

# FR95B

# **OPERATOR'S MANUAL**

**Original instructions** 



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#### **Imprint**

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#### Original operator's manual

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## **EC Declaration of Conformity**

Manufacturer

Swepac AB Blockvägen 3 34132 Ljungby

1. Category: Plate compactor

2. Type: FR95B

3. Motor efficiency: FR95B 1.2 kW

The product complies with the following directives:

2006/42/EC

2000/14 /EC

2004/108/EC

EN 500-1

EN 500-4

Technical documentation available from:

Swepac AB, Bergvägen 7 34132 Ljungby SE Tomas Johansson/Product Engineer

#### 2 FOREWORD

#### 2.1 Introduction

This operator's manual contains important information and procedures for the safe, proper and economical operation of this machine. Careful reading, understanding and observing it helps to avoid hazards, reduce repair costs and downtimes and thus increase the availability and service life of the machine.

This operator's manual is not a manual for extensive maintenance or repair work. Such work must be carried out by the service partner or by technically trained personnel. The machine must be operated and maintained in accordance with the instructions in this operator's manual. Improper operation or maintenance can cause hazards.

Defective machine parts must be replaced immediately!

The manufacturer is always available to answer questions on operation or maintenance.

## 2.2 Storage Location of the Operator's Manual

This operator's manual must be kept in the immediate vicinity of the machine and accessible to personnel at all times.

If a second copy of this operator's manual is lost or required, the following options are available for obtaining a replacement:

- On the Internet at <a href="http://www.swepac.com">http://www.swepac.com</a>.
- · Contact the manufacturer.

#### 2.2.1 Understanding These Instructions

This section helps to understand the operator's manual and the illustrations used therein.

#### Target group

People working with this machine must be regularly trained with regard to the dangers and risks occurring when using this machine.

This operator's manual is aimed at:

- Operating personnel:
  - These people have been instructed in working with the machine and about possible dangers and risks arising due to improper behavior.
- Technically trained personnel:
  - These people have a professional training as well as additional knowledge and experience. They are capable of assessing the tasks assigned to them and recognizing any possible risks and dangers.

#### 2.2.1.1 Explanation of symbols

The symbols used in the operator's manual are explained below. The symbols are used exclusively in warning or environmental instructions or information. Warnings must always be observed to protect the operator and third parties from personal injury and damage to property.



## Symbol for warning notices

This symbol marks general warnings. It is used to alert you of possible hazards, e.g. risks of injury or accidents.



#### Symbol for indications of technical damage

This symbol is a warning symbol that indicates a danger of technical damage. It is used to indicate situations where damage to the machine or third-party property may occur.



#### Symbol for environmental information

This symbol indicates environmental information. It is used to warn of possible environmental hazards.



#### Symbol for information

This symbol indicates information. This information can include tips on operation, for example. It helps to better understand and use the machine.

#### 2.3 Accident Prevention Regulations

In addition to the notes and safety instructions in this operator's manual, the local accident prevention regulations and the national industrial safety regulations apply.

#### 2.4 Contact person

Depending on the country, the contact person is a service partner, a subsidiary or a dealer.

On the Internet at <a href="http://www.swepac.com">http://www.swepac.com</a>.

#### 2.5 Limitation of liability

In the event of the following infringements, the manufacturer disclaims any liability for personal injury and damage to property:

- Actions contrary to this operator's manual.
- Non-designated use
- Deployment of untrained personnel.
- Use non-approved spare parts and accessories.
- Improper handling.
- Structural changes of any kind.
- Non-observance of the General Terms and Conditions (GTC).

#### 2.6 Use of the operator's manual

This operator's manual:

- must be regarded as an integral part of the machine and must be kept in a safe place throughout its service life.
- must be passed on to each subsequent owner or operator of this machine.
- applies to various machine types from one product range. For this
  reason, some illustrations may differ from the appearance of the
  purchased machine. Variant-dependent components that are not
  included in the scope of delivery can also be described.

The manufacturer reserves the right to change the information in this operator's manual without notice.

It must be ensured that any changes or additions made by the manufacturer are immediately incorporated into this operator's manual.

GROUP - TYPE	MATERIAL number (MAT. NO.)
FR95B	306850



#### Information

#### Compatible rechargeable batteries!

Only use the following rechargeable batteries:

- BOB5......1009258
- BOB10.....1009257
- BOB14.....1009256
- Other incompatible rechargeable batteries switch off automatically after 30 seconds and do not release any voltage at the plug receptacle.

#### 3 USAGE

#### 3.1 Designated use

Designated use also includes observing all notes and safety instructions in this operator's manual and observing the prescribed care and maintenance instructions.

The machine is used for:

- Compaction in earth and gravel construction.
- Compaction of mixed and granular soils.
- Compaction of asphalt.
- Shaking in cobblestones.

Any other use or use that goes beyond this is considered improper use. The manufacturer shall not be liable or liable for any damage resulting therefrom. The risk is borne solely by the operator.

The rechargeable battery:

- · Only use in machines intended for this purpose.
- Only charge with the manufacturer's approved charger.

#### 3.2 Unintended use

The manufacturer is not liable for personal injury or damage to property resulting from unintended use. The following activities, among others, are not intended:

- · Compaction of strongly cohesive soils.
- Compaction of frozen soils.
- Compaction of hard, non-compactable soils.
- · Compaction of non-load-bearing soils.
- Connecting non-permitted components.
- Operating the machine outside the performance data.
- Operation contrary to the notes and safety instructions contained in the operator's manual attached to the machine.
- Operation in potentially explosive atmospheres.
- Operation in the vincinity of open flames.

#### 4 SAFETY

## 4.1 Safety symbols and signal words

The following symbol identifies safety instructions. It is used for warning against potential personal risk or danger.



## **A** DANGER

DANGER identifies a situation causing death or serious injury if it is not avoided.

Consequences in case of non-observance.

► Avoidance of injury or death.



## **WARNING**

WARNING identifies a situation that can cause death or serious injury if it is not avoided.

Consequences in case of non-observance.

► Avoidance of injury or death.



## **A** CAUTION

CAUTION identifies a situation that can cause injury if it is not avoided.

Consequences in case of non-observance.

► Avoidance of injury.



## NOTICE

INFORMATION identifies a situation that causes damage if it is not observed.

Consequences in case of non-observance.

► Avoidance of damage to property.

#### 4.2 Principle

The machine has been designed and built in accordance with latest stateof-the-art standards and the recognized safety regulations. Nevertheless, improper use may result in danger to life and limb of the operator, third parties or damage to the machine and other material property.

Read and observe the notes and safety instructions in this operator's manual. Failure to follow these instructions may result in electric shock, fire and/or serious injury, and damage to the machine and/or other objects.

Keep safety instructions and information for the future.

## 4.3 Structual changes

Structural modifications may not be made without the written consent of the manufacturer. Unauthorized structural changes may result in hazards to the operator and/or third parties as well as damage to the machine.

The manufacturer's liability and warranty are also void in the event of unauthorized structural alterations.

In particular, a structural change shall be deemed to have occurred:

- When opening of the machine and permanent removal of components.
- Installation of spare parts that do not come from the manufacturer or are not equivalent in design and quality to the original parts.
- Attachment of accessories of any kind that do not originate from the manufacturer.

Spare parts or accessories from the manufacturer can be installed or removed safely. Further information is available on the Internet at - https://www.swepac.com.

#### 4.4 Responsibility of the operator

The operator is the person who operates this machine himself for commercial or economic purposes or who leaves it to a third party for use/application and bears the legal product responsibility for the protection of personnel or third parties during operation.

The operator must make the operator's manual accessible to the personnel at all times and ensure that the operator has read and understood the operator's manual.

The operator's manual must be kept ready to hand at the machine or at the place of use.

The operator must hand over the operator to any other operator or subsequent owner of the machine.

The country-specific regulations, standards and directives on accident prevention and environmental protection must also be observed. The operator's manual must be supplemented by further instructions for compliance with operational, official, national or generally applicable safety guidelines.

#### 4.5 Obligations of the operator

- Know and implement applicable health and safety regulations.
- In a risk assessment, identify hazards arising from working conditions at the place of use.
- Create operating instructions for the operation of this machine.
- Regularly check whether the operating instructions correspond to the current status of the regulations.
- Clearly regulate and define responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- Train personnel at regular intervals and inform them about possible dangers.
- Refresh instruction at regular intervals.
- Keep records of the training received and make them available to the competent authority on request.
- Provide personnel with the necessary protective equipment.

#### 4.6 Qualification of staff

This machine may only be put into operation and operated by trained personnel.

In the event of misuse, abuse or operation by untrained personnel, there is a danger to the health of the operators and/or third parties, as well as damage or total failure of the machine.

## In addition, the following requirements apply to the operator:

- · Physical and mental suitability.
- Minimum age 18 years.
- No influence on reactivity by drugs, alcohol or medication.
- Familiarity with the safety instructions in this operator's manual.
- · Familiarity with the intended use of this machine.
- Instructed in the independent operation of the machine.

#### 4.7 General safety instructions

The safety instructions in this chapter contain the "General safety instructions", wich must be listed in the operator's manual in accordance with the applicabel standards. It may contain instructions which are not relevant for this machine.

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## 4.8 Specific safety instructions for vibratory plates

#### 4.8.1 External influences

Do not operate the machine under the following external influences:

In case of heavy rain on inclined surfaces. Danger of slipping!

#### 4.8.2 Operational safety

- When operating the machine, make sure that no gas, water or electrical lines or pipes are damaged.
- Exercise the utmost degree of caution near abysses or slopes.
   Danger of falling!
- Do not leave the designated operating position when the machine is in operation.
- In trenches and pits, pay maximum attention to side walls so that they remain stable and do not collapse due to vibration. Risk of spillage!
- Never let the machine run unattended. Risk of injury!
- Keep work area clear and keep unauthorized persons away. Risk of injury!
- Operators of this machine must ensure that persons staying in the work area maintain a minimum distance of 2 metres from the running machine.
- When operating the machine on inclined surfaces, always approach gradients from below and always stand above the machine on the slope. The machine could slip or tip over.

#### 4.8.2.1 Safety distances

Compaction work in the vicinity of buildings can lead to building damage. Therefore, any possible effects and vibrations on surrounding buildings must be checked in advance.

The relevant regulations and codes of practice for measuring, assessing and reducing vibration immissions must be observed, in particular DIN 4150-3.

The manufacturer shall not be liable for any damage to buildings.

#### 4.9 Maintenance

- Do not service, repair, adjust or clean the machine when it is switched on.
- Remove accumulator from the machine before maintenance work.
- Observe maintenance intervals according to maintenance plan. Have work that is not listed performed by a service partner.
- Replace worn or damaged machine parts immediately. Only use spare parts from the manufacturer.
- Keep the machine clean.
- Replace any missing, damaged or illegible safety labels immediately. Safety and information labels contain important information for the protection of the operator.
- Carry out maintenance work in a clean and dry environment (e.g. workshop).

#### 4.9.1 Service

- Only have the machine repaired or serviced by technically trained personnel.
- Only use original spare parts and accessories. The operational safety of the machine is thus maintained.

#### 4.9.1.1 Threaded fittings

All threaded fittings must comply with the specified specifications and be firmly bolted together. Observe the tightening torques! Screws and nuts must not be damaged, bent or deformed.

## Particular attention should be paid to the following:

- Self-locking nuts and micro-encapsulated screws must not be reused after loosening. The fastening effect is lost.
- Threaded fittings with adhesive protection/liquid adhesives (e.g. Loctite) must be cleaned after loosening and provided with new adhesive.



#### Information

Observe the instructions of the liquid adhesive manufacturer.

## 5 DESCRIPTION OF THE MACHINE

## 5.2 Type plates and labels

## 5.2.1 Type label

A type label is permanently attached to the machine.

## Other type labels

Furthermore, the following components of the machine are provided with their own type label:

· the rechargeable battery

## Symbols on the type label

Various symbols and markings for national and international approvals may be shown on the type label.

## 5.2.1.1 Labeling on the machine

## Type label data

The type label contains information that uniquely identifies this machine.

This information is required for ordering spare parts and for technical queries.

Enter the data on the machine in the following table:

DESIGNATION	YOUR DETAILS
Group - Type	
Material number (Mat. no.)	
Machine version (version)	
Machine number (machine no.)	
Year of construction	

## 5.2.2 Safety and information labels



## **A** WARNING

## Injury hazard due to missing or damaged labels and signs!

Safety labels contain important information to protect the operator.

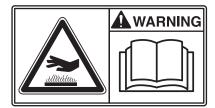
- ► Keep all safety, warning and operating instructions on the machine in a clearly legible condition.
- ▶ Replace missing or damaged labels and signs immediately.



#### Warning signs on the machine



**Before use**, carefully read the manual and its safety instructions so that you can handle the machine safely. Ensure that the manual is always accessible.



**To avoid burns or discomfort**, do not touch the vibration element when the machine has recently been used.



As the sound pressure level at the operator's ears exceeds 80 dB (A), ear protectors must be used when working with the machine to prevent hearing damage.

## Info signs on the frame



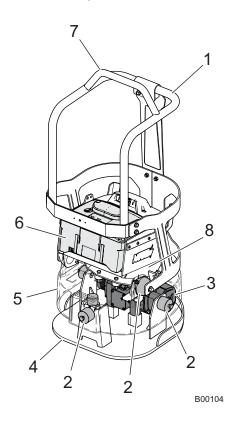
This sign shows which part that is intended to use to safely lift the machine.

Type label.



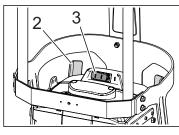
19

## 5.3 Components



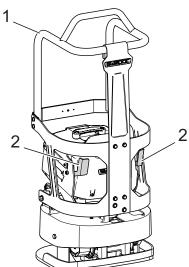
- 1. Operating lever
- 2. Rubber dampers
- 3. Exciter
- 4. Base plate
- 5. Engine plate
- 6. Rechargeable battery
- 7. Lifting eye
- 8. Battery holder / guide rechargeable battery

## 5.4 Control elements



Always keep the displays and controls of the machine dry, clean and free of oil and grease.

Do not lock, manipulate or alter the machine operating elements in an inadmissible manner.



- 1. Guide bracket
- 2. Handle
- 3. Lock rechargeable battery

## **6 TRANSPORTATION**

## 6.1 Safety instructions for transport



## **A** WARNING

## Hazard of falling!

The falling machine can cause serious injuries, e.g. by crushing.

- ► Only use suitable and tested lifting gear and slings (safety hooks) with sufficient lifting capacity.
- ▶ Only lift the machine by the central suspension.
- ► Secure the machine safely to the lifting gear.
- ▶ Do not lift the machine by the guide bracket.
- ► Leave the danger zone when lifting, do not stand under suspended loads.

## 6.2 Prerequisites and preparations

- Switch off the machine and let it cool down.
- We recommend removing the rechargeable battery from the machine before charging and transporting.
- · Use only suitable hoists with sufficient lifting capacity.
- Only use suitable lifting equipment with sufficient lifting capacity, see "12 Technical Data" on page 39.
- The transport vehicle must have a sufficient bearing load and a suitable loading surface.

## 6.3 Lifting the machine

#### Lifting with lifting device and lifting gear

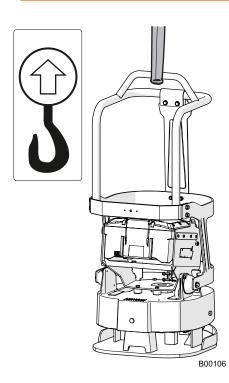


## **MARNING**

## Risk of crushing!

If the machine is unstable, the lifting gear and the hoist may fail and fall down.

► Check the stability of the lifted machine before continuing work.



- 1. To ensure safe lifting, appoint a competent instructor.
- 2. Only use certified lifting and fastening gear.
- 3. Attach suitable sling to lifting eye.
- 4. Load the machine into or onto the transport vehicle.



## **A** CAUTION

## **DANGER OF BURNS DUE TO HOT SURFACES!**

Exciter can become very hot after a short time, which can cause severe burns if it comes into contact with the skin.

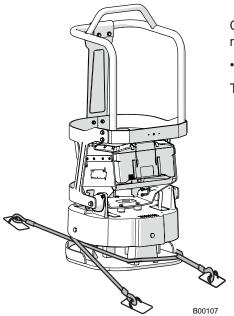
- ► Always allow the machine to cool down after use.
- ▶ If the cooling phase cannot be maintained (e.g. due to an emergency) use heat-resistant protective gloves.

## 6.4 Lashing the machine



## NOTICE

Use anti-slip mats to secure the load.



Only use the lashing points provided for this purpose to secure the machine.

Tie down the machine as shown.

The machine is secured against unrolling, slipping and tipping over.

#### 7 COMMISSIONING

## 7.1 Safety instructions for operation



## **MARNING**

Risk of serious injury, death and property damage due to smoke development and fire!

A damaged or defective rechargeable battery can smell unusual, smoke or burn. Persons may be seriously injured or killed and property damage may occur.

- ▶ Do not use the rechargeable battery and separate it from combustible materials if it smells or smokes unusually.
- ► In case of fire, extinguish with water only, do not use a direct water jet.



## **A** WARNING

Tipping hazard due to slipping or overturning machine!

At least 2/3 of the machine must be on a stable surface near edges.

➤ Take the machine out of operation and lift it back onto a stable surface.



## **A** WARNING

Improper handling may result in injury or serious material damage.

► Please read and follow all safety instructions in this operator's manual.



## **A** CAUTION

Health hazard due to vibrations!

Physical impairments due to vibration.

► Take regular breaks.



## **A** CAUTION

## Risk of collapse and spillage!

There is a risk of injury from falling or spilling when working on fracture, pit, dump and embankment edges, on trench edges and heels.

- ▶ Pay attention to side walls and their stability.
- ► Ensure stability.

## Operation on inclined surfaces

Only approach gradients from below.

#### **Ground conditions**

The maximum dumping height depends on several factors of the ground conditions. An exact specification of this value is not possible.

 Determine the maximum fill height by compaction tests or soil samples.

#### 7.2 Tests before commissioning



#### Information

Further information and detailed descriptions, see "9 Maintenance" on page 33.

#### Perform the following checks:

- · Check machine and components for damage.
  - Do not put the damaged machine into operation. Damages and defects must be repaired immediately.
- · Check the charge state of the accumulator.
- Check to ensure the screw connections are firmly seated.
- Check control elements for functionality.

## 7.3 Test before commisioning



## NOTICE

Damage to the machine or the accumulator.

Only use chargers and rechargeable batteries from the manufacturer.



## NOTICE

Note on putting into operation!

Detailed and illustrated information can be found in the operator's manual of the battery charger.

## 7.4 Install the rechargeable battery



## NOTICE

Damage to the machine or the accumulator.

Connections and contact area of the accumulator must be clean and dry.



## NOTICE

Damage to the machine or the accumulator.

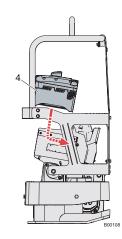
Note the direction of installation when installing the accumulator. The connections must point in the direction of the protective cover.



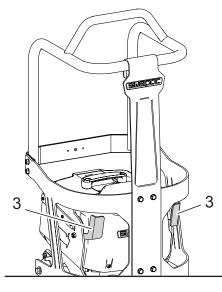
## NOTICE

Note on putting into operation!

Detailed and illustrated information can be found in the operator's manual of the battery

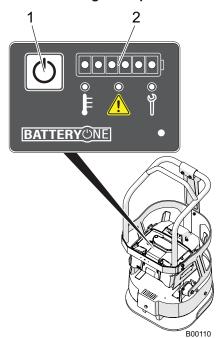


- 1. Place rechargeable battery (4) on the charger.
- 2. Carefully insert the rechargeabel battery into the provide guide rail.



- 3. Insert the rechargeable battery by the handle until you hear a clearly audible snapping sound of the lock (3).
- 4. Make sure the rechargeable battery is firmly seated.

## 7.5 Putting into operation



- 1. Hold the machine by the guide bracket.
- Press start button (1). Rechargeable battery is activated.
- 3. Check the charge level of the rechargeable battery (2).
- 4. Wait at least 4 seconds, then start the machine.

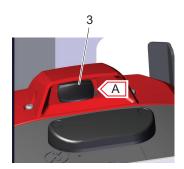


## **NOTICE**

## Possible error message on the rechargeable battery

If the machine is started too quickly, error messages may appear on the accumulator.

- ▶ Wait at least 4 seconds after activating the rechargeable battery.
- ► Then continue with the starting procedure.



5. Set switch (3) to position **A**. The machine starts up.

#### 8 OPERATION

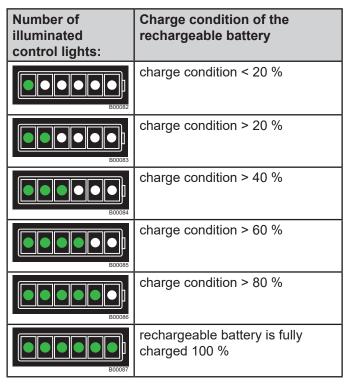
## 8.1 Operating the machine

The operator's designated location is behind the machine.

Guide and steer the machine using the guide bracket.

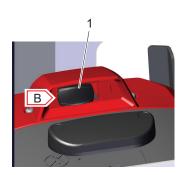
#### 8.2 Check charge state of rechargeable battery

Checking the charge condition of the rechargeable battery during operation on a regular basis



If only one control light is still on, the charge condition is already below a range of 20 %. To avoid the most severe discharges possible, recharge the battery.

## 8.3 Taking the rechargeable battery out of operation



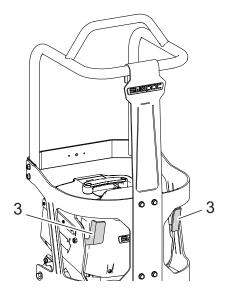
## Taking the machine and rechargeable battery out of operation

 $\sqrt{}$  The machine is on a level surface.

1. Set switch (1) to position B.

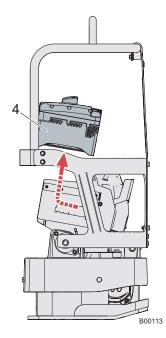
Machine switches off.

Rechargeable battery is deactivated.



## Remove the rechargeable battery

- 1. Allow the machine to come to a complete stop
- 2. Pull lock handle (3) to the rear.



- 3. Carefully pull back rechargeable battery (4) by the handle as far as it will go.
- 4. Pull out the rechargeable battery by the handle and put it down safely.

#### 9 MAINTENANCE

## 9.1 Safety instructions for maintenance



## **A** WARNING

Improper handling may result in injury or serious material damage.

► Please read and follow all safety instructions in this operator's manual.



## **A** WARNING

Risk of injury from uncontrolled machine starting and moving parts!

- ▶ Only perform maintenance work when the machine is switched off.
- ► Remove the rechargeable battery.



## **A** WARNING

Risk of fire and explosion when using flammable cleaning agents!

▶ Do not clean the machine and components with gasoline or other solvents.



## **A** WARNING

Risk of injury due to missing or non-functioning safety devices!

- ► Only operate the machine if the safety devices are correctly installed and functioning.
- ▶ Do not change or remove safety devices.



## **A** WARNING

## Danger from electric current.

Risk of injury from electric current in the event of improper work.

Repairs and a subsequent safety check may only be performed by a qualified electrician according to the applicable guidelines.



## **A** CAUTION

## Danger of burns due to hot surfaces!

Exciter can become very hot after a short time, which can cause severe burns if it comes into contact with the skin

- ► Always allow the machine to cool down after use.
- ▶ If the cooling phase cannot be maintained (e.g. due to an emergency) use heat-resistant protective gloves.



#### NOTICE

#### Damage by penetrating water!

Penetrating water can damage electrical operating elements or machine components.

Penetrating moisture can lead to total failure.

- ▶ Do not clean the machine with high pressure or steam cleaners!
- ▶ Use a cloth to remove water that has entered (e.g. due to rain) the housing and then let the machine dry.
- ► Only use dry and clean cloths.



#### **ENVIROMENT**

#### Avoid damage to the environment!

- ► Clean the machine in a suitable place where the dirty waste water can be collected in an environmentally friendly manner.
- ► Collect contaminated water and dispose of it in an environmentally friendly manner.

## 9.2 Maintenance plan

Maintenance work	daily	125 h
Clean machine, rechargeable battery and charger.	•	
Visual check for completeness.		
Visual check for damage.		
Check operating elements for ease of movement.	•	
Check screw connections.	•	
Check rubber buffer.		•

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#### 9.3 Maintenance work

## **Carrying out preparations:**

- 1. Place the machine on a level surface.
- 2. Decommissioning the machine.
- 3. Let the machine cool down.
- 4. Remove the rechargeable battery.

#### 9.3.1 Cleaning the machine



#### **NOTICE**

## Information on damage to the components!

Contact service representative if accumulator or charger is damaged.



## **NOTICE**

## Notice for cleaning the machine!

▶ Do not clean the machine with high pressure or steam cleaners!

#### Observe the following when cleaning:

- 1. Clean machine with compressed air.
- 2. Wipe the rechargeable battery and battery charger with a dry clean cloth.

## Visual check after cleaning:

- 1. Check cables, hoses and lines for leaks and chafe marks.
- 2. Check screw connections.
  - Replace damaged components.
- 3. Check all safety, warning and operating instructions for completeness.
  - Replace missing or damaged labels and signs immediately.

## **TROUBLESHOOTING**

## 10.1 Troubleshooting machine



## **A** WARNING

## Danger to life due to unauthorized troubleshooting!

- ▶ If faults occur on this machine which are not described in these operating instructions, contact the manufacturer.
- ▶ Do not rectify faults on your own.



## NOTICE

## Possible error message on the rechargeable battery

If the machine is started too quickly, error messages may appear on the accumulator.

- ▶ Wait at least 4 seconds after activating the rechargeable battery.
- ▶ Then continue with the starting procedure.

Fault	Possible cause	Remedy		
The machine will not operate.	On/Off switch is not off.	Move the switch to position 0.		
	Rechargeable battery is not activated.	Activate rechargeable battery.		
	The charge condition of the rechargeable battery is too low.	Charge the rechargeable battery.		
	The rechargeable battery is not inserted correctly into the machine.	Insert the rechargeable battery correctly into the machine.		
	The rechargeable battery is defective.	Have the rechargeable battery repaired.*		
The machine is displaying unexpected faults when putting into operation or operation.	Troubleshooting Observe rechargeable battery.	Deactivate the rechargeable battery and remove it from the machine. If the fault persists, have the rechargeable battery repaired.*		
The machine switches itself off	The charge condition of the chargeable battery is too low.			
	The machine was overloaded.	Switch the machine on again.		
	Machine is overheated.	Let the machine cool down.		
	Machine under temperature.	Operate the machine only within the permissible temperature range, "12 Technical Data" on page 35.		
* Have this work carried out by a service partner.				

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#### 11 SHUTDOWN

## 11.1 Temporary decommissioning



## **A** WARNING

#### Fire and explosion hazard!

Storage with other hazardous substances may lead to fire or explosion due to dangerous interaction.

- ▶ Store separately from other hazardous materials.
- ► Store away from other flammable materials.
- ► Keep a minimum distance of 2.5 m.



#### **NOTICE**

# Property damage due to self-discharge of the rechargeable battery!

The self-discharge rate is approx. 3 % per month. Deep discharge can cause damage to the cells or loss of capacity.

► Check charge condition every six months.



#### Information

Further information and detailed descriptions, see "9 Maintenance" on page 36.

## Storage requirements

- · Store dust-free and dry.
- · Do not store outdoors.
- · Protect from direct sunlight.
- Observe storage temperature, see "9 Maintenance" on page 36.
- Store in a locked place that is not accessible to children.

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If the machine is stationary for more than 1 month, perform the following measures:

Entire machine	•	Clean thoroughly.
	•	If necessary, rectify all defects.
	•	Check for leaks, rectify any defects if necessary.

If the machine is shut down for more than 6 months, contact a service partner.

#### 11.2 Final shutdown

Have the machine professionally dismantled and disposed of by a stateapproved recycling company.

Professional disposal of this machine avoids negative effects on human health and the environment, helps with the targeted treatment of pollutants and makes it possible to recycle valuable raw materials.

#### 12 TECHNICAL DATA

#### 12.1 General instructions



#### Information

For system technical reasons, empty columns can be displayed in the technical data, and numbers and letters that written in superscript or subscript may be displayed incorrectly, e.g:

- ► Sound power level LWA instead of L<sub>wA</sub>
- ▶ Sound pressure level LpA instead of L<sub>DA</sub>
- ▶ Vibration total value ahv instead of a<sub>hv</sub>
- ► Carbon dioxide CO2 instead of CO₂
- Unit m/s2 instead of m/s²

#### 12.2 Noise and vibration data

The noise and vibration data listed have been determined in accordance with the following guidelines for the typical machine operating conditions / special test conditions and using harmonized standards:

- Machinery Directive 2006/42/EC
- Noise Emission Directive 2000/14/EC

During operational use, values may differ depending on the prevailing operating conditions.

#### Sound pressure level at operator station

• L<sub>nA</sub> was determined according to EN ISO 11201 and EN 500-4.

#### **Guaranteed sound power level**

L<sub>wa</sub> was determined according to EN ISO 3744 and EN 500-4.

## Weighted vibration total value hand-arm vibration

a<sub>hv</sub> was determined according to EN ISO 20643 and EN 500-4.

## 12.3 FR95B

Туре	FR95B		
Material number machine			
Centrifugal force [kN]	13		
Vibrations [Hz]	98		
Vibrations [1/min]	5880		
Area output* [m2/h]	652,5		
Flow [m/min]	25		
Gradeability [%]	46		
Nominal power ** [kW]	1,2		
Rated current [A]	21,5		
Rated voltage [V]	51		
Protection type	IP23		
Type of current (output)	DC		
Length (drawbar in working position) [mm]	450		
Width [mm]	435		
Height [mm]	1053		
Underclearance [mm]	1053		
Operating weight incl. battery BOB10 [kg]	78 +9,3		
Operating temperature range [°C]	0-+50		
Storage temperature range [°C]	-30 +50		
Sound pressure level at operator station LpA [dB(A)]	91		
Sound power level LWA, measured [dB(A*)]	100		
Sound power level LWA guaranteed [dB(A)]	105		
Vibration total value ahv [m/s2]	< 2.5		
Measurement uncertainty of the total vibration value ahv [m/s2]	0,5		
* Depends on the soil conditions.			
** Corresponds to the installed net power according to Directive 2000/14/EC.			

