shoes

to protect the feet from injuries caused by falling parts and from slipping and falling on slippery surfaces.



ear protection

To protect against hearing damage.



safety goggles

to protect against eye injuries caused by flying parts, particles, liquid splashes or escaping compressed air.



mouthguard

to protect against health damage caused by inhaling dust and small particles.



face shield

To protect the eyes and face from injuries caused by flying parts, particles, liquid splashes or escaping compressed air.

2.7 Driven

The machine has been subjected to a risk assessment. The dangers identified were eliminated as far as possible and identified risks were reduced. Nevertheless, the machine poses residual risks, which are described in the following section.

It is essential to observe the warning and safety instructions listed here and in the action chapters of this manual in order to avoid possible damage to health and dangerous situations.

2.7.1 moving parts



warning

Driven moving assemblies or parts can cause severe injuries!

- Do not allow people to remain in the danger area or in the immediate vicinity.
- Do not remove covers such as flaps or maintenance covers.
- Do not disable, disable or bypass any safety device and/or function.
- Never reach into the running machine.
- Before starting work, always wait for the cutting disc to come to a standstill and for residual energy to dissipate automatically.

2.7.2 thermal hazard



Caution

Risk of burns from hot surfaces!

Contact with hot components can cause burns.

- For all work on hot components, e.g. B. the engine, wear protective clothing and protective gloves.
- Before starting any work, ensure that the components have cooled down to the ambient temperature.

2.7.3 Vibration risks



warning

Long-term damage caused by strong vibrations!

Strong vibrations can damage your health.

- Do not override vibration dampeners.
- During operation, do not stay at, in or near dangerous areas subject to strong vibrations.

2.7.4 Risks from noise



warning

Hearing damage from noise!

The noise occurring in the work area can lead to severe hearing damage and even deafness.

- Always wear hearing protection during all work.
- Stay in the danger area only as far as necessary.

2.7.5 Risks due to safety devices that have been taken out of service



warning

Danger to life due to defective or bypassed safety devices!

Inoperative, bypassed or disabled safety devices do not protect against the hazards and can lead to serious injury or death.

- Before starting work, always check that all safety devices are correctly installed and functional.
- Never disable safety devices.
- Ensure that the safety devices are always freely accessible.

2.7.6 Make sure you have a tidy workplace

A messy workplace can lead to accidents. Unauthorized persons (children) may not enter the workplace or operate the machine. After completing work, secure the machine against unauthorized use. Be sure to catch or support any part cut out during cutting (especially when cutting floors or ceilings). Secure the device for unauthorized persons after the work has been completed and secure it against unauthorized use.

2.7.7 Observe the entire environment of the workplace

Provide good lighting. Pay attention to the position of the cables, lines and reinforcing iron. Never operate electrical tools near flammable materials.

2.7.8 Ensure a safe workplace

Keep the tools belonging to the device safe so that they cannot become loose. Before switching on the device, check that all keys and other aids have been removed. Ensure blade guards are securely fitted. Always keep a safe distance from moving parts. Avoid abnormal posture and maintain a stable balance.

2.8 safety devices

The operator of the machine is responsible for regularly checking the safety devices and their functional safety.

2.8.1 Emergency stop switch

An emergency stop is triggered by pressing the emergency stop switch (1).

Before switching on again after an emergency stop, the emergency stop switch must first be unlocked by turning it.

The emergency stop switch is located on the machine's control panel.

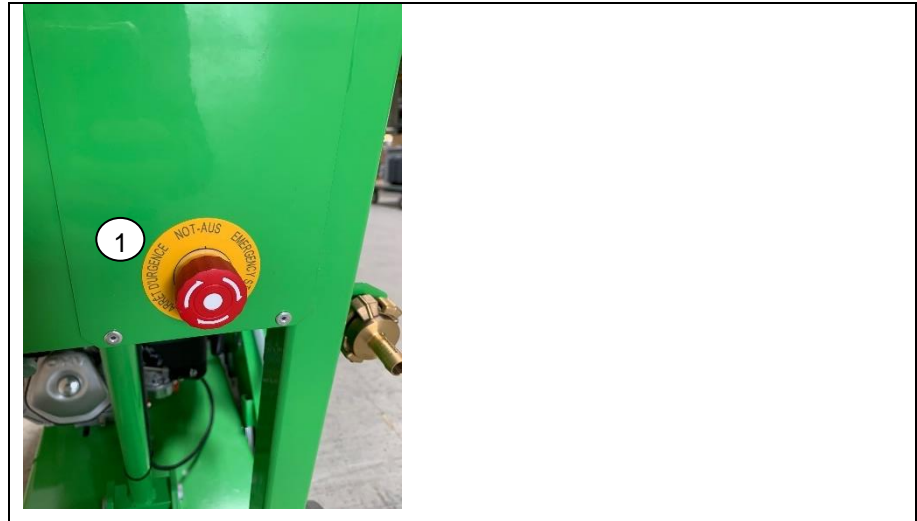


Abbildung 1: emergency stop switch

2.8.2 main switch

When switching on the machine, be sure to observe the operating instructions for the Honda engine GX390!



warning

Danger from switching on the machine!

When switching on the machine, personal injury and machine damage can occur!

- To switch the machine on, observe the operating instructions for the Honda engine GX390!

2.8.3 protective enclosure

To protect against unintentional reaching in, the area of the cutting disc (1) and the drive (2) is surrounded by protection on all sides.

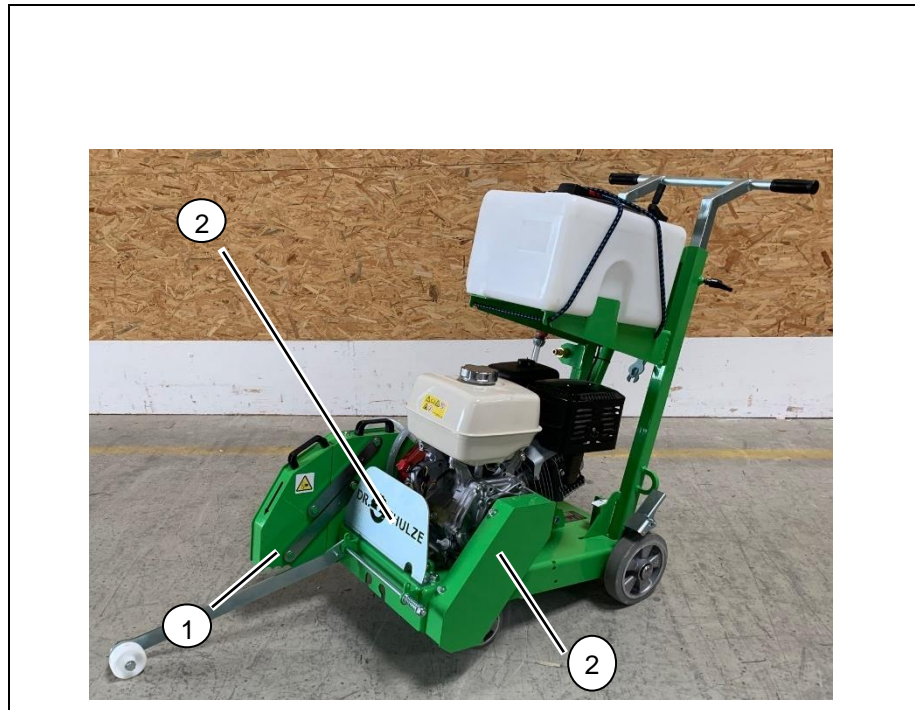


Abbildung 2: protective enclosure

2.9 Work, traffic and danger area

Workspace

Area in which people work on or with the machine in normal operation or operate it; excluded inspection, maintenance, cleaning, repair.

The working area (green area) may only be entered by authorized operating personnel for the purpose of operating the machine.

danger area

Area where a person is at risk of injury or damage to health.

The danger area (red area) must be cordoned off and clearly marked and must not be entered by people while the machine is in operation.

traffic area

Area that can be accessed or reached by people without opening, crossing or bypassing a barrier.

The transport area includes the supply of processing material directly to the machine by people or with the help of person-guided means of transport or the removal of processed products from the machine.

The traffic area (yellow area) must be kept free at all times and may only be used as a traffic route and for transport work.

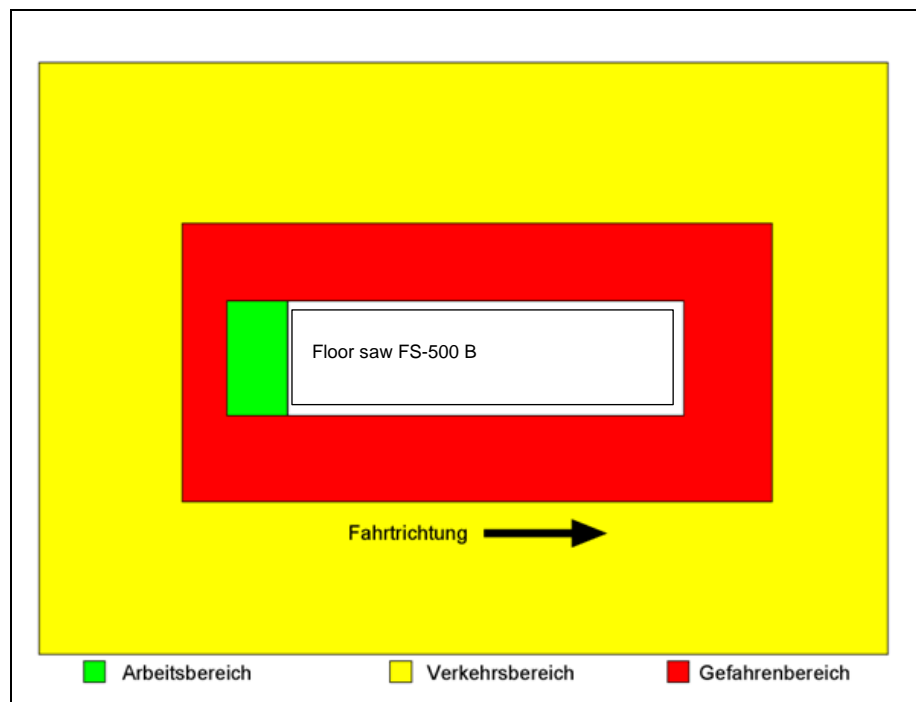


Abbildung 3: Work, traffic and danger area

2.10 spare Parts



Notice

Warning due to faulty spare parts!

Defective spare parts can severely impair safety and cause damage, malfunctions and even total failure.

- Use original spare parts or spare parts that correspond to the manufacturer's specification.

spare Parts

Only those from the Dr. Schulze GmbH specified spare parts are used. The information in the parts lists or the spare parts lists is decisive for this.

Other components can influence the safety functions and the behavior of the system/machine. They are therefore not permitted for use.

use-by date

Spare parts whose maximum usage date has passed may no longer be used.

2.11 Secure against being switched on again



warning

Risk of injury from unauthorized restarting!

When working on components, assemblies or individual parts, people at the danger points can be injured if the power supply is switched on without authorization.

- Press the emergency stop before any work on components, assemblies or individual parts.
- Lock the machine against unauthorized restarting.

2.12 Behavior in the event of danger and accidents

2.12.1 preventive measures

- Always be prepared for accidents.
- Keep first aid equipment (first aid kit, blankets, etc.) to hand.
- Always keep access routes clear for rescue vehicles.

2.12.2 Do the right thing if the worst comes to the worst

1. Trigger an emergency stop immediately.
2. Initiate first aid measures.
3. Remove affected persons from the danger zone.
4. Inform those responsible at the site.
5. In the event of serious injuries, alert a doctor and/or the fire brigade.
6. Keep access routes open for rescue vehicles.

3 Technical specifications

3.1 cutting disc

Tabelle 3: cutting disc

Machine/system details	value [unit]
diameter of the cutting disc	Ø 350 / 400 / 450 / 500 mm
cutting depth	125 / 150 / 175 / 200mm
mounting hole	25.4mm
rotation speed	max. 63 m/s

3.2 Engine Honda GX390

Tabelle 4: engine

Declarations	value [unit]
Performance	9.6 kW / 13 hp
default speed	2674 rpm
security level	IP55
fuel	petrol

3.3 Dimensions

Tabelle 5: Dimensions

Declarations	value [unit]
length	1220mm
Broad	605mm
Height	1030mm

3 Technical specifications

3.4 Weight

3.4 Weight

The Floor saw FS-500 is not dismantled for transport.

Tabelle 6: Weight

specification	value [unit]
Weight	115kg

3.5 emissions

Tabelle 7: emission

specification	value [unit]
Sound pressure level, maximum	Noise level > 116 dB(A)
Vibration total / hand-arm vibration	over 2.5 m/s ²

3.6 environmental conditions

Tabelle 8: environmental conditions

specification	value [unit]
temperature range	+3 - +43 °C
Relative humidity	60%

3.7 type label

Nameplate is used to identify the component assembly. Specification of the nameplate facilitates communication with the customer.

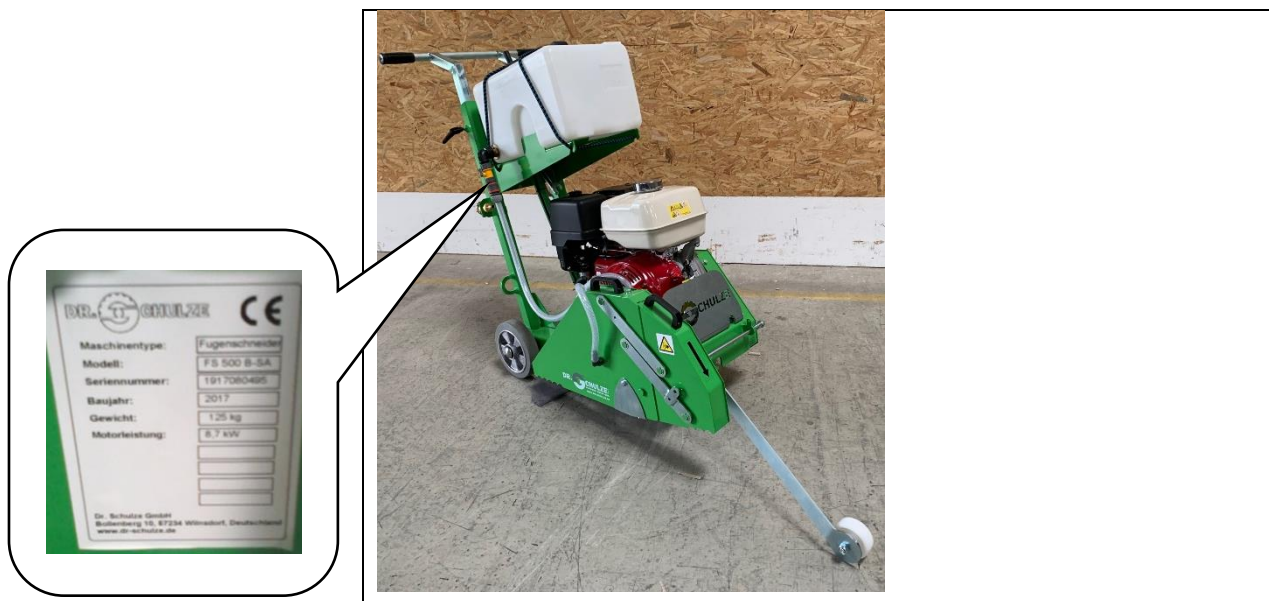


Abbildung 4: type label

4 Layout and function

4.1 General Descriptions

the dr Schulze Floor saw FS-500 B is a mobile floor cutter, suitable for cutting with diamond cutting discs with a maximum diameter of 500 mm. The cutting shaft is driven by a petrol engine. During cutting, the machine must be pushed forward using the handle.

4.2 Machine overview

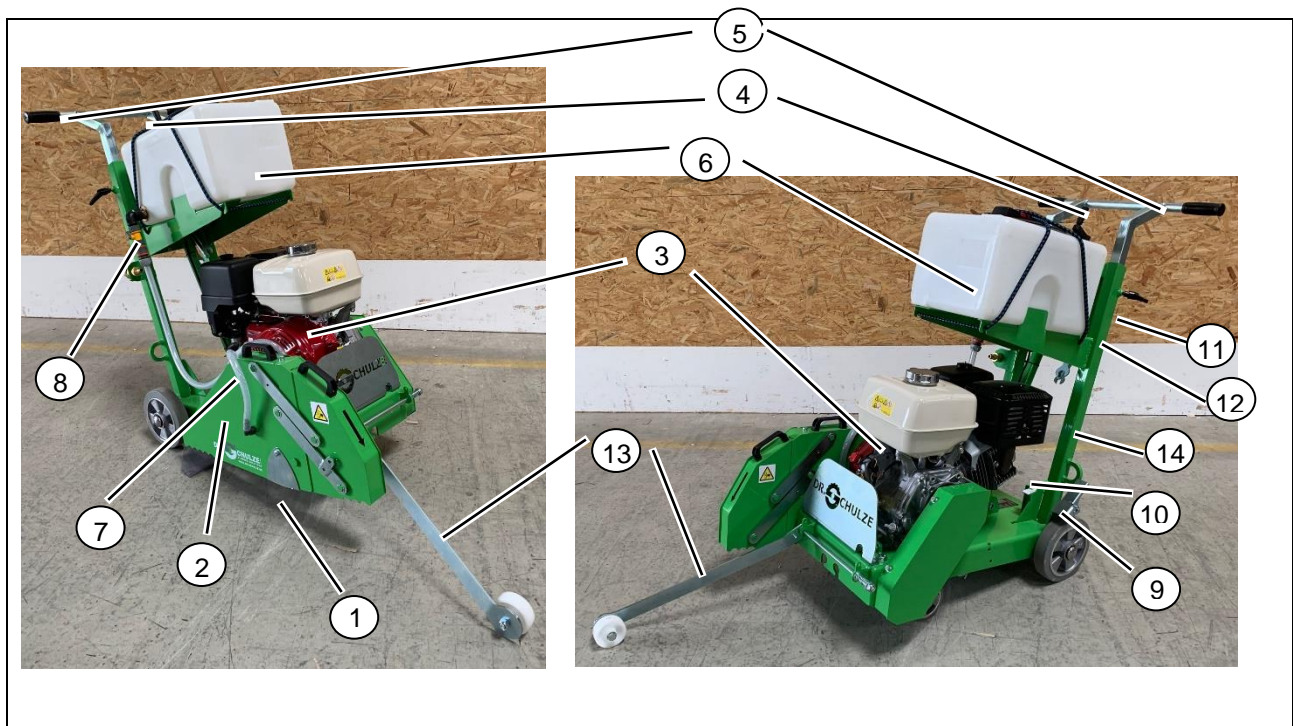


Abbildung 5: Machine overview

- | | | | |
|---|--|-----|---|
| 1 | Cutting disc (not shown) | 8th | ball valve |
| 2 | blade guard | 9 | parking brake |
| 3 | Drive engine Honda GX390 | 10 | cutting depth indicator |
| 4 | Hand crank for raising and lowering the cutting disc | 11 | Emergency stop button (not shown) |
| 5 | Height adjustable handle | 12 | Fixation of the cutting depth (not shown) |
| 6 | Water tank 30 l | 13 | bout marker |
| 7 | Water supply via leaf protection | 14 | machine frame |

4.3 Description of the assemblies

4.3.1 emergency stop switch



Abbildung 6: emergency stop switch

The emergency stop switch (**11**) is located on the control panel. If you press the emergency stop button, the engine will stop. Before the machine is restarted, the emergency stop switch must be unlocked.

4.3.2 cutting disc



Abbildung 7: cutting disc

The cutting disc (1 , mounting hole \varnothing 25.4 mm) is fastened against the mounting flange on the cutting shaft (15 , covered) using the flange . This axle is driven by the petrol engine with the help of 3 V-belts. The cutting disc must rotate in the same direction as the arrow on the blade guard.

4.3.3 Cutting disc cooling

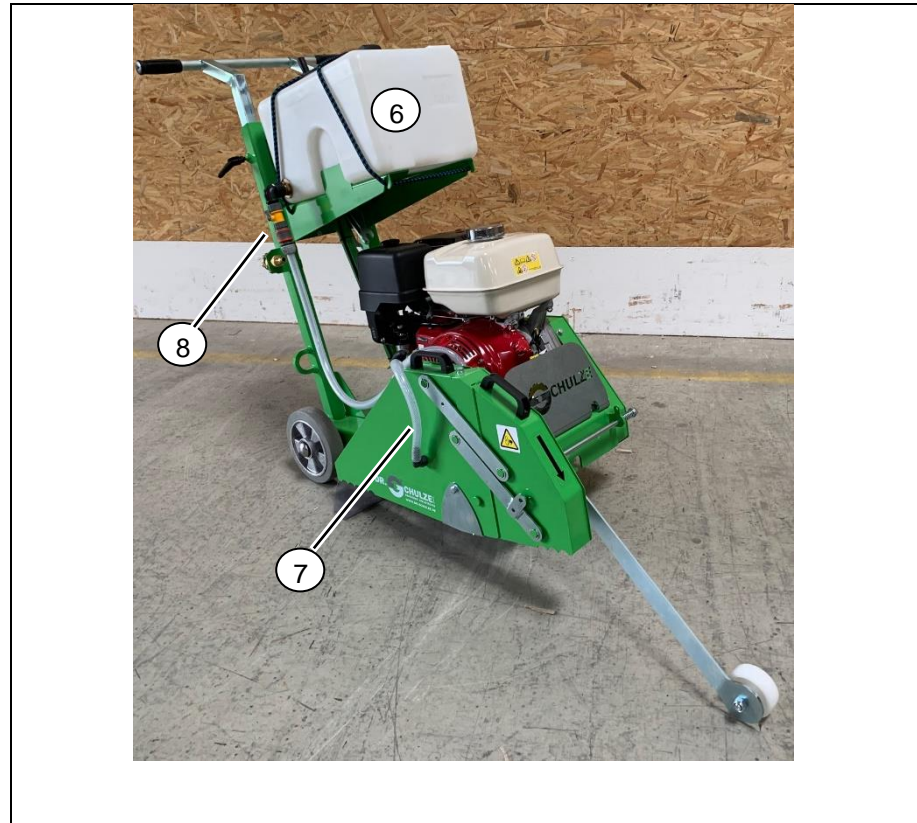


Abbildung 8: blade cooling

To avoid overheating, the diamond cutting disc is cooled with water. The water is supplied via a large 30 l tank (**6**). For this purpose, a water supply system (**7**) was provided in the blade guard of the machine. The hose has a ball valve (**8**) with which the water supply can be regulated. During cutting, the cooling water is distributed over the entire surface of the cutting disc by the rotating movement of the cutting disc. This results in an even cooling of the cutting disc.

4.3.4 mobility



Abbildung 9: mobility

Because the floor saw has 4 wheels, the machine can easily be moved to another location. The parking brake (9) is attached to the rear left wheel. The machine can be pushed ahead during cutting using the handle (5).

4.3.5 Cutting depth adjustment

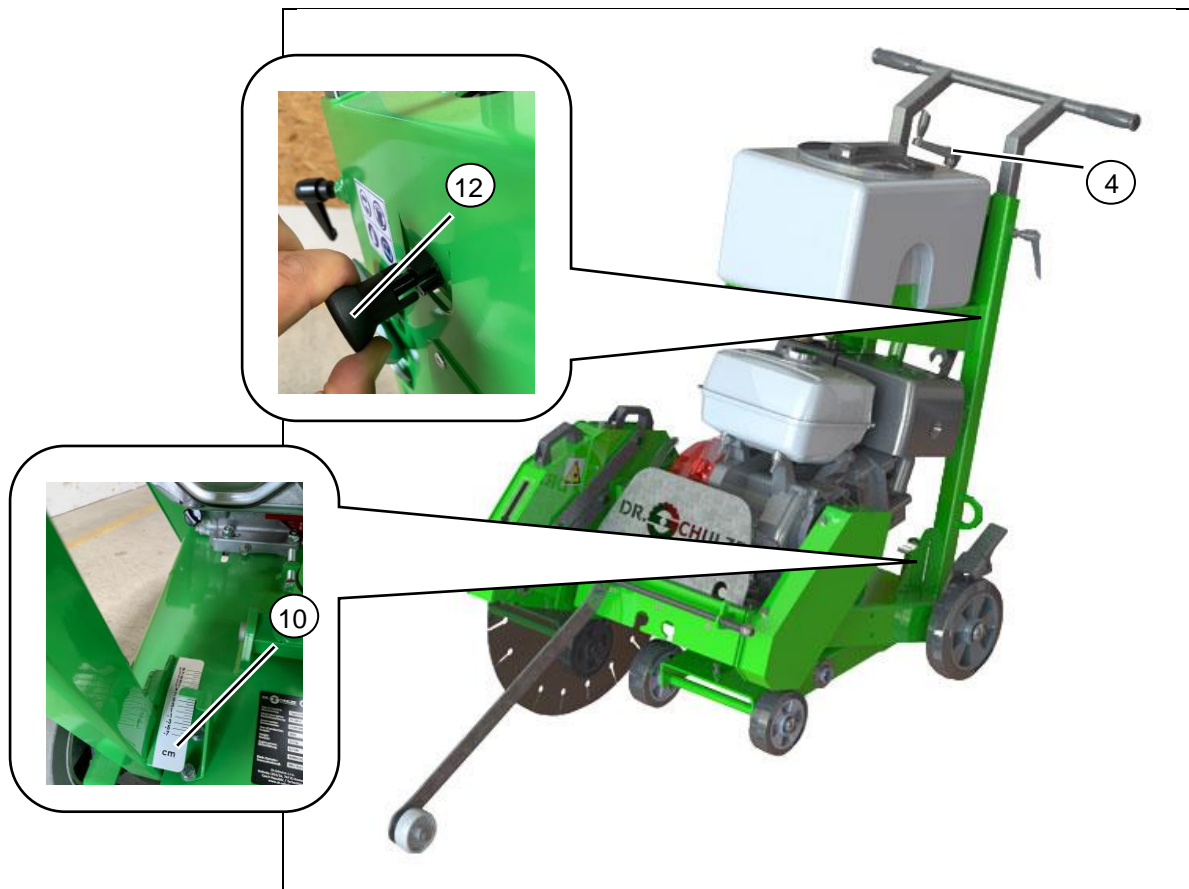


Abbildung 10: cutting depth

By turning the handwheel (4) anti-clockwise, the cutting disc is lifted out of the substrate to be cut. The cutting disc is plunged into the substrate to be cut by turning the hand wheel (4) clockwise .

Before setting the cutting depth by turning the handwheel, the cutting depth fixator (12) must be loosened and then snapped in again after the desired setting has been reached.

be checked at any time using the cutting depth display (10). The scale of the display is valid for the cutting disc Ø500 mm.

4.3.6 bout marker



Abbildung 11: bout marker

The machine was equipped with a bout marker (**13**). This allows you to follow the cutting line marked on the floor exactly.

4.3.7 main switch

When switching on the machine, be sure to observe the operating instructions for the Honda engine GX390!



warning

Danger from switching on the machine!

When switching on the machine, personal injury and machine damage can occur!

- To switch the machine on, observe the operating instructions for the Honda engine GX390!

5 Scope of delivery , transport

5.1 included supply

When the machine is delivered, the following parts are included:

Tabelle 9: included supply

designation	Order number
Floor saw FS-500 B with original operating instructions	MS 1400 4917

5.2 Safety instructions for transport



Notice

Damage due to improper transport

Improper transport can cause considerable damage to the transported goods and objects in the vicinity.

- Always exercise great care and caution when loading, unloading and transporting goods within the company.
- Observe the information and symbols on the packaging.
- Always remove transport locks only during assembly.

5.3 transport inspection

Immediately check the condition of the transported goods for completeness and damage upon receipt of the delivery.

- Only remove packaging and transport locks before assembly.
- Dispose of packaging material in accordance with applicable local/regional/statutory regulations.

In the case of externally visible transport damage:

- delivering carrier immediately .
- Do not accept the delivery or only accept it with reservations.00
- Enter the extent of the damage on the transport documents and note it on the delivery note from the carrier.



Notice

about any defect immediately upon receipt of the goods to be transported to the shipping company ! Claims for damages due to transport damage can only be asserted within the applicable complaint periods.

5.4 transport symbols

Depending on the content, there are symbols on the outside of the transported goods that must be observed when transporting and storing.

The following transport symbols can be found on transport goods:



Above

The arrowheads indicate the upper side of the goods to be transported. They must face up or the content may be damaged.



Protect from moisture

Protect transported goods from moisture and keep dry.



anchor point

Only attach slings to the marked points.



main emphasis

Indicates the center of gravity of the transported goods. Pay attention to the center of gravity when lifting and transporting!

5.5 storage and transportation

The goods to be transported are packaged safely and in an environmentally friendly manner for the expected transport conditions. The packaging protects the components from damage and corrosion until assembly begins.

- Only remove the packaging and transport locks before assembly.
- Dispose of packaging material in accordance with applicable local regulations.



Notice

Secure moving parts with transport locks before transport and remove before commissioning!

5.5.1 storage conditions

the Floor saw FS-500 only under the following conditions:

- Do not store outdoors
- Store dry and dust-free
- Do not expose to aggressive media
- Protect from sun exposure
- Avoid mechanical shocks
- Storage temperature 5°C to 45°C
- Relative humidity, max. 60%

5.6 Handling packaging materials

- Always dispose of packaging material in an environmentally friendly manner.
- Observe local/regional/applicable legal regulations, if necessary commission a specialist company with disposal.



Environmental damage due to incorrect disposal

- Packaging materials are valuable raw materials and can be reused or sensibly processed and recycled.

6 lineup



warning

Risk of injury due to improper installation!

Improper work execution and installation errors can lead to serious injuries at work and life-threatening situations during commissioning and operation.

- Any installation work may only be carried out by trained personnel authorized by the operator.
- Always ensure order and cleanliness in the work area! Loose objects lying around can be sources of accidents.
- Always ensure order and cleanliness in the work area!
- Put on the personal protective equipment required for the work.



Danger

The substrate for operation must:

- have sufficient carrying capacity
- have a non-slip surface
- be level and horizontal, and not exceed inclines of more than 5%

7 service

7.1 Assembly



Caution

Risk of injury due to improper installation!

- Pay attention to the required personal protective equipment.

7.1.1 V-belt change

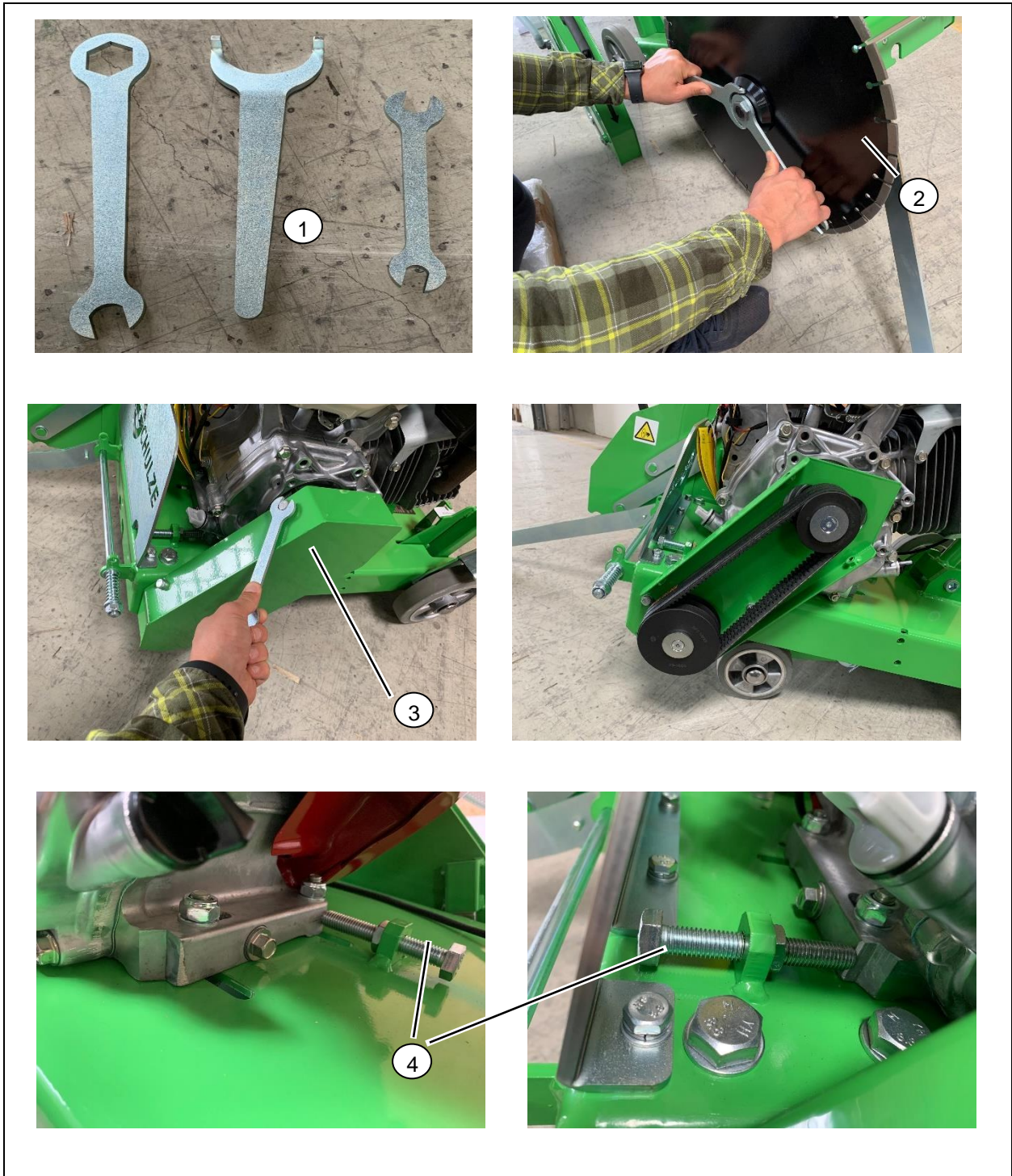


Abbildung 12: V-belt change

1. Use the tool provided for assembly (**1**)
2. Dismantle the cutting disc (**2**).
3. Dismantle the V-belt cover (**3**).
4. Loosen the two motor adjustment screws to sufficiently slacken the V-belts (**4**).
5. Replace the V-belts with new V-belts of the specification recommended by the machine manufacturer.
6. With the help of the two adjusting screws (**4**), the V-belts must be pre-tensioned in such a way that they yield by approx. 5-8 mm with moderate pressure with the thumb.
7. Assemble the V-belt cover and the cutting disc in reverse order.
8. After 3 working hours, the belt tension must be checked and adjusted if necessary.

7.1.2 Assembly of the cutting disc



Caution

Danger of cutting on the cutting disc!

There is a risk of cutting when touching the cutting disc.

- Wear cut-resistant protective gloves when clamping and changing the cutting disc.
- Turn off the machine!
- For dry cutting, only the cutting discs approved and marked accordingly by the manufacturer may be used. There is an acute risk of injury if unsuitable cutting discs are used.
- The cutting disc used must always be matched to the material to be cut.



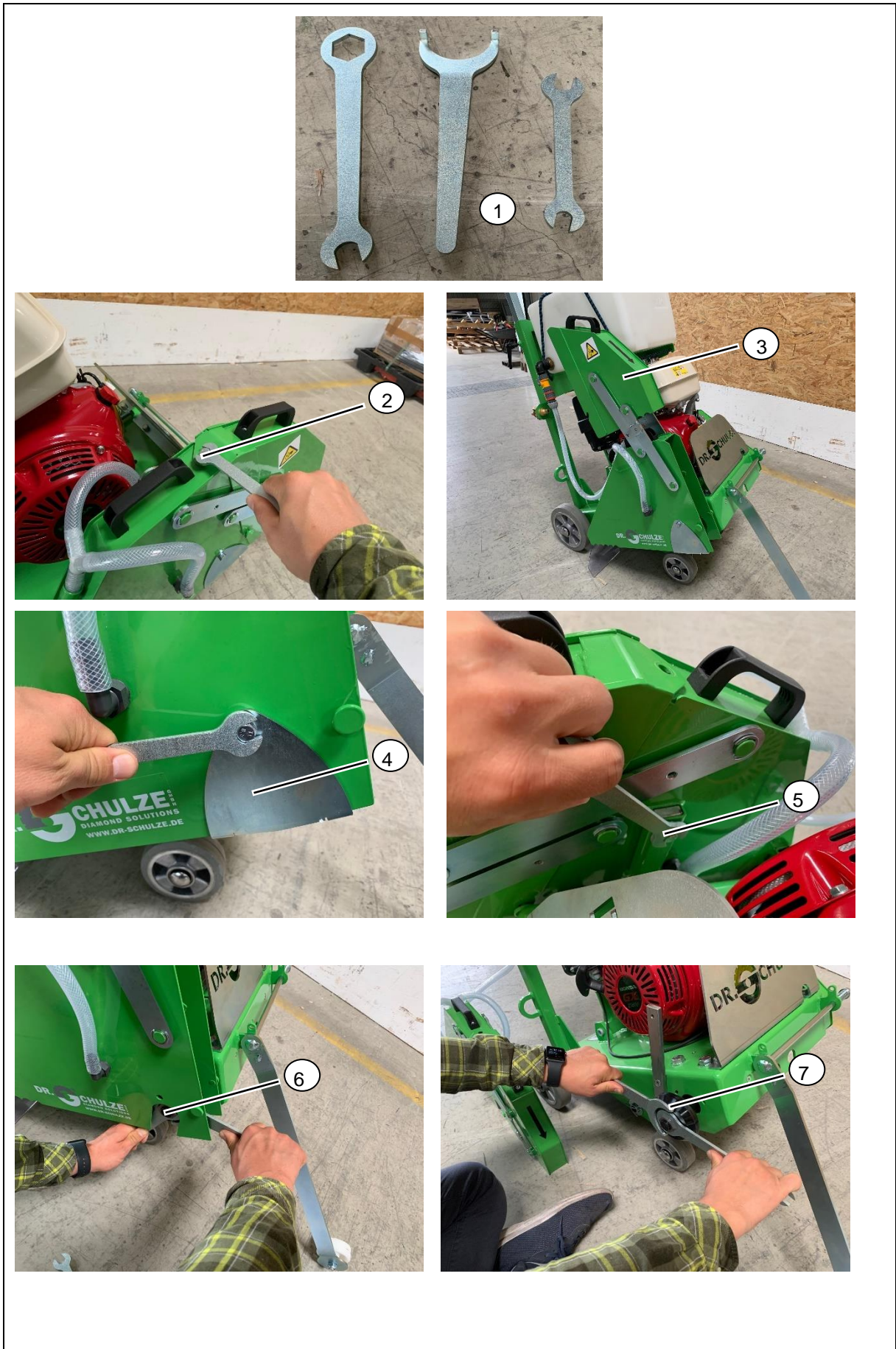
Danger

The bore diameter of the cutting disc must match the mounting diameter of the mounting flange.

Mounting flange and cutting disc must be clean.

Eccentric clamping of the cutting wheel will damage the machine, workpiece and cutting wheel.

- Clean the mounting flange and the cutting disc before clamping.
- After clamping, check that the cutting disc is firmly and centrally seated.



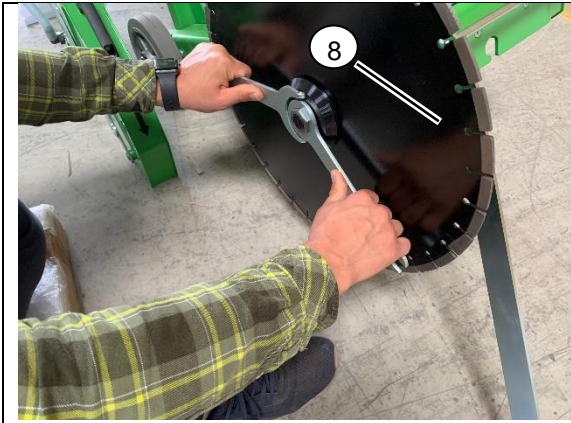


Abbildung 13: Assembly of the cutting disc

1. Use the supplied tool (1) for assembly.
2. Loosen the fastening screw (2) and open the front segment of the blade guard (3).
3. Open the rotating cover of the bottle screw (4).
4. OPTIONAL: To allow better access to the blade and flange, the entire blade guard can be removed by loosening the screw (5).
5. Unscrew the flange nut (6) on the mounting flange (7) **using a tool and hold the flange with a special open-end wrench.**
6. Remove the flange, put on a suitable cutting disc (8) with a bore of $\text{Ø}25.4$ mm, check that it is firmly seated and tighten the flange again using the two tool wrenches.
NOTE: Clean the mounting flange and the cutting disc (8) before clamping!
7. Close the protective hood again and secure the screw (2).



Danger

A badly centered blade will damage itself and the machine.

Pay attention to the direction of rotation of the cutting disc, see the direction of the arrow on the blade guard and the cutting disc.

7.2 Safety instructions for use



warning

Risk of injury due to improper operation!

Improper operation can lead to serious injuries.

- It may only be operated by trained personnel authorized by the operator.
- Before starting any work, make sure that the safety devices are installed correctly and are working properly.
- Never disable safety devices.
- Always ensure order and cleanliness in the work area! Loose objects lying around can be sources of accidents.
- Put on the personal protective equipment required for the work.
- Before starting work, check the cutting disc for damage and replace the cutting disc if necessary.

7.2.1 Turn on

1. After the machine is set up, the following actions must be performed to start the machine.
2. Mark the cutting line.
3. check security.
4. Check that all liquids are in sufficient quantities in the containers provided (fuel/water tank).
5. Unlock the emergency stop button by turning it slightly to the right.
6. Put on hearing protection.
7. Start the engine and move the machine to the appropriate cutting position.



warning

Risk of injury due to improper operation!

Improper operation can lead to serious injuries.

- Observe the operating instructions for the Honda engine!
- The engine speed is controlled manually. The lever on the control panel is designed for this!

8. If necessary, expand the cut display.
9. Set the engine speed to its maximum.
10. Open the faucet and check the water flow.

11. Holding the machine steady with one hand, slowly lower the tool to cut using the depth of cut adjuster until the desired depth of cut is set. If the machine rises while adjusting the depth of cut, decrease the depth of cut.



warning

Risk of injury due to improper operation!

- AVOID DEEP CUTS IN ASPHALT OR CONCRETE UNLESS ABSOLUTELY NECESSARY. EXCESSIVE AND DEEP CUTTING WILL RESULT IN LOSS OF TIME, EXCESSIVE TOOL WEAR AND INCREASED FUEL CONSUMPTION!

12. Continue cutting.



Notice

Make the first cut approx. 50 mm deep so that this guide cut is carried out as precisely as possible. When cutting asphalt, the Floor saw FS-500 not cut (too deep) in the sand. Sand increases wear on the cutting disc.

7.2.2 Turn off

After completing the cutting process, the following actions must be taken to switch off the machine:

1. Lift the tool out of the cut.
2. Turn off the tap.
3. Set the engine speed to its minimum.
4. Turn off the engine at the ON/OFF switch.
5. Do not store the machine until the engine has cooled sufficiently to avoid burn injuries. Only park the machine in a safe place to avoid damage, e.g. caused by the weather.
6. If the machine is to be loaded using a crane, it must only be fastened at the appropriate points.



Notice

A machine that is not in use must be stored dry and placed in a locked room.

7.3 Ideas

7.3.1 Adjust handle

The handle (1) of the machine can be fully retracted and is equipped with a height adjustment function. The height of the handle can be adjusted using the two clamping levers (2).



Abbildung 14: Adjustment handle

7.3.2 Set the cutting depth of the cutting disc

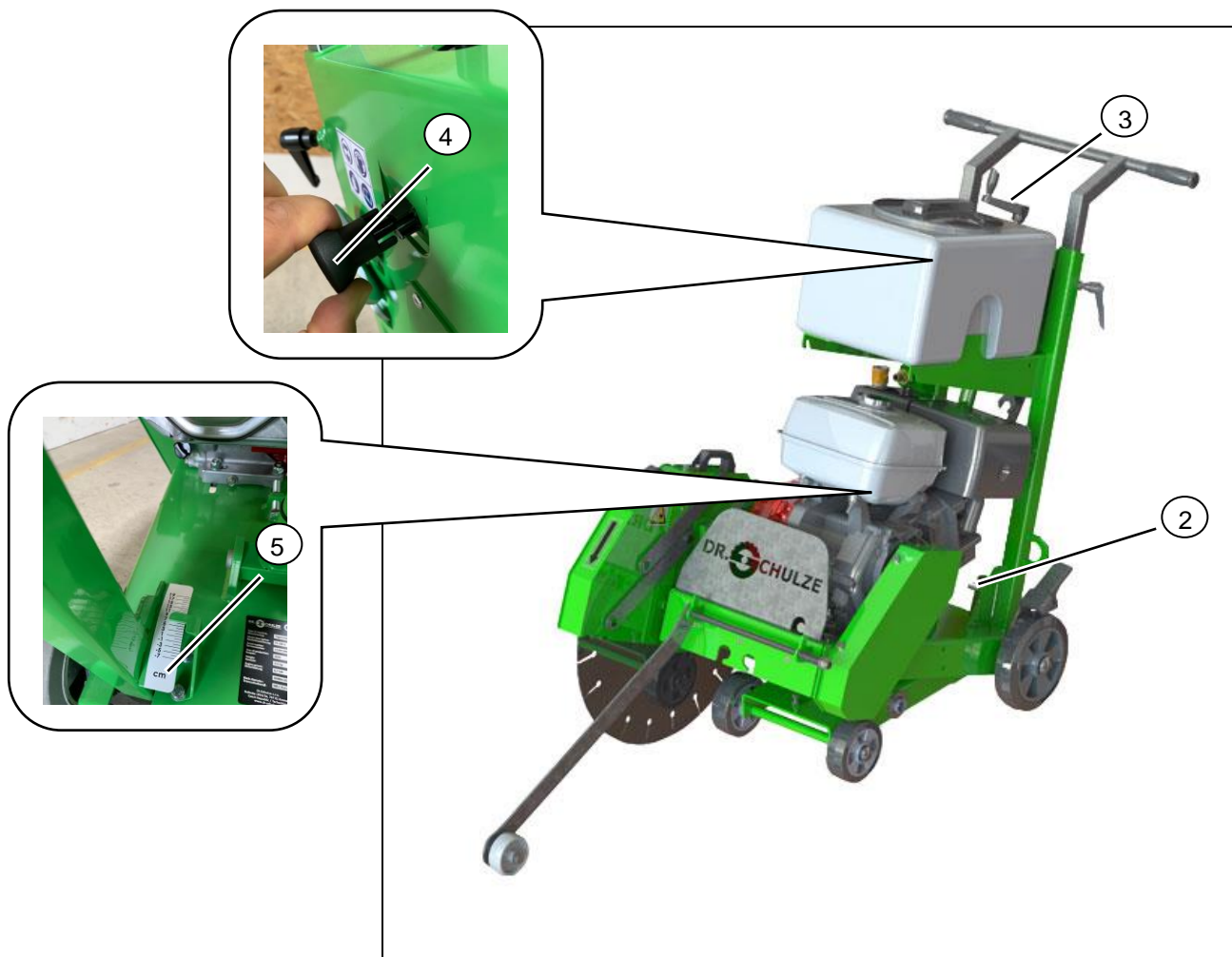


Abbildung 15: cutting depth adjustment

By turning the handwheel (3) anti-clockwise, the cutting disc is lifted out of the substrate to be cut. The cutting disc is immersed in the substrate to be cut by turning the handwheel (3) clockwise .

Before setting the cutting depth by turning the hand wheel, the cutting depth fixator (4) must be loosened and locked in again after the desired setting has been reached.

The cutting depth can be checked at any time using the cutting depth indicator (5). The scale of the display is valid for the cutting disc Ø500 mm.

7.3.3 controls

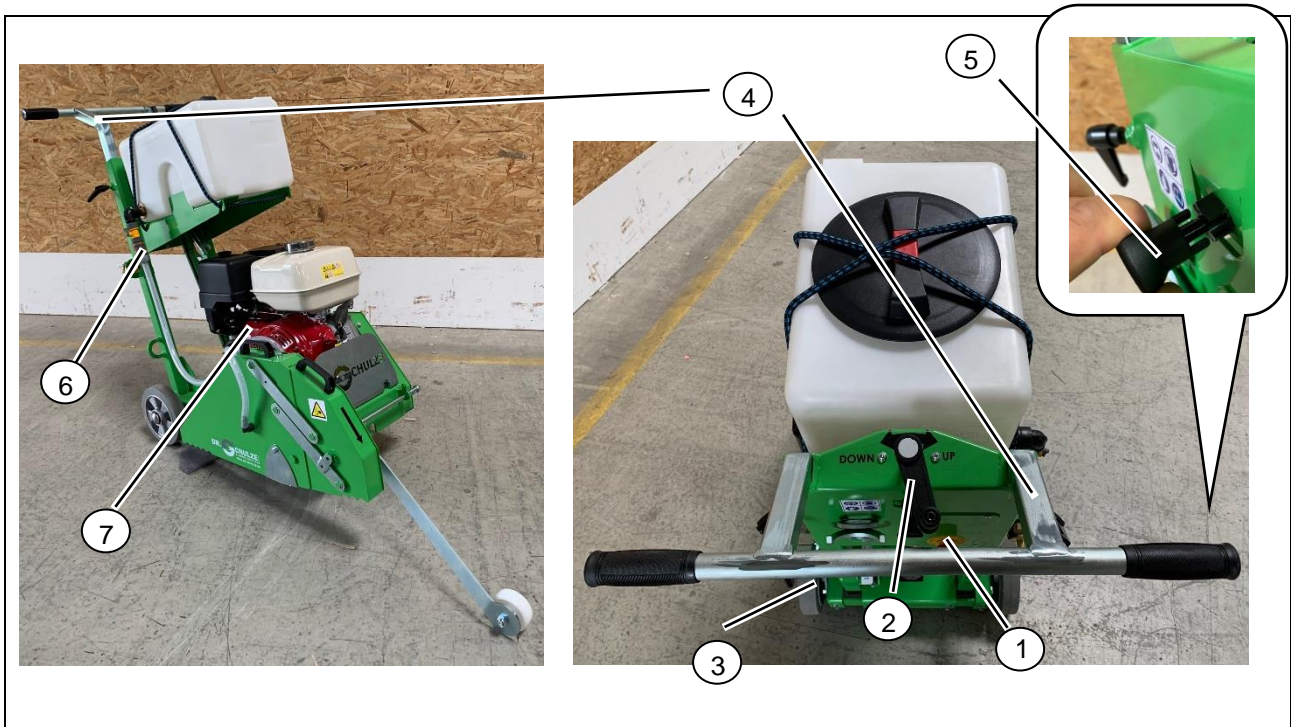


Abbildung 16: controls

- 1 emergency stop switch
- 2 cutting depth adjustment
- 3 parking brake
- 4 handle
- 5 Fixation cutting depth adjustment
- 6 ball valve

7 Controls Honda Gasoline Engine GX390



warning

Danger from switching on the machine!

When switching on the machine, personal injury and machine damage can occur!

- To switch the machine on, observe the operating instructions for the Honda engine!

7.4 Shutdown in an emergency

In case of danger:

1. Initiate an emergency stop immediately on the emergency stop device.
2. Inform those responsible at the site.
3. If necessary, alert doctor and fire brigade.
4. Rescue injured persons, initiate first aid measures.
5. Keep access routes clear for rescue vehicles.

7.4.1 Measures before switching on again after an emergency stop:

After the rescue measures:

1. If necessary, inform the responsible authorities.
2. Assign specialist personnel to rectify the fault.
3. Check the technical condition of the machine before restarting it and make sure that all functions are working properly.

8 maintenance and cleaning

8.1 maintenance

8.1.1 Maintenance Safety Instructions



warning

Risk of injury due to improper maintenance!

Improper maintenance can cause serious injury.

- Maintenance work may only be carried out by trained personnel authorized by the operator.
- Only carry out work on the machine when it is at a standstill.
- Before restarting, assemble all covers, screw connections and safety devices according to the instructions and check their function.
- Put on the personal protective equipment required for the work.

8.1.2 maintenance schedule

The following sections describe the maintenance work required for optimal and trouble-free operation.

- If increased signs of wear are found on the components during the regular checks, shorten the maintenance intervals based on the actual signs of wear!
- In some cases, the execution of the specified work depends on time and/or load. When specifying intervals both in deadlines and in operating hours (operating hours), the case that occurs first applies.
- If you have any questions about maintenance work and intervals, contact the manufacturer.
- **Observe the maintenance instructions in the Honda Gasoline Engine GX390 operating instructions!**

Tabelle 10: maintenance schedule

interval	Maintenance work	annotation
Before every operation	– Check screws for tightness.	The machine is exposed to vibrations during operation.
	– Check connection cable and plug for damage.	By qualified electricians.
	– Check protective devices for function and presence.	
	– Visual inspection of the cutting disc for wear.	If the cutting disc is worn or damaged, replace it. Always clamp a cutting disc that fits the workpiece.
With every cutting disc change	– mounting flanges .	
3 hours after start-up	– Checking the V-belt tension	If necessary, tighten the V-belt
8 hours	– Visually inspect the water fork spray nozzles for debris.	If the spray nozzles are clogged with deposits, clean them.
300 h	– If necessary, relubricate the shaft bearings using the grease nipples with 2-3 strokes.	
500 h	– Visual inspection of the V-belt for wear – Checking the V-belt tension	If necessary, replace or tension the V-belt.
	– Check bearings for wear. The service life is 500 to 1000 hours	Bearings may only be replaced by the manufacturer. Please ask Customer service.
3 months	– Check all drives and electrical components of the machine for the correct setting and function.	The test should be carried out by the manufacturer or by an authorized representative.

8.1.3 Measures after maintenance

After completing the maintenance work, perform the following steps before switching on:

1. Check all previously loosened screw connections for tightness.
2. Verify that all previously removed guards and covers are properly installed.
3. Make sure that all safety devices of the Floor saw FS-500 work properly.

8.1.4 maintenance log

Log the type and scope of the maintenance process.

8.2 cleaning



Caution

Danger from cleaning agents!

The use of cleaning agents can cause injuries to the skin or respiratory tract.

- When handling cleaning agents, the national and municipal legal regulations on environmental protection and disposal must be observed.
- Use personal protective equipment.
- Cleaning agents containing solvents must not be used.
- The information in the safety data sheets for the cleaning agents used must be observed.

8.2.1 cleaning schedule

After use, it is recommended to immediately rinse the moving parts with water. This has the advantage that grinding dust is prevented from accumulating.

9 disturbances

9.1 Safety instructions for troubleshooting



warning

Risk of injury due to improper troubleshooting!

Improper work execution when eliminating faults can lead to serious injuries.

- Repair work may only be carried out by trained personnel authorized by the operator.
- If components have been replaced, check correct installation of the spare parts. Install all fasteners properly. Observe screw tightening torques.
- Before restarting, ensure that all protective devices have been installed correctly and are functional.
- Before switching on again, make sure that there are no people in the danger area.

9.2 Who is allowed to fix faults

Malfunctions may only be carried out by operating personnel who have been instructed in how to rectify the malfunction, otherwise the specialist mechanics must be consulted.

9.3 Response to malfunctions

Basically:

- Trigger an emergency stop immediately in the event of faults that pose an immediate danger to persons or property.
- Inform those responsible at the site.
- Depending on the type of fault, have the responsible and authorized specialist personnel determine and eliminate the cause.

9.4 Behavior after a fault has been rectified

1. Check all previously loosened screw connections for tightness.
2. Verify that all previously removed guards and covers are properly installed.
3. Ensure that all tools, materials and other equipment used are removed from the work area.
4. Clean the work area and remove any substances that may have escaped, e.g. B. remove liquids, processing material or the like.
5. Make sure that all safety devices of the Floor saw FS-500 work properly.

9.5 Process technical disturbances

Tabelle 11: Process technical disturbances

PROBLEM: THE ENGINE WILL NOT START

CAUSE	SOLUTION
On/off switch in "OFF" position	Set to "ON" position
Fuel supply "CLOSED"	Set to "UP" position
lack of fuel	refill fuel
Low engine oil level	Top up engine oil
Start lever not mounted	Install a starter for cold starting
engine failure	Check and/or repair

PROBLEM: FLOOR SAW WILL NOT CUT PROPERLY - POOR CUTTING PERFORMANCE

CAUSE	SOLUTION
Cutting disc dull or unsuitable; No power transmission to the cutting shaft	Inspect, repair and/or replace; Tension belt, tighten flange nut
No water on the divider	Fill up the water tank and check the flow
Engine speed not calibrated	Adjust engine speed
Ball bearing rusted or blocked	Check and/or replace
Material cannot be cut with the machine	Check and use suitable cutting disc.

PROBLEM: NO WATER FLOW FROM CUTTING SHAFT

CAUSE	SOLUTION
water flow blocked; Flexible hoses deformed	Check and clean; Check and straighten hoses
dirty water tank; Closed faucet	Clean and remove dirt; open the faucet

10 dismantling and disposal

10.1 Safety instructions for dismantling and disposal



Caution

Risk of poisoning from oil and grease!

There is a risk of poisoning when handling oils and fats.

- Observe the safety data sheets of the suppliers, use personal protective equipment.

This device is subject to 2012/19/EU (WEEE) of August 13, 2012. The manufacturer undertakes to take back the device for disposal. The device must be delivered free of charge to the manufacturer or to the acceptance point named by the manufacturer.

11 directories

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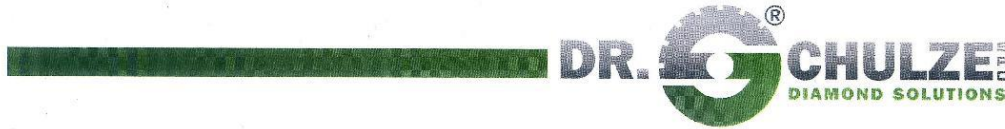
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12 Attachment

Appendix 1: Declaration of Conformity

Appendix 2: Spare parts list

12.1 EC Declaration of Conformity




Declaration of conformity within the meaning of the Machinery Directive 2006/42/EC Annex II 1A

We hereby confirm that the CE labelling process for the product listed below has been completed and has met the basic requirements of the EC Machinery Directive 2006/42/EC, EC Guideline for Electro-Magnetic Compatibility 2014/30/EU and the Outdoor-Guideline 2000/14/EC, guideline for environment-polluting sound emissions for devices and equipment designed for outdoor use. The protective regulations of the Low Voltage Directive 2014/35/EU have been met. In the event the equipment is modified without coordinating the modification process with us, this declaration is no longer valid. A complete list of the applied standards, guidelines and specifications as well as complete technical documentation is available at the manufacturers.

Manufacturer:	Dr. Schulze s.r.o. Hulínská 1814/1b 767 01 Kroměříž Czech Republic Tel.: +420 573 336 101
Provider of Documentation:	Dr. Schulze s.r.o. Hulínská 1814/1b 767 01 Kroměříž Czech Republic Tel.: +420 573 336 101
Machine:	Floor Cutter FS-500 B, FS-500 E
Serial Number:	See name plate
Applied Standards:	DIN EN 13862 Floor cutting grinding equipment – safety DIN EN ISO 12100 Equipment safety – general design guidelines – risk assessment and risk reduction. DIN EN ISO 13857 Equipment safety – safety distance for approaching hazardous areas with the upper and lower extremities. DIN EN ISO 14120 Equipment safety – separation safety guards – general requirements for the design and construction of stationary and mobile separation safety guards. DIN EN ISO 13850 Equipment safety – emergency stop – design sets. DIN EN 349 Minimum distance to prevent contusions of body parts. DIN EN 60204-1 Electrical equipment for industrial machines.

767 01 Kroměříž June 08, 2018


Mr. Marek Motálik
Executive Director and CE-Representative

12.2 Spare part list



Abbildung 17: Spare parts list FS-500 B

Tabelle 12: Spare parts list FS-500 B