



Scrubmaster B35/B50 (7746/7747)

Operating manual

Part number: 88-10-3635-5045-68

Valid from: 06.2026

Please read this **original operating manual** before you use the machine for the first time, act accordingly and keep it for future reference or subsequent users. The operating manual contains all important information for operation, maintenance and servicing. We have provided the points in this operating manual concerning your safety with danger pictograms. Your authorised Hako dealer is available at all times to answer further questions about the machine or the operating manual.

We would expressly advise you that no legal claims may be asserted based on the contents of this operating manual. In the case of necessary repair work, please make sure that only original spare parts are used. Spare parts must be original spare parts to guarantee safety. We reserve the right to make changes in the interests of further technical development.

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Edition

Index	Book no.	Change no.	Valid from
1	88-10-3635	5045-68	06.2026

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1 General information

1.1 Intended use

The Scrubmaster B35/B50 is a scrubber-drier for the wet cleaning of hard indoor floor surfaces. This machine is intended for commercial use, e.g. in shops, hospitals, hotels and schools.

- The machine may be used, maintained and repaired only by persons who have been instructed by specialists.
- The relevant accident prevention regulations as well as the other generally recognised safety engineering and occupational medical rules must be complied with.
- The machine should only be used on level surfaces with a maximum slope of 2 %.
- Cleaning carpets with the machine is not permitted.
- The machine is not suitable for removing liquids, dusts or materials that are dangerous to health, combustible or explosive. It is also prohibited to collect burning objects, e.g. glowing cigarettes.
- The machine must not be used in potentially explosive atmospheres.
- The operating and storage temperature of the machine is +2 °C to +40 °C.
- Cleaning the machine with a high-pressure cleaner or steam jet is not allowed.

Any use extending beyond this is not intended use. Hako GmbH shall not be liable for any damage resulting from this and the user alone bears the risk. Intended use also includes compliance with the operating, maintenance and servicing conditions specified by Hako GmbH.

By virtue of its design and construction as well as in the version distributed by Hako GmbH the machine meets the usual health and safety requirements of the EC Directives 2006/42/EC as well as the requirements according to 2014/30/EC and 2014/53/EC at the start of series production. The following standard was referred to for implementation: IEC 60335-2-72.

This Declaration loses its validity in the event of a modification to the machine not authorised by Hako GmbH. The manufacturer is not deemed liable for any damage resulting from unauthorised modifications to the machine.

1.2 Notes on warranty

The terms defined in the purchase agreement apply. Claims for compensation in relation to damage are excluded from the terms of the warranty when the damage is the result of the failure to observe rules concerning servicing and maintenance. Maintenance work must be carried out by an authorised Hako service workshop and confirmed in the service booklet under the item *Maintenance Report*. The service booklet serves as a warranty logbook.

The following are excluded from the terms of warranty: wear and tear through overuse, defective fuses, improper handling and use and unauthorised modifications. Claims under the terms of the warranty are also annulled when damage occurs to the machine resulting from

the use of parts or accessories not explicitly approved by Hako GmbH or from failure to observe maintenance rules.

1.3 Acceptance of the machine

Inspect the machine for transport damage immediately on arrival. You will be compensated for transport damage provided you immediately have the damage confirmed by the transport company and send in the damage report together with the consignment note to your Hako dealer.

1.4 Machine data

Your machine is described clearly by the following data. Please always quote these data in correspondence or when making a telephone query to your authorised Hako dealer or our company.

Machine type:	
Manufacturing no.:	
Start-up on	

Your nearest authorised Hako dealer	
Address	
Phone	

2 Safety instructions

2.1 Warning and danger symbols

Important tasks concerning the safety of the operating staff and machine are named as follows in this operating manual and emphasised by symbols.

DANGER

Indication of a direct danger with high risk, in which death or severe physical injury can occur if it is not avoided.

WARNING

Indication of a possible danger with average risk, in which death or severe physical injury can occur if it is not avoided.

CAUTION

Indication of a danger with low risk, in which light to medium severe physical injury or material damage can occur if it is not avoided.

NOTICE

Attention indicates a hazard that can lead to technical damage when not heeded.

CAUTION

Environmental danger

Environmental danger due to the use of substances from which a health and environmental risk proceeds.

NOTE

Indication of information that facilitates more effective and economical use of the machine.

2.2 Staff qualification

The various tasks described in this operating manual place different demands on the qualifications of the persons entrusted with these tasks.

WARNING

Danger in case of insufficient qualification of persons!

Inadequately qualified persons cannot assess the risks involved in handling the machine and expose themselves and others to the risk of severe or fatal injury.

- All work must only be carried out by qualified persons.

All work on and with the machine may only be carried out by qualified and authorised staff. Staff are qualified if they have been trained, briefed or instructed in the respective work.

A distinction is made between the following groups of people in this manual:

- **Operating staff:** Have been demonstrably instructed in the operation and functioning of the machine. Are also responsible for daily and weekly maintenance and servicing work.
- **Specialists:** Specialists in the sense of the operating manual are persons who have been specially trained and instructed in the use of the machine and who have relevant knowledge in the areas of start-up and maintenance. In addition, specialists are familiar with the safety equipment and instructions and are responsible for the initial instruction of the operating staff.

2.3 Personal protective equipment

Personal protective equipment is used to protect persons from impairments to safety and health during work.

Staff must wear personal protective equipment during the various operations on and with the machine, which is referred to separately in the individual sections of this operating manual.



Safety shoes

Safety shoes protect the feet from heavy falling parts and prevent slipping on slippery surfaces.



Protective gloves

The protective gloves against chemicals protect the hands against direct skin contact with the various operating materials such as detergents or battery acid. Contaminated protective gloves must be disposed of in an environmentally friendly manner. Protective gloves against mechanical abrasion protect the hands against injuries such as cuts, abrasions, etc. Defective or worn protective gloves must be disposed of in an environmentally friendly manner.



Protective goggles

Protective goggles protect the eyes against contact with the different engine/vehicle fluids such as detergents or battery acid.

2.4 General safety instructions

- Apart from the instructions in this operating manual, the general safety and accident prevention regulations of the legislation must be taken into account.
- Before starting up the machine please carefully read the operating manual you receive as well as further separate instructions for additional implements or attachment parts and observe them in all aspects of your work.
- The machine may be used, maintained and repaired only by persons who have been instructed by specialists.
- The machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or by persons lacking the required experience and knowledge.
- Please hand over the technical documentation to the new owner/operator on sale or rental of the device. Have the handover confirmed!
- The labels attached to the machine provide important information for safe operation. Renew labels that are no longer legible or present.
- With Hako-AntiBac® machine variants, the plastic inner surface of the solution and waste water tanks contains silver ions in nanoparticle form.
- Spare parts must be original spare parts to guarantee safety.

2.5 Operating safety instructions

Before putting into service

- Before initially starting up the machine, charge the battery used fully and appropriately with commissioning charge. Please observe the technical documentation of the charger and battery manufacturer which is enclosed with each lithium-ion battery. Hako GmbH assumes no liability for battery damage resulting from insufficient commissioning charge.
- Check the machine for operating safety before every start-up! Eliminate faults immediately.
- Before starting work, the operating staff must familiarise themselves with all equipment, operating and actuating elements as well as with their function.

During operation

- Sturdy and slip-proof shoes must be worn when working with the machine.
- Only those surfaces approved by the contractor or its authorised representative for use of the machine may be cleaned.
- When working with the machine, pay special attention to third persons, especially children.
- Only use detergents suitable for automatic machines (foam retarded). Observe the application, disposal and warning instructions provided by the detergent manufacturers.
- The machine is not suitable for removing liquids, dusts or materials that are dangerous to health, combustible or explosive. It is also prohibited to collect burning objects, e.g. glowing cigarettes.
- **Health hazard!** The collection of dry wood dust, e.g. beech and oak dust, is prohibited.
- **Warning!** The machine must not be used in potentially explosive atmospheres.
- The machine should only be used on level surfaces with a maximum slope of 2 %.
- Manipulating the switches and protective devices is prohibited.
- The operating and storage temperature of the machine is +2 °C to +40 °C.

After operation

- Remove the key when leaving the machine to prevent unauthorised use (only applies to machines with travel drive).
- After use, park the machine in a dry, indoor location with the cleaning tool and squeegee raised and with the waste water tank open.

2.6 Maintenance instructions

- Daily and weekly maintenance work must be done in accordance with the maintenance plan by the operating staff. In all other maintenance work, please contact your nearest Hako service centre.
- The maintenance work and maintenance intervals specified in the operating manual and service booklet must be complied with.
- Use suitable tools for cleaning and maintenance work.
- Have the machine checked for safe condition by an expert in accordance with the accident prevention regulations at appropriate intervals (at least once yearly) as well as after modifications or maintenance.
- Spare parts must at least comply with the technical requirements specified by the manufacturer! This is guaranteed by original spare parts.
- Disconnect the battery plug when working on the electrical system.
- When working in the area of the raised waste water tank, it must be completely opened to prevent unintentional closing.
- Turn the machine off for cleaning and maintaining the machine as well as before replacing parts.
- To prevent unauthorised use of the machine, remove the ignition key (only applies to machines with wheel drive).
- Cleaning the machine with a high-pressure cleaner or steam jet is not allowed.
- Application of aggressive and corrosive detergents is not allowed.
- After cleaning, let the machine air dry, e.g. over the weekend.
- Only put the machine into service when all the protective devices are attached and in protection position.

2.7 Information about special risks

Electrical system

- If the electrical system is faulty, always turn off the machine and eliminate the fault.
- Work on the electrical system may be done only in accordance with electrical engineering standards by a specialist trained for this work.
- Regularly inspect/check the electrical system of the machine. Defects such as loose connections, loose nuts of electrified bolts, electrical components or damaged cables must be eliminated immediately.
- Only use original fuses with the specified current. If stronger fuses are used, the electrical system can be destroyed and there can be fires.

Batteries

General notes

- Observe the operating manual and safety instructions provided by the battery manufacturer! The technical documentation is enclosed with the battery.
- Make sure the batteries are never fully discharged; recharge them as quickly as possible.
- Only use batteries approved by Hako GmbH at the intended position.
- Do not open, dismantle or mechanically damage the battery.
- Visually inspect the battery for external damage or leaks before putting it into service. Do not put defective batteries into service.
- Have the batteries replaced by Hako Service only.
- Only connect and disconnect the battery when the machine is turned off.

When connecting the battery, first connect the positive terminal and then the negative terminal. Disconnection of the battery is in reverse order.

- **Danger!** Make sure that the insulation of the battery cables is not damaged. The battery cable should not rub against anything. If the insulation is defective, no longer use the machine and have the battery cables replaced by a Hako service workshop or the Hako customer service immediately.
- **Risk of explosion!** Do not heat up the battery or place it in a fire.
- **Caution!** Always make sure that the battery is clean and dry to avoid creeping currents and corrosion damage. Protect the battery, in particular, against conductive contamination, e.g. metal dust.
- **Risk of short circuits and spark formation!** Never place tools or other electrically conductive objects on the battery!
- Do not allow the battery to come into contact with water or detergents.
Use a soft, slightly moist cloth for cleaning the battery.
- For further safety instructions, see Hako supplementary sheet 88-60-2556 *Information for drive batteries*.

Charging of the battery

- Only use the correct charger for the battery.
- Keep the charging connections free from dirt, moisture and metal parts.
- Only charge the battery in well-ventilated, dry rooms.
- Do not place the battery plug on the battery during charging!

Behaviour in the event of faults or damage

- Do not continue to use or store damaged or defective batteries.
- In case of contact with leaking electrolyte, immediately clean skin with water and consult a doctor if necessary.

Storage

- Store fully charged gel batteries in a dry, frost-free room.

Additional safety instructions for lithium-ion batteries

- Interim charging can significantly increase the operating times of the machine and does not damage the battery.
- The battery is put into sleep mode for transport journeys and longer storage times. Pressing a button on the battery cancels sleep mode.
- **Risk of fire!** In the event of deformation, bloating, smoke development, odour or leakage of liquids, turn off the machine immediately and do not use it any longer. Notify Hako Service.
- In the event of a fire, keep a safe distance and notify the fire brigade.
- In the event of a fire, do not use water to extinguish the fire! Only use suitable fire extinguishers (fire class D or special extinguishing granulate).
- A state of charge of approx. 30-50 % is ideal for longer storage times.
- Store the battery in a cool, dry place away from heat sources.
- Do not store the battery near combustible materials.

Power connection and mains plug

Danger!

- Only connect the machine to an electrical connection installed by an electrician in accordance with IEC 60364-1.
- We recommend connection to a fused socket with a residual current circuit breaker (max. 30 mA).
- We recommend use of splash water protected sockets according to DIN VDE 0620-1.
- Make sure that the socket is dry!
- Only touch the mains plug and the mains cable with dry hands.
- Never insert the mains plug into the socket when the floor is wet or damp.
- Never dip the mains cable or mains plug in water or other liquids or clean it under running water.
- Damp mains plugs or mains plugs that have become wet must no longer be used. Water can enter the mains plug. Only qualified electricians must carry out recommissioning.
- Check the mains cable regularly for damage. If damage is detected, the machine must no longer be used. Have a qualified electrician replace the mains cable.
- Make sure that no water or liquid can come into contact with live parts of the machine. If water has still entered parts, immediately disconnect the mains plug and have the machine checked by the authorised Hako Service.

2.8 Environmental protection instructions and disposal

NOTE

In other countries, the corresponding national regulations must be complied with.

If the end of use of the machine or of its components is reached and they are handed over for scrapping, the components must be correctly disposed of. Further information about disposal is available through the competent local authorities and the authorised Hako dealers.



Do not dispose of products with this symbol in the domestic waste. They must be disposed of at municipal collection points or via the manufacturer.



Recycle used materials with this symbol according to their labelling and do not dispose of them in domestic waste.

- Observe the applicable laws and local regulations when disposing of dirt, waste water and detergents, also see the German Water Resources Law (WHG).
- Used batteries with the recycling symbol contain reusable commodities. In accordance with the symbol showing the crossed-out garbage bin, these batteries must not be disposed of in the domestic waste. Return and recycling have to be arranged with the authorised Hako dealer as required in § 6 and § 8 of the German battery law (BattG).
- Observe the local regulations when disposing of the AntiBac® tanks, e. g. take the AntiBac® tanks to a suitable disposal site or incineration plant.

2.9 Labels on the machine

The following safety and instruction labels are affixed to the machine in a clearly visible and legible manner.

Renew safety and instruction labels that are no longer legible or present.

The following figures serve as general orientation! Illustrations may differ from your machine.



Fig. 1

- | | |
|----------------------------|---|
| 1 Hako company logo | 7 Label: QR code |
| 2 Label: Machine type | 8 Label: AGR (Campaign for Healthier Backs) |
| 3 Type plate | 9 Label: Read the operating manual |
| 4 Label: Detergent dosing | 10 Label: 24 V |
| 5 Yellow dot | 11 Label: Only maintenance-free batteries |
| 6 Label: Waste water drain | |



Hako company logo

The company logo is located at the front on the waste water tank.



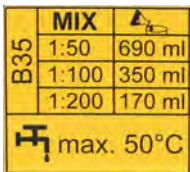
Label: Machine type

The label is located on both sides of the solution tank.



Type plate

The type plate is located on the right-hand side of the machine in front of the wheel.



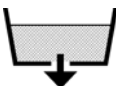
Label: Detergent dosing

The label is located on the fresh water filling opening.



Label: Yellow dot

The yellow dot is located on the cover of the fresh water filter.



Label: Waste water drain

The label is located on the waste water drain hose.



Label: QR code

The QR code is located on the electronics cover.

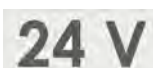


Label: AGR (Campaign for Healthier Backs)



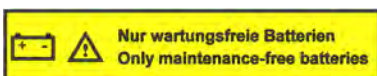
Label: Read and observe the operating manual, maximum permissible slope of 2 %, do not use a high-pressure cleaner or steam cleaner to clean the machine

The label is located on the electronics cover.



Label: 24 V

The label is located in the battery compartment.



Label: Only maintenance-free batteries

The label is located in the battery compartment.

3 Use

3.1 Overviews of the machine

This section contains an overview of the most important components of the machine.

The following figures serve as general orientation! Illustrations may differ from your machine.

3.1.1 Front and interior view



Fig. 2

- | | |
|--|-------------------------|
| 1 Vacuum system | 6 Cleaning unit |
| 2 Exhaust air filter (option) | 7 Fresh water ball cock |
| 3 On-board dosing system (option) | 8 Cover seal |
| 4 Battery | 9 Coarse dirt sieve |
| 5 Solution tank filling opening with cover | 10 Suction filter |

3.1.2 Rear and side view

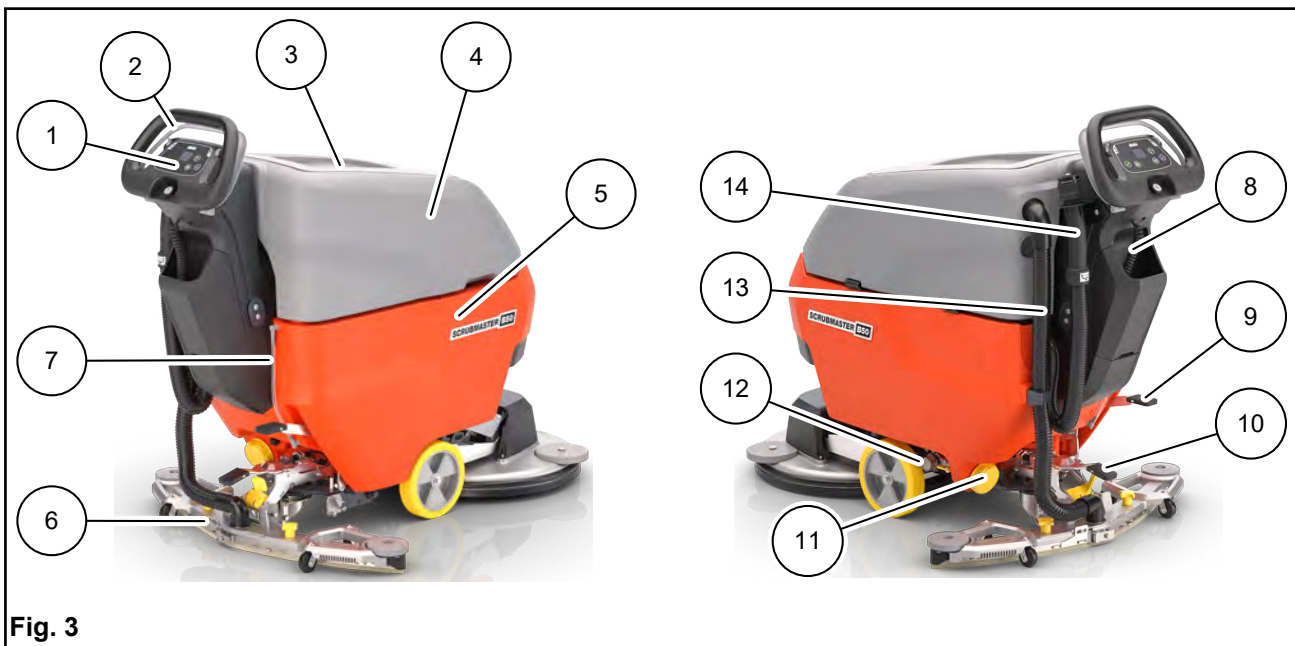


Fig. 3

- | | |
|-----------------------------------|---------------------------------------|
| 1 Control panel | 8 Mains plug – on-board charger |
| 2 Manual drive lever | 9 Foot pedal – brush unit lift system |
| 3 Tank cap – waste water tank | 10 Foot pedal – squeegee lift system |
| 4 Waste water tank | 11 Revision opening – solution tank |
| 5 Solution tank | 12 Fresh water filter |
| 6 Squeegee | 13 Suction hose |
| 7 Level indicator – solution tank | 14 Drain hose – waste water |

3.1.3 Control panel

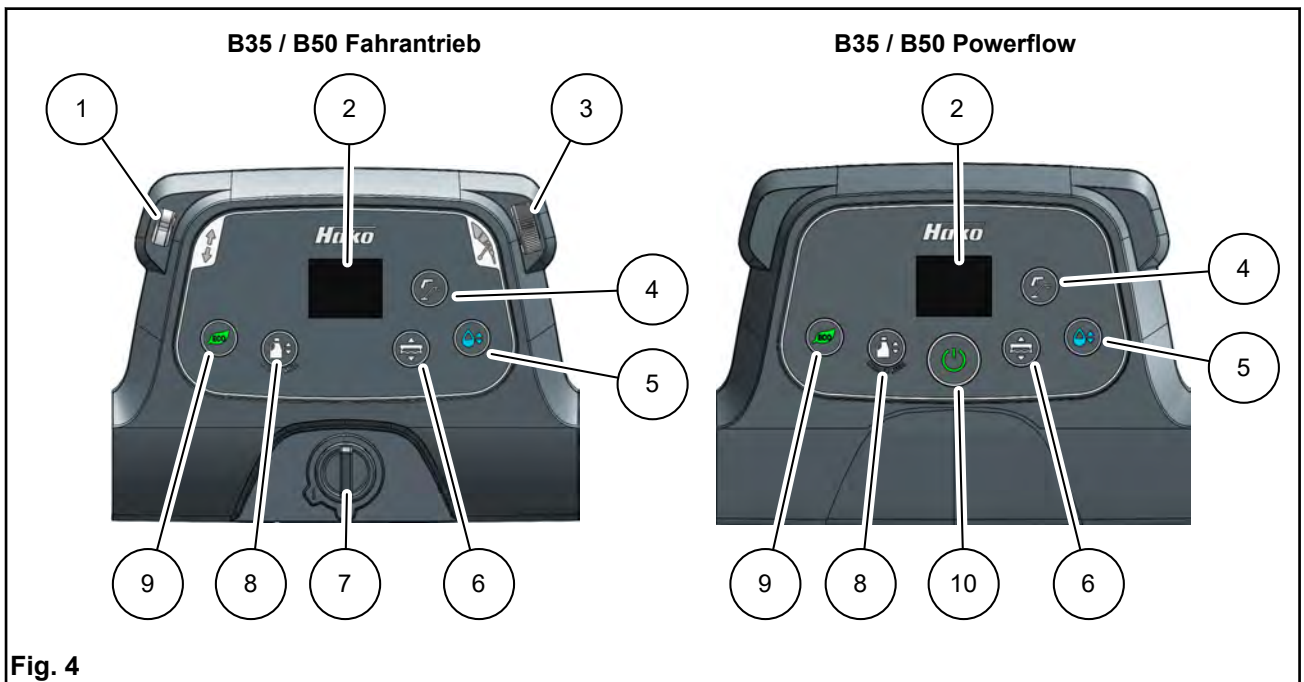


Fig. 4

- | | |
|---|--------------------------------------|
| 1 Rocker switch – driving direction selection | 6 Button – brush decoupling/coupling |
| 2 Display panel | 7 Key switch ON/OFF |
| 3 Continuously variable speed controller | 8 Button – dosing system |
| 4 Button – tool connection | 9 Button – ECO mode |
| 5 Button – fresh water dosing | 10 Button – ON/OFF |

3.2 Controls and display elements

The individual functions of the buttons on the control panel and the symbols on the display panel are described below.

3.2.1 Buttons and controls on the control panel

Button – ON/OFF



The machine is turned on and off with this button.

- Press the button for approx. 3 seconds: The machine is turned on.
- Press the button for approx. 3 seconds: The machine is turned off.

Key switch



The electrical system is switched on or off with the key switch.

- Position I: The machine is turned on.
- Position 0: The machine is turned off. The key can be removed.

Rocker switch – driving direction



The driving direction of the machine is preselected with the rocker switch.

- Rocker switch to the front: Forwards gear
- Rocker switch to the rear: Reverse gear

To change the driving direction, brake the machine, then select the new driving direction and start again.

Controller – driving speed



The speed of the machine is adjusted continuously using the controller. When cornering, the speed is automatically reduced.

Button – decoupling/coupling cleaning tool

The cleaning tool is decoupled and coupled with this button.

Decoupling the cleaning tool

Raise the cleaning unit. Keep the button pressed until the timer on the display panel has elapsed. The cleaning tool is decoupled automatically.

Coupling the cleaning tool

Raise the cleaning unit. Position the cleaning tool in a central position in relation to the cleaning unit. Lower the cleaning unit. Keep the button pressed until the timer on the display panel has elapsed and the cleaning tool has been coupled.

Button – tool operation (option)

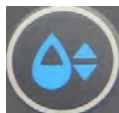
The spray nozzle or the manual suction or spray suction tool can be switched on and off with this button.

Press the button once to switch on. The last active tool is switched on. To change the tool, press the button again until the corresponding symbol appears on the display panel. Pressing the button again switches tool operation off.

Button – ECO mode

ECO mode is switched on and off with this button.

When ECO mode is switched on, the volume is reduced by lowering the brush speed and suction power.

Button – fresh water dosing

This button can be used to set or switch off the fresh water quantity in four levels and the maximum water supply when the cleaning unit is lowered.

The first four levels are either speed-dependent or fixed, depending on the presetting. The fourth level is followed by the level with the maximum possible water supply.

Press the button to increase the water quantity by one level. After reaching the maximum water supply, press the button again to deactivate the water supply. Pressing the button again activates the water supply with the lowest water quantity (level 1).

Button – on-board dosing system

When the cleaning tool is lowered and the water supply has been switched on, the following actions can be performed with this button:

On-board dosing system ON/OFF

Pressing the button switches the on-board dosing system on or off. After switching on, the last mixing ratio selected is active.

Setting the mixing ratio of the detergent

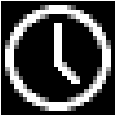
When the on-board dosing system is switched on, the mixing ratio of the detergent can be selected in the following ratios by double-clicking the button:

1:700
1:300
1:100
1:50

Fast filling

After changing the detergent canister, press the button for approx. 10 seconds to convey the detergent to the cleaning tool.

3.2.2 Symbols on the display panel

Symbol	Function	Remark
	Battery charging state indicator	The number of bars shown indicates the charging state: - Five green bars visible: Battery is 100 % charged. - Four green bars visible: Battery is approx. 80 % charged. - Three green bars visible: Battery is approx. 60 % charged. - Two green bars visible: Battery is approx. 40 % charged. - One green bar visible: Battery is approx. 20 % charged. - One yellow bar visible: Battery is approx. 10 % charged. - One red bar visible: Battery is approx. 5 % charged. Charge the battery immediately! At 0 %, the battery is empty and all cleaning functions are switched off.
	Operating hours meter	The number next to the symbol indicates the number of operating hours.
	Service case	If a service case occurs, the symbol appears with a code in the upper row of the display panel, alternating with the standard display. In addition, the affected unit is symbolically displayed in red on the display panel.
	ECO mode	The machine works in ECO mode.
	Vacuum system	The squeegee is lowered and the vacuum system is active.
	Tool operation	The manual suction or spray suction tool is active.
	Tool operation	The spray nozzle is active.
	Cleaning unit	The cleaning unit is lowered. It is possible to change the settings for water dosing and the on-board dosing system.
	Decoupling of the cleaning tool	The symbol appears while the cleaning tool is being decoupled. At the same time, a timer counts down until the cleaning tool has been decoupled.
	Coupling of the cleaning tool	The symbol appears while the cleaning tool is being coupled. At the same time, a timer counts down until the cleaning tool has been coupled.
	On-board dosing system	The on-board dosing system is active. The set mixing ratio for the detergent appears next to the symbol.
	On-board dosing system	The detergent in the canister is empty.
	Water dosing	The selected water supply level can be read.

Symbol	Function	Remark
	Water dosing	The maximum water supply is set.
	Charging process	The symbol appears while the battery is being charged. At the same time, the green bars in the battery symbol flash until the battery is fully charged.

3.3 Controls at the machine



Fig. 5

- | | |
|---------------------------------|--------------------------------|
| 1 Manual drive lever | 6 Lever – squeegee |
| 2 Drain hose – waste water | 7 Handle – squeegee |
| 3 Mains plug – on-board charger | 8 Fresh water draining opening |
| 4 Foot pedal – cleaning tool | 9 Fresh water ball cock |
| 5 Foot pedal – squeegee | 10 Fresh water filling opening |

Manual drive lever

Pulling the manual drive lever towards you starts the water supply and the drive of the cleaning tools when the cleaning tool is lowered.

Drain hose – waste water

The waste water tank is drained using the drain hose.

Mains plug – on-board charger

The mains connection supplies voltage to the on-board charger.

Foot pedal – cleaning tool

Actuating the foot pedal lowers the cleaning tool. Actuating the foot pedal again raises the cleaning tool.

Foot pedal – squeegee

Pressing down the foot pedal lowers the squeegee and activates the vacuum system. To raise the squeegee, press the pedal upwards.

Lever – squeegee

Pulling the manual lever towards you unlocks the squeegee.

Handle – squeegee

The squeegee can be folded over for cleaning using the two handles.

Fresh water draining opening

The draining opening is used to drain the fresh water and clean the solution tank.

Fresh water ball cock

The ball cock can be used to open or close the water supply from the solution tank to the cleaning tool.

To close the water supply, turn the horizontal ball cock downwards by 90 °.

Fresh water filling opening

After removing the cap, fill the solution tank with fresh water via the filling opening.

Optionally, the solution tank can be filled via the *automatic filling unit*.

3.4 Mode of operation

In cleaning mode, the cleaning solution is supplied from the solution tank to the cleaning tool. When the machine is moving forwards, the loosened dirt is absorbed by the squeegee with the help of the cleaning solution and conveyed into the waste water tank.

The individual components of the machine are explained below.



Fig. 6

- | | | | |
|---|------------------|---|---------------------------------|
| 1 | Waste water tank | 5 | Suction hose |
| 2 | Solution tank | 6 | Level indicator – solution tank |
| 3 | Cleaning tool | | |
| 4 | Squeegee | | |

Solution tank

The solution tank **Fig. 6-2** has a capacity of 35/50 litres. The current level can be determined via the transparent hose **Fig. 6-6**.

On-board dosing system (option)

The on-board dosing system is used for optimum dosing of the detergent. It mixes fresh water with detergent in the selected ratio and supplies it to the cleaning tool.

The on-board dosing system is installed under the waste water tank, next to the battery. To access the components, the waste water tank must first be emptied and opened.

Cleaning tool

The floor is cleaned by the rotating cleaning tool **Fig. 6-3** and the supply of cleaning solution. The cleaning tool can be decoupled and coupled for maintenance purposes using a button on the control panel.

Squeegee

The squeegee **Fig. 6-4** withdraws the waste water using the sealing strips. The suction turbine conveys the waste water from the squeegee through the suction hose **Fig. 6-5** into the waste water tank.

A manual suction tool is optionally available for water absorption in difficult-to-reach positions.

Waste water tank

The waste water tank **Fig. 6-1** has a capacity of 35/50 litres. An acoustic signal generated by an increased speed of the suction turbine indicates that the waste water tank is full. The waste water tank must be emptied immediately.

Power flow drive

The angle at which the cleaning tool is positioned generates a power flow or a propulsive force. The angle is adjusted by pre-tensioning the tension spring.

A Hako service workshop can adjust the pre-tension of the tension spring, thereby increasing the propulsive force.

Travel drive

At machines with a travel drive, the driving speed, driving direction and dynamic braking are controlled by the electronic drive control.

3.4.1 Batteries

NOTE

Read and observe chapter *Safety instructions*!

NOTICE

Battery damage possible!

When using other batteries which have been approved by Hako, the BMS must be reset. The settings of the BMS must only be carried out by a Hako service workshop!

The various machine types are equipped with different maintenance-free battery systems.

- Gel battery 76 Ah
- Gel battery 105 Ah
- Lithium-ion battery 54 Ah
- Lithium-ion battery 100 Ah

Battery management system (BMS)

All Scrubmaster B400 variants are equipped with a BMS. The BMS ensures that the battery system is monitored and secure.

The BMS is responsible for:

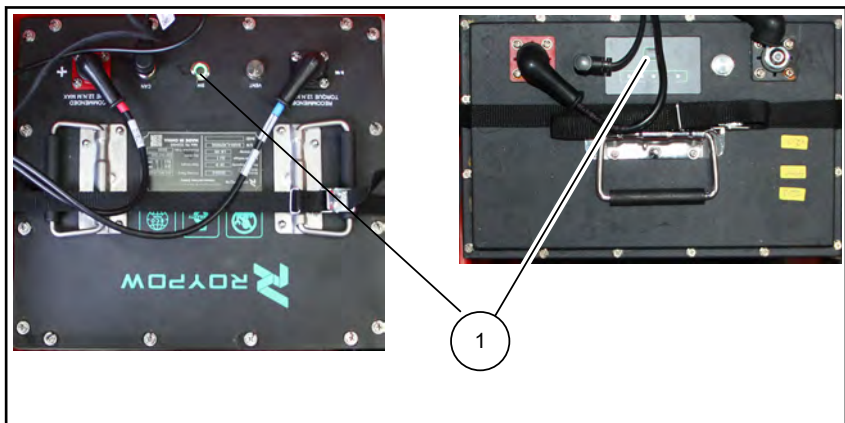
- determining the battery charging state during operation
- switching off the cleaning functions when the discharge limit has been reached to protect the battery against total discharge

Replacing the batteries

Observe the following instructions:

- The battery should only be replaced by qualified service personnel!
For reasons of safety, we recommend that an authorised Hako service workshop carries out these tasks.
- Only use batteries approved by Hako at the intended position!
- When changing the type of battery, the battery holder in the battery compartment might have to be adjusted to prevent slipping.

Switching lithium-ion batteries off and on



1 On/Off button

Lithium-ion batteries must be switched off for transport and longer storage times.

Proceed as follows:

1. Press the button **1-1** once to switch off the battery.
The LED no longer lights up; the battery is switched off.
2. Press the button again to switch on the battery.
The green LED lights up (if present).

4 Operation

4.1 Initially starting up the machine

NOTICE

Battery damage possible!

Before initially starting up the machine, charge the batteries used fully and appropriately with commissioning charge. Hako assumes no liability for battery damage resulting from insufficient commissioning charge.

Notes on starting up the machine.

- Check the machine for operating safety before every start-up! Eliminate faults immediately.
- Before using the machine, make yourself familiar with all the equipment, controls and actuating elements as well as with their functions.

NOTE

Read and observe chapter *Safety instructions*.

Proceed as follows:

1. Install the cleaning tool and the squeegee.
2. Carry out a commissioning charge of the battery before first use.
3. Fill the solution tank and add detergent according to the detergent manufacturer's specifications.

4.2 Daily start-up

Proceed as follows:

1. Check the parking area of the machine for signs of leaks. Cables and tanks must not show any sign of leaks or damage. If leaks or damage occur, have damaged components replaced by a Hako service workshop.
2. Check the cleaning tools for coarse parts, remove them if necessary.
3. Check the battery charge and recharge the battery as required, see chapter **6 Maintenance and servicing**.
4. Fill the solution tank and add detergent according to the detergent manufacturer's specifications, see section **4.2.1 Filling the solution tank**
5. Empty the waste water tank if necessary.

4.2.1 Filling the solution tank

Fill the solution tank before commencing work or as required, see level indicator. If the suction turbine becomes louder, the solution tank is empty and should be filled immediately.

⚠ WARNING

The detergent may come into contact with the skin and eyes.

- Observe the safety instructions of the detergent manufacturer.

NOTE

In order to avoid contamination of the drinking water by backflow, the requirements of DIN EN1717 must be adhered to for filling the solution tank.

NOTE

Only use detergents suitable for automatic machines (foam retarded). We recommend use of our cleaning and care agents specifically developed for the machine. These products meet the requirements of the German Detergent and Cleaning Agent Act (WRMG). Observe correct dosing of the detergent. Strong foam formation is a sign of excessive dosing and impairs machine operation.

Filling the solution tank with a hose



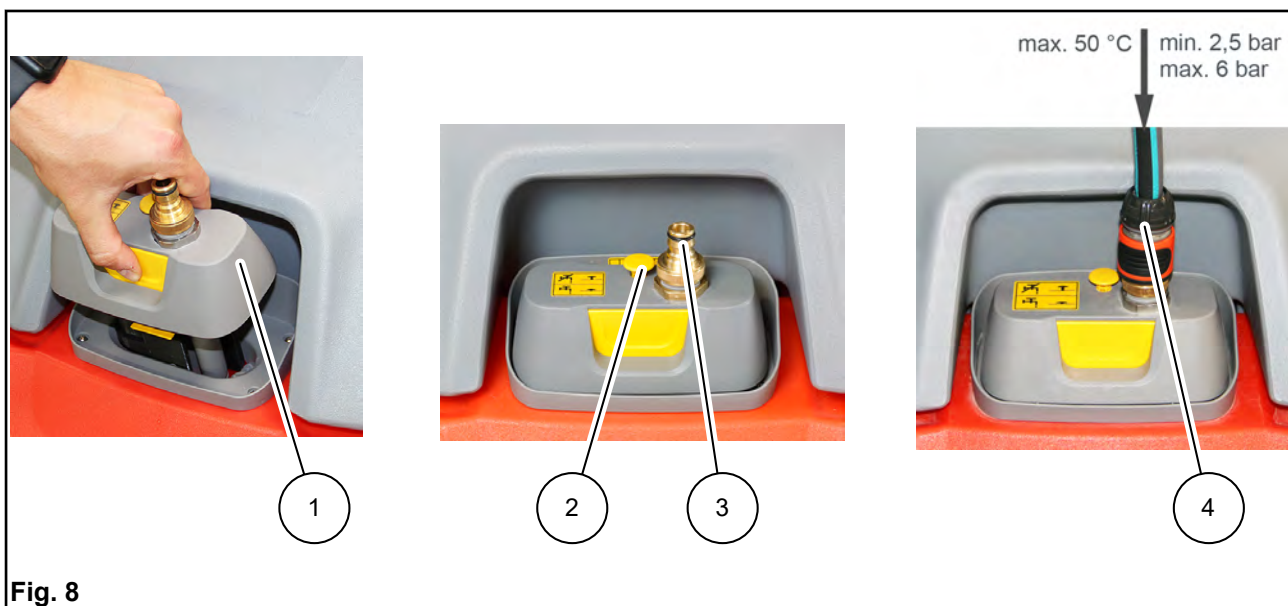
Fig. 7

- 1 Filling opening cap
- 2 Dosing table

- 3 Level indicator – solution tank

Proceed as follows:

1. Place the machine on a level surface.
2. Press the yellow grips on the filling opening cap **Fig. 7-1** together and remove the cap.
3. Fill the solution tank approximately three-quarters full using a hose or spray nozzle (maximum water temperature 50 °C).
4. Add detergent to the tank according to the manufacturer's regulations. Observe the dosing table **Fig. 7-2** at the filling opening! Fill the solution tank with fresh water up to the maximum filling level, see level indicator **Fig. 7-3**.
5. Replace the cap until it engages audibly.

Filling the solution tank with the automatic filling unit (option)**Fig. 8**

- 1 Automatic filling unit
2 Indicator knob

- 3 Connecting piece
4 Hose with quick coupling

Optionally, the solution tank can be filled via the automatic filling unit.

Proceed as follows:

1. Slightly press the automatic filling unit **Fig. 8-1** together at the yellow grips and insert it into the filling opening until it engages audibly. Ensure that the installation position is correct, see figure.
2. Fit the hose with the quick coupling (3/4 inches) **Fig. 8-4** on the connecting piece **Fig. 8-3**. Do not yet open the water line!
3. Press down the indicator knob **Fig. 8-2**.
4. Open the water line – water starts to flow.
5. The filling unit switches off automatically when the tank is full. The indicator knob has popped out again.
6. Close the water supply and remove the hose with the quick coupling.
Use a water line fitted with a stop valve!

4.2.2 On-board dosing system (option)

NOTE

Read and observe chapter *Safety instructions*!

NOTICE

Only use detergents suitable for automatic machines (foam retarded). We recommend use of our cleaning and care agents specifically developed for the machines. These products meet the requirements of the German Detergent and Cleaning Agent Act (WRMG).

Observe the safety instructions of the detergent manufacturer.

Mop up spilled detergent immediately.

When replacing the canister, we recommend using the original canister (2 litres) supplied by the detergent manufacturer. If the supplied canister is to be filled with detergent, it must be labelled with the safety instructions of the manufacturer.

- Personnel:
 - Operating staff
- Personal protective equipment:
 - Protective gloves
 - Protective goggles

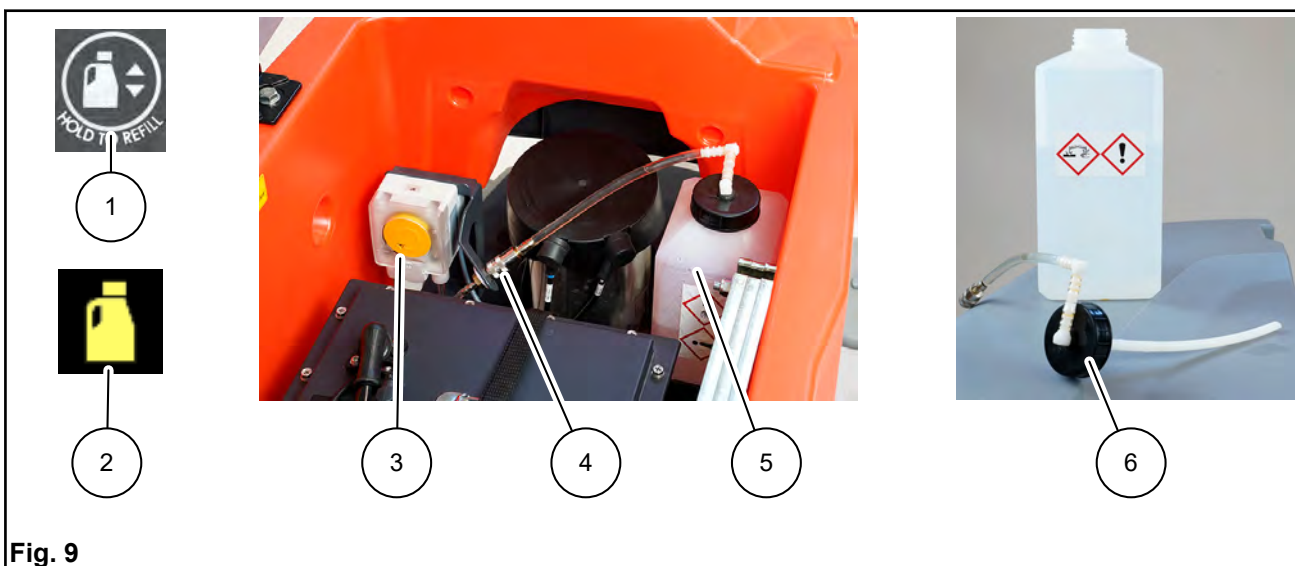


Fig. 9

- 1 Button *on-board dosing system*
- 2 Symbol *canister empty*
- 3 Hose pump

- 4 Quick coupling
- 5 Installed canister
- 6 Cap with hoses

Change the canister with detergent at the latest when the *canister empty* symbol **Fig. 9-2 Symbol canister empty** appears on the display panel.

Putting into service and canister change

The following points must be run through for putting into service and after every canister change.

Proceed as follows:

1. Release the quick coupling **Fig. 9-4** by pulling the lower ring of the coupling upwards.
2. Unscrew the cap **Fig. 9-6** from the empty canister and replace it with an original canister with detergent.
3. Screw on the cap, place the canister into the machine **Fig. 9-5** and re-connect the quick coupling.
4. Turn on the machine, lower the cleaning unit and switch on the water supply.
5. Press and hold the *on-board dosing system* button **Fig. 9-1** on the control panel for approx. 10 seconds. The detergent is fed to the cleaning unit via the dosing pump.

The on-board dosing system is ready for operation.

Setting the mixing ratio

The mixing ratio of detergent/fresh water can be selected in 4 steps.

Mixing ratio	Detergent in the fresh water
1:700	0.1 %
1:300	0.3 %
1:100	1 %
01:50	2 %

Proceed as follows:

1. Turn on the machine, lower the cleaning unit and switch on the water supply.
2. Briefly press the *on-board dosing system* button **Fig. 9-1** on the control panel.
The on-board dosing system is switched on. The corresponding symbol and the last mixing ratio set appear on the display.
3. **Change the mixing ratio:**
Set the desired mixing ratio by pressing the *on-board dosing system* button twice.

Switch off the on-board dosing system:

Briefly press the *on-board dosing system* button.

4.3 Cleaning

NOTE

Read and observe chapter *Safety instructions!*

WARNING

Health hazard

Dust may be stirred up and inhaled.

- ▶ Work mode only permitted in conjunction with water.

Start cleaning mode of the B35/B5 with power flow as follows:

1. Press the *ON/OFF* button for approx. 3 seconds.
 - ▶ *The machine is ready for use.*
2. Lower the squeegee with the foot pedal.
 - ▶ *The vacuum system is active.*
3. Lower the cleaning tool with the foot pedal.
4. Set the fresh water level with the *fresh water dosing* button.
5. The mixing ratio of the detergent can be changed by double-clicking the *on-board dosing system* button.
6. If required, start ECO mode with the *ECO mode* button.
7. Actuate the manual drive lever.
 - ▶ *The cleaning tool drive and the water supply are switched on.*
8. Push the machine in the desired direction. The power flow of the cleaning tool drive supports the propulsion.

Start cleaning mode of the B35/B5 with travel drive as follows:

1. Turn the key switch from position 0 to I.
 - ▶ *The machine is ready for use.*
2. Lower the squeegee with the foot pedal.
 - ▶ *The vacuum system is active.*
3. Lower the cleaning tool with the foot pedal.
4. Set the fresh water level with the *fresh water dosing* button.
5. The mixing ratio of the detergent can be changed by double-clicking the *on-board dosing system* button.
6. If required, start ECO mode with the *ECO mode* button.
7. Select the driving direction with the rocker switch.
8. Actuate the manual drive lever.
 - ▶ *The cleaning tool drive and the water supply are switched on.*
9. Set the speed with the rotary knob.

Note: The driving speed of the machine is automatically reduced when cornering.

4.3.1 Cleaning tips

Sweep the floor before carrying out wet cleaning. This not only enhances the cleaning effect but also reduces wear of the cleaning tool.

If the floors are really dirty or wax needs to be removed, treat the floor twice. In the first step, scrub the floor with a detergent suitable for the degree of soiling; the squeegee remains raised for this.

Leave the detergent for approx. 5 to 10 minutes; subsequently scrub the floor again. Then vacuum with the squeegee.

NOTE

Only use detergents suitable for automatic machines (foam retarded). We recommend use of our cleaning and care agents specifically developed for the machine. These products meet the requirements of the German Detergent and Cleaning Agent Act (WRMG).

Observe correct dosing of the detergent. Correct dosing saves money and protects the environment. Strong foam formation is a sign of excessive dosing and impairs machine operation.

4.4 After cleaning

NOTICE

Damage possible!

Do not use a high-pressure cleaner or steam cleaner to clean the machine.

NOTE

Observe applicable laws and local regulations when disposing of detergents!



Fig. 10

- | | |
|-----------------|-----------------|
| 1 Squeegee | 3 Tank cap open |
| 2 Cleaning tool | |

After cleaning, proceed as follows:

1. Drive to a suitable maintenance location.
2. Turn off the machine.
3. Carry out all the prescribed daily or weekly maintenance work.
4. Raise the squeegee **Fig. 10-1**.
5. Raise the cleaning tool **Fig. 10-2**.
6. Open the tank cap.
7. Park the machine in a dry indoor location, with the waste water tank cap open **Fig. 10-3**.

4.5 Loading and transporting

Information on loading and transporting:

- When loading, the machine must be pulled backwards up the ramp.
Remove the cleaning tools beforehand.
- The ramp angle must not exceed 18 %.
- Empty the solution tank and the waste water tank before transporting the machine!
- Switch off lithium-ion batteries before transport.
- When loading the machine, observe its weight.
- Risk of skidding! Drive extremely carefully, especially on wet ramps!

WARNING

Danger due to uncontrolled movement!

- ▶ When transported on a vehicle or trailer, the machine must be secured against tilting and rolling away. To do so, lower the cleaning unit and firmly secure the machine at the front and rear with tension belts.

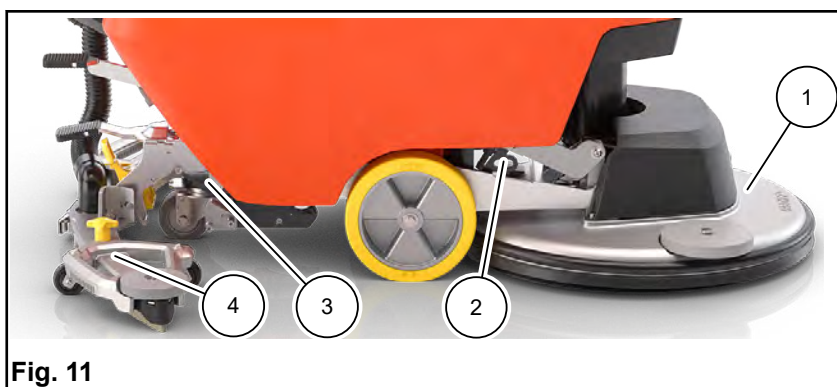


Fig. 11

- | | | | |
|---|------------------------|---|-----------------------|
| 1 | Cleaning unit | 3 | Rear attachment point |
| 2 | Front attachment point | 4 | Squeegee |

To secure the machine, proceed as follows:

1. Lower the cleaning unit **Fig. 11-1**.
2. Remove the squeegee **Fig. 11-4** and secure it separately.
3. Firmly secure the machine at the front **Fig. 11-2** and rear **Fig. 11-3** attachment points with tension belts.

5 Technical data

Name	Unit	B35 Basic TB460	B35 Premium TB460	B50 Basic TB560	B50 Premium TB560
Length of machine with squeegee	mm	1270	1270	1350	1350
Width of machine without/with squeegee	mm	520/780	520/780	590/880	590/880
Height of machine	mm	1090	1090	1090	1090
Working widths					
Cleaning tool	mm	460	460	560	560
Squeegee	mm	760	760	860	860
Sweeping capacity					
Theoretical sweeping capacity	m²/h	1840	2070	2240	2520
Working speed	km/h	4	4.5	4	4.5
Permissible slope	%	2	2	2	2
Weights					
Weight (empty, without batteries, without water pump)	kg	78	87.5	79	88
Total weight when ready for operation, depending on the existing options with the following batteries:					
Gel 76 Ah	kg	174-178	183-188	189-194	199-203
Gel 105 Ah	kg	n.a.	n.a.	209-214	219-223
Lithium 54 Ah	kg	150-154	161-163	165-170	175-179
Lithium 100 Ah	kg	n.a.	n.a.	183-184	192-193
Tank contents					
Solution tank	Litre	35	35	50	50
Waste water tank	Litre	35	35	50	50
Cleaning tools					
Quantity of cleaning tools	Piece	1	1	1	1
Speed of cleaning tools (standard/ECO)	rpm	180	180	180	180
Pressure of cleaning tool without/with additional pressure	kg	25/29	25/29	27/31	27/31
Electrical system					
Nominal voltage	V	24	24	24	24
Nominal output (max.) (P), incl. water pump	kW	1060	1348	1217	1491
Type of protection	IP X3				

Noise emission values

	Standard operation without ex-haust air filter	Standard operation with ex-haust air filter	ECO mode without ex-haust air filter	ECO mode with ex-haust air filter
Scrubmaster B35 with rotating brush 460				
The sound power level (LwAd) measured under the customary conditions of use according to DIN EN 60335-2-72 with measuring standard DIN EN ISO 3744 is:	81 dB(A)	80 dB(A)	75 dB(A)	73 dB(A)
The sound pressure level (LpA) (at the ear of the operating staff) measured under the customary conditions of use according to DIN EN 60335-2-72 with measuring standard DIN EN ISO 11201 is:	63 dB(A)	62 dB(A)	60 dB(A)	59 dB(A)
Measuring uncertainty (KpA)	1 dB(A)	1 dB(A)	2 dB(A)	1 dB(A)

	Standard operation without ex-haust air filter	Standard operation with ex-haust air filter	ECO mode without ex-haust air filter	ECO mode with ex-haust air filter
Scrubmaster B50 with rotating brush 560				
The sound power level (LwAd) measured under the customary conditions of use according to DIN EN 60335-2-72 with measuring standard DIN EN ISO 3744 is:	80 dB(A)	79 dB(A)	75 dB(A)	74 dB(A)
The sound pressure level (LpA) (at the ear of the operating staff) measured under the customary conditions of use according to DIN EN 60335-2-72 with measuring standard DIN EN ISO 11201 is:	63 dB(A)	62 dB(A)	57 dB(A)	57 dB(A)
Measuring uncertainty (KpA)	1 dB(A)	1 dB(A)	2 dB(A)	1 dB(A)

Vibration

The weighted effective value of the acceleration to which the upper limbs (hand - arm) are subjected, determined in accordance with DIN EN ISO 5349-1, is as follows under the customary conditions of use:	$\leq 2.5 \text{ m/s}^2$
---	--------------------------

6 Maintenance and servicing

NOTE

Read and observe section *Safety instructions!*

This section describes the daily and weekly maintenance work to be carried out by the operating staff. For all other maintenance work, see **service booklet**, please contact your Hako service workshop.

All warranty claims become void in the event of damage resulting from non-compliance with these instructions.

Please always state the serial number in all enquiries and spare parts orders, see type plate.

NOTE

Maintenance parts in the machine are marked with yellow areas.

6.1 Maintenance plan

Daily
Clean the waste water tank, coarse dirt sieve and suction filter.
Check the cover seal of the waste water tank, clean if necessary.
Check the battery charge, charge if necessary.
Fill the solution tank and check the detergent level.
Check the squeegee, clean if necessary.
Check the drain hose of the waste water tank for soiling, clean if necessary.
Weekly
Clean the machine as required.
Check the sieve insert in the fresh water filter, clean or replace if necessary.
Check the brushes/pads, clean if necessary.
Check the brushes/pads for wear, replace if necessary.
Check the sealing strip at the cleaning unit for wear, have it replaced by Hako Service if necessary.
Check the sealing strips at the squeegee for wear, turn or replace if necessary.
Clean the suction hose.
Clean the automatic filling unit (option)
Check the exhaust air filter (option) for soiling, replace if necessary
Trial run and function test

6.2 Waste water tank

6.2.1 Emptying the waste water tank



Fig. 12

- | | | | |
|---|--------------------------|---|----------------------------------|
| 1 | Waste water tank | 4 | Cap |
| 2 | Drain hose – waste water | 5 | Original squeeze nozzle position |
| 3 | Bent squeeze nozzle | | |

NOTE

Observe applicable laws and local regulations when disposing of detergents!

Empty the waste water tank daily, as required or when an acoustic signal is output (increased suction turbine speed).

Personal protective equipment:

- Protective gloves
- Protective goggles

Proceed as follows:

1. Drive to a suitable disposal centre.
2. Turn off and park the machine, ensuring the drain hose reaches the drain in the ground.
3. Remove the drain hose from the holder, bend the squeeze nozzle in the front section and unscrew the cap.
4. Return the drain hose to its original position and empty the waste water tank fully.
5. Clean the waste water tank.

6.2.2 Cleaning the waste water tank



- 1 Drain hose – waste water
- 2 Suction hose
- 3 Coarse dirt sieve
- 4 Suction filter

- 5 Opening to suction hose
- 6 Inside of tank cap
- 7 Cover seal

Clean the waste water tank as required but at least once a day.

Personal protective equipment:

- Protective gloves
- Protective goggles

Proceed as follows:

1. Drive to a suitable disposal centre.
2. Turn off and park the machine, ensuring the drain hose and the suction hose reach the drain in the ground.
3. Empty the waste water tank, see
4. Open the tank cap.
5. Remove the coarse dirt sieve and clean it thoroughly.
6. Pull out the suction filter from the top and clean it thoroughly.
7. Rinse the waste water tank thoroughly.
8. Use the water hose to rinse the suction hose through the opening in the waste water tank.
9. Clean the tank cap from the inside and wipe the cap seal with a soft cloth. If the seal in the cap is damaged, have it replaced by Hako Service.
10. Installation is in reverse order. Make sure the drain hose is closed securely again.

6.3 Cleaning the solution tank

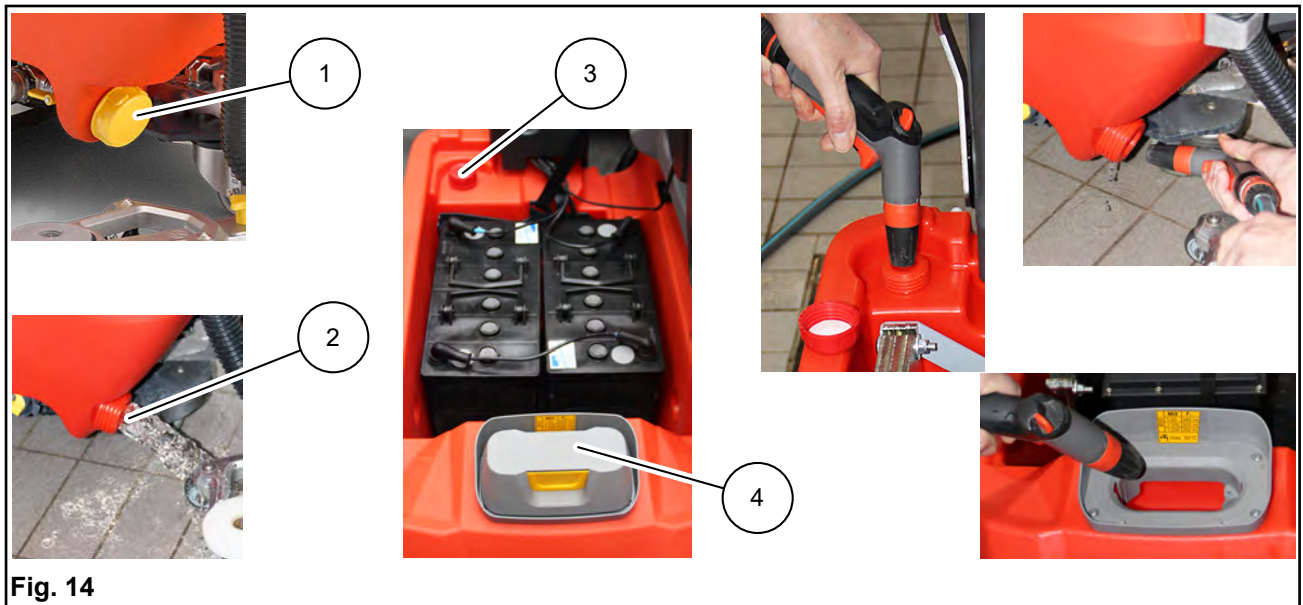


Fig. 14

- 1 Revision opening – solution tank
- 2 Draining the fresh water

- 3 Solution tank cleaning opening
- 4 Filling opening cap

Clean the solution tank as required but at least once a week.

Proceed as follows:

1. Drive to a suitable disposal centre.
2. Turn off the machine and park it, ensuring that the revision opening of the solution tank **Fig. 14-1** is near the drain in the ground.
3. Unscrew the yellow cap of the revision opening and drain the fresh water **Fig. 14-2**.
4. Empty the waste water tank and open it to the side.
5. Unscrew the red screw cap **Fig. 14-3**.
6. Remove the filling opening cap **Fig. 14-4**.
7. Thoroughly rinse the solution tank through all three openings using the spray nozzle.
8. After cleaning, close all three openings again with the corresponding caps and close the waste water tank.

6.4 Cleaning the fresh water filter

Check the filter sieve of the fresh water filter weekly and clean or replace it as required.

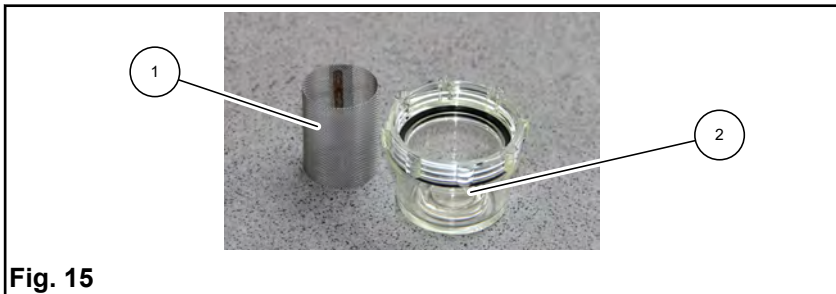


Fig. 15

1 Filter sieve

2 Filter cap

Proceed as follows:

1. Close the ball cock.
2. Turn and remove the filter cover.
3. Remove the filter sieve from the filter cover and clean it under running water. Replace the filter sieve as required.
4. Reinsert the filter sieve and filter cover.

6.5 Cleaning/replacing the cleaning tools



Fig. 16

1 Foot pedal – cleaning tool

2 Button – decoupling/coupling cleaning tool

3 Timer on display panel

4 Cleaning the cleaning tool

Clean the cleaning tool daily or replace it when worn. The brush must be replaced when the bristles measure less than 1.5 cm in length.

Proceed as follows:

1. Drive to a suitable washing place.
2. Turn on the machine and raise the cleaning unit with the foot pedal **Fig. 16-1**.
3. Press the *decoupling/coupling cleaning tool* button **Fig. 16-2** until the timer on the display panel **Fig. 16-3** has elapsed and the cleaning tool has been uncoupled.
4. Remove foreign particles from the cleaning tool and clean it thoroughly with fresh water **Fig. 16-4**.
5. Raise the cleaning unit with the pedal.
6. Place the cleaned or new cleaning tool in a central position underneath the cleaning unit.
7. Lower the cleaning unit with the pedal.
8. Press the *decoupling/coupling cleaning tool* button until the timer on the display panel has elapsed and the cleaning tool has been coupled.

6.6 Squeegee

Optimum vacuuming is achieved through:

- Clean and undamaged or not worn sealing strips
- Correct height adjustment of the sealing strips

6.6.1 Cleaning the squeegee

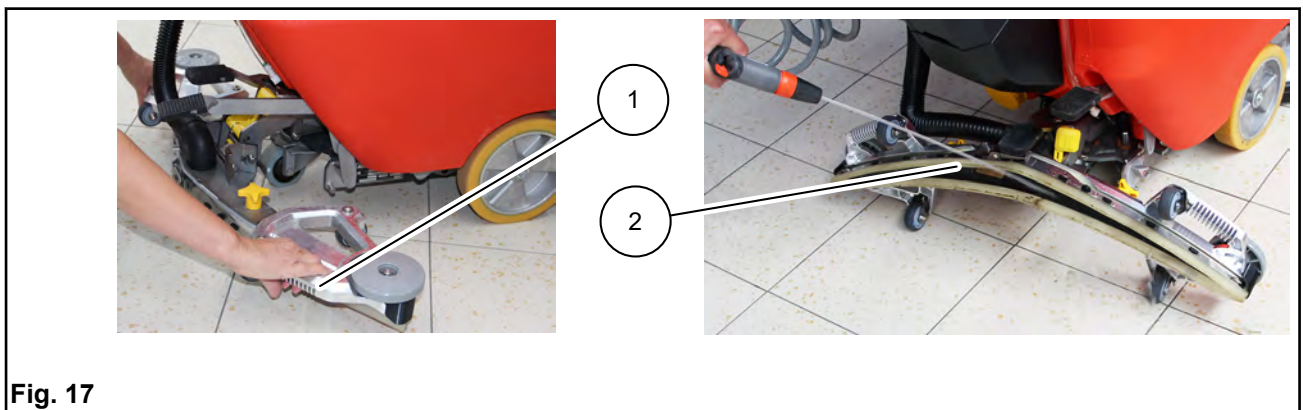


Fig. 17

1 Squeegee handles

2 Cleaning the squeegee

Clean the squeegee daily.

Proceed as follows:

1. Drive to a suitable washing place.
2. Turn off the machine.
3. Use the two handles to fold over the squeegee by 90° **Fig. 17-1**.
4. Remove foreign particles from the squeegee and clean it thoroughly with fresh water **Fig. 17-2**.
5. After cleaning, fold the squeegee back into its initial position.

6.6.2 Replacing the sealing strips

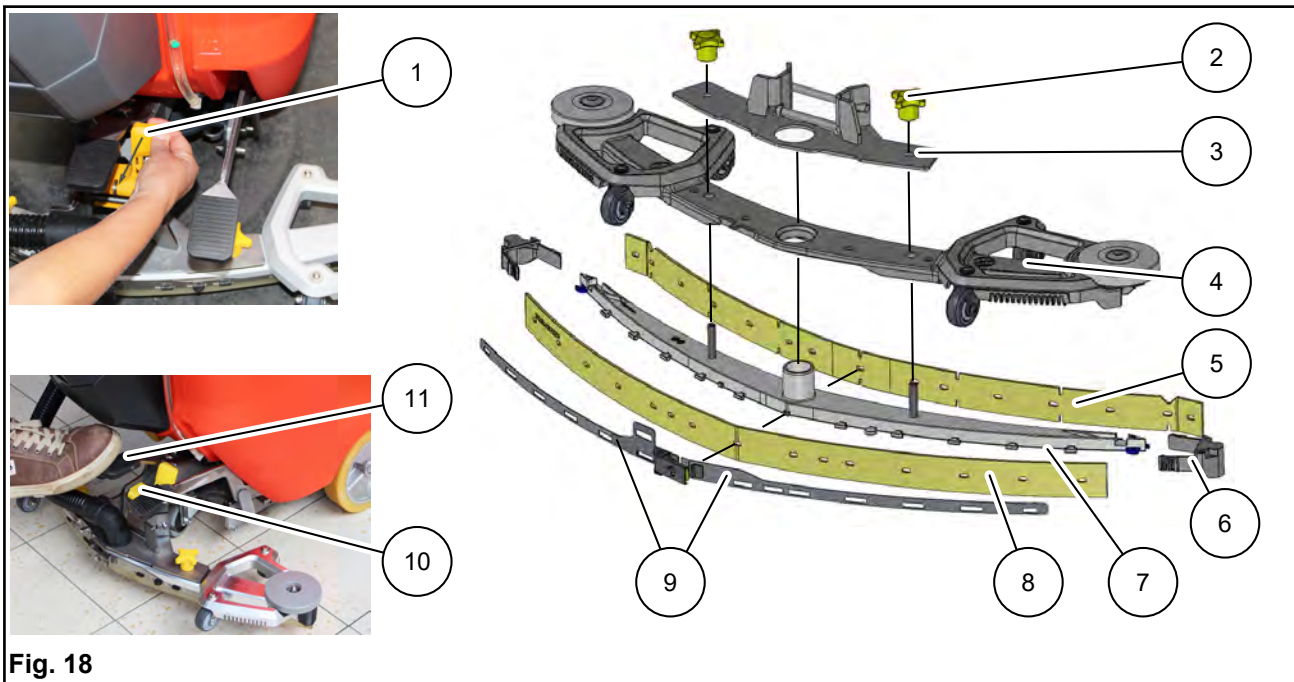


Fig. 18

- | | | | |
|---|---------------------|----|--------------------------|
| 1 | Lever – squeegee | 7 | Plastic body |
| 2 | Star-shaped handles | 8 | Sealing strip |
| 3 | Adapter plate | 9 | Tension strap |
| 4 | Squeegee body | 10 | Squeegee holding fixture |
| 5 | Slot strip | 11 | Foot lever – squeegee |
| 6 | Protective caps | | |

Check the sealing strip and the slot strip at the squeegee weekly for wear and damage. If the used sealing edge of the sealing strip is worn or damaged, turn or replace the sealing strip. Each sealing strip can be used four times before it needs replacing.

Proceed as follows:

1. Pull the *squeegee lever* **Fig. 18-1** backwards to unlock the squeegee.
2. Pull the suction hose from the squeegee.
3. Loosen the star-shaped handles **Fig. 18-2** and remove the adapter plate **Fig. 18-3**.
4. Press together the protective caps **Fig. 18-6** and pull them out.
5. Release and remove the tension strap **Fig. 18-9**.
6. Remove the squeegee body **Fig. 18-4** from the top.
7. Remove the sealing strip **Fig. 18-8** and the slot strip **Fig. 18-5** from the plastic body **Fig. 18-7**.
8. Before turning or replacing the sealing strip, thoroughly clean the plastic body!
9. Assembly is in reverse order.
10. Place the assembled squeegee underneath the squeegee holding fixture **Fig. 18-10**.
11. To couple the squeegee, actuate the *squeegee foot pedal* **Fig. 18-11**.

6.6.3 Adjusting the height of the sealing strips

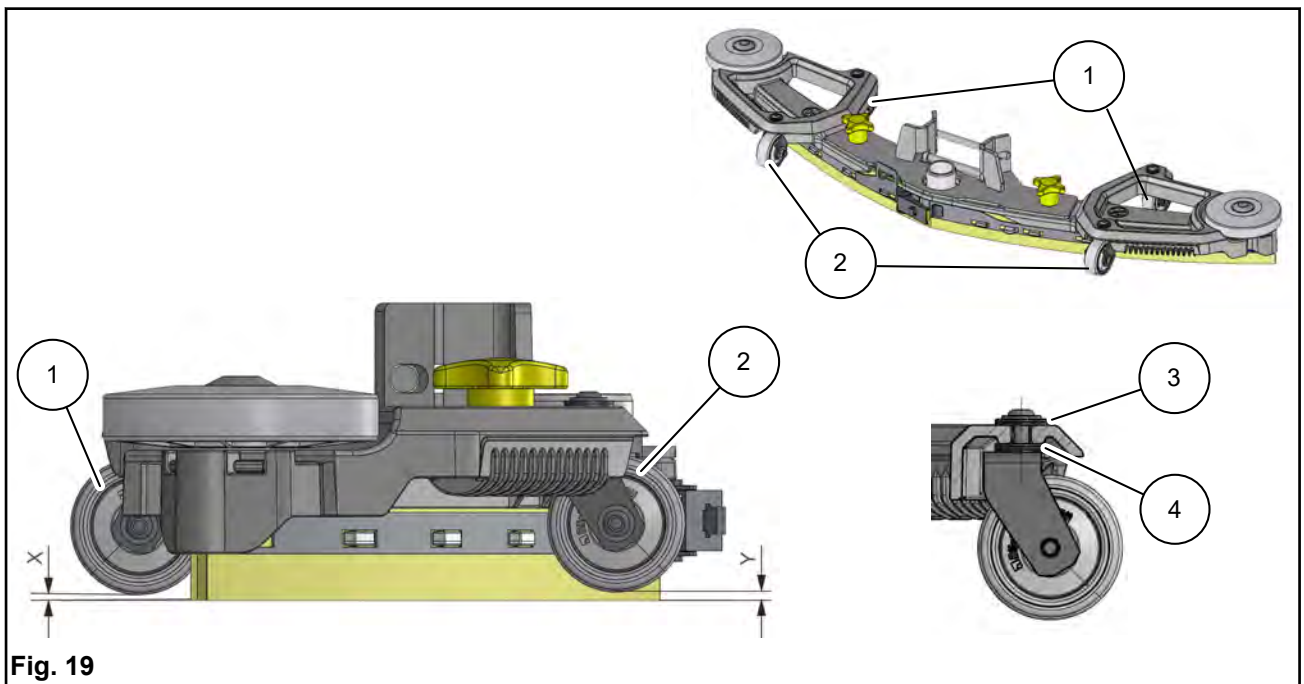


Fig. 19

- 1 Front supporting roller
- 2 Rear supporting roller

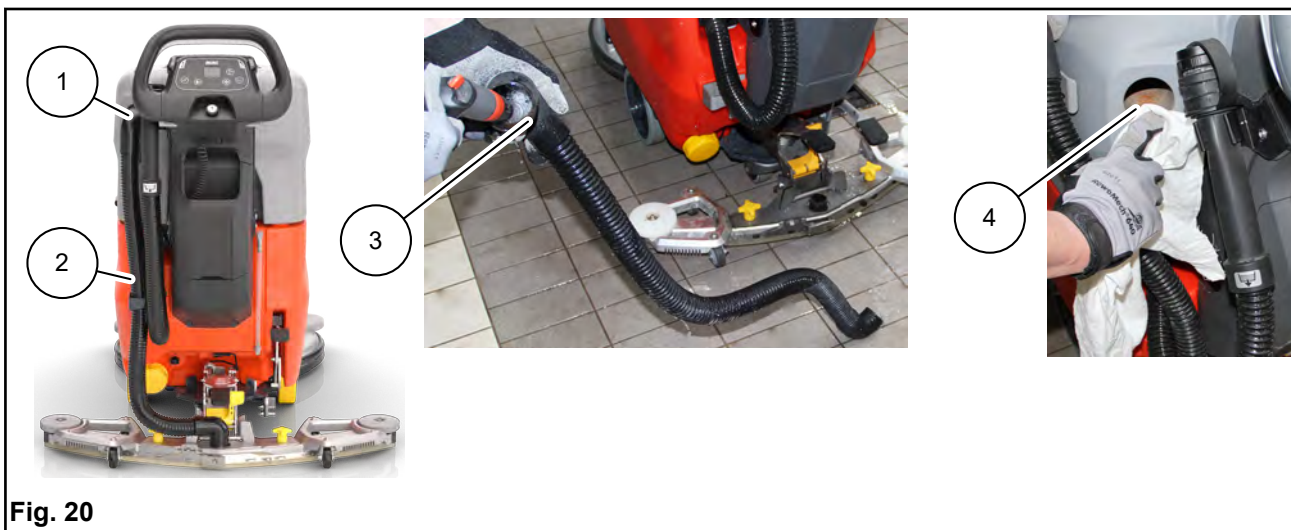
- 3 Top spacer washers
- 4 Bottom spacer washers

The height adjustment (X at front, Y at rear) of the supporting rollers has been set to respectively 2 and 3 mm in the factory. If striping occurs, readjust the distance between the supporting rollers and the lower edge of the sealing strip, see following table.

To adjust the height of the supporting rollers, remove the spacer washers from underneath the squeegee body **Fig. 19-4** and add them above it **Fig. 19-3** – or vice versa.

Distance of supporting roller to floor (X at front)	Distance of supporting roller to floor (Y at rear)	Use
1 mm (max. 2 mm)	2 mm (max. 3 mm)	Very smooth floor surfaces, e.g. coated screed, PVC, linoleum
2 mm (max. 3 mm)	3 mm (max. 4 mm)	Standard setting
3 mm (max. 4 mm)	4 mm (max. 5 mm)	Very uneven floor surfaces, e.g. poorly laid tiles (water does not drain off)

6.7 Cleaning the suction hose



- | | |
|-----------------|----------------------------|
| 1 Vacuum system | 3 Rinsing the suction hose |
| 2 Suction hose | 4 Vacuum system opening |

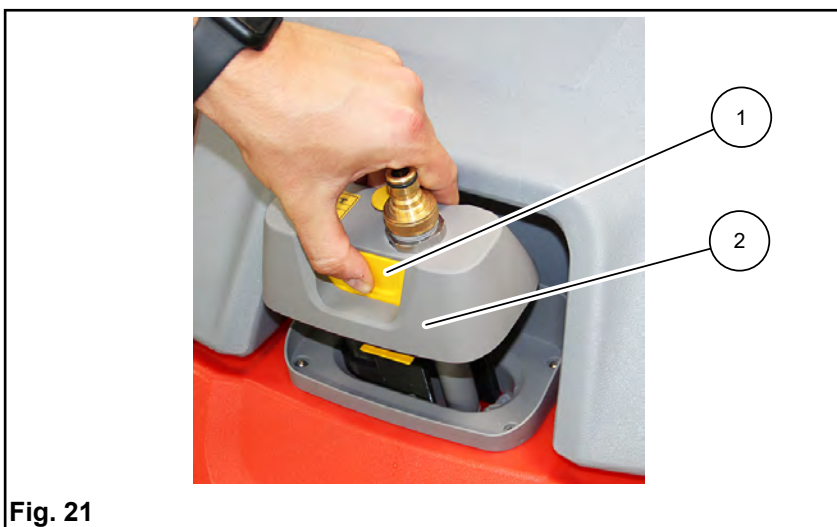
Clean the solution tank as required but at least once a week.

Proceed as follows:

1. Drive to a suitable disposal centre.
2. Turn off the machine and pull the suction hose from the squeegee and the vacuum system.
3. Remove coarse dirt from the suction hose and rinse it thoroughly.
4. Clean the vacuum system with a cloth.

Installation is in reverse order.

6.8 Cleaning the automatic filling unit (option)



- | | |
|----------------|--------------------------|
| 1 Yellow grips | 2 Automatic filling unit |
|----------------|--------------------------|

Clean the automatic filling unit once a week and check it for damage and proper functioning.

Proceed as follows:

1. Drive to a suitable washing place.
2. Slightly press the automatic filling unit together at the yellow grips and remove it from the filling opening.
3. Thoroughly clean the automatic filling unit with water and check it for damage and proper functioning.
4. Slightly press the automatic filling unit together at the yellow grips and re-insert it into the filling opening until it engages audibly. Ensure that the installation position is correct, see figure.

6.9 Charging the battery

6.9.1 Checking the charging state



The charging state of the battery is indicated on the display panel during operation. The number of bars shown indicates the charging state, see section **3.2.1 Buttons and controls on the control panel**.

6.9.2 Charging the battery with the on-board charger

⚠ DANGER

- ▶ Avoid smoking, fire or naked light in the vicinity of batteries. Ensure that there is sufficient ventilation when charging the battery.
- ▶ Danger of explosion due to short circuits and spark formation! Never place tools or other electrically conductive objects on the battery!

NOTICE

- ▶ Before initially starting up the machine, charge the battery used fully and appropriately with commissioning charge. Please observe the technical documentation for the charger and the battery. Hako assumes no liability for battery damage resulting from insufficient commissioning charge.
- ▶ Never leave batteries discharged, always recharge them immediately.

NOTE

The battery should be charged after each use. The battery can be charged at any time, but must, however, be charged at the latest after the cleaning functions have been switched off (this happens when the displayed charging state is 0 %).

If the machine is not used for a longer period of time, charge the battery occasionally.

When charging, the battery specifies the charging currents and the end of charge to the charger.

Interim charging of lithium-ion batteries is possible at any time.

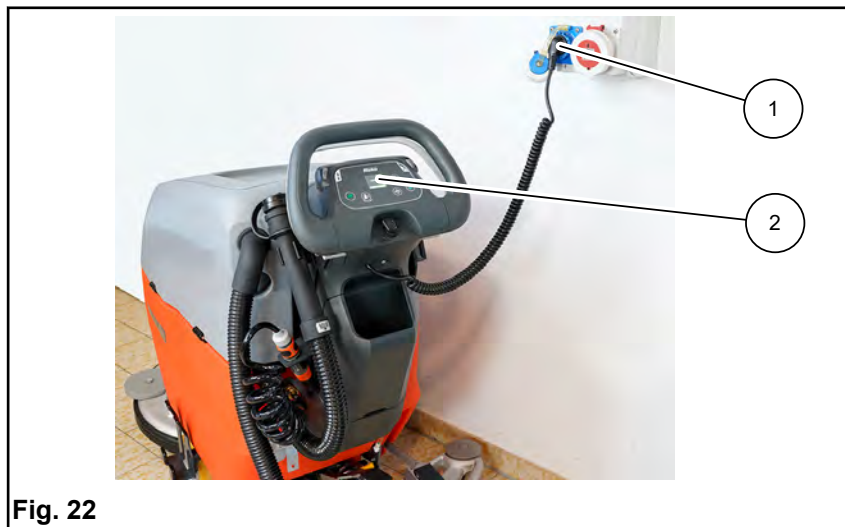


Fig. 22

1 Mains plug – on-board charger

2 Charging process display panel

Proceed as follows:

1. Place the machine on a level surface and turn it off.
2. Connect the mains plug to a 230 V socket **Fig. 22-1**.
3. The charging process starts automatically.
During the charging process, the charging progress is displayed in the display panel **Fig. 22-2**.

6.10 Service information

In case problems occur with the machine, a ten-digit service code is output in the display panel in addition to the service indicator (tool key).

Eliminate the cause or note down the service code and inform your authorised Hako service partner.

If the cause has been eliminated, the fault must be acknowledged via the OFF/ON button.

Service code	Fault	Cause	Remedy
A1.004.001 A1.007.004	Cleaning tool stops.	Foreign particles block the cleaning tool.	Inspect the cleaning tool for foreign particles and remove them if necessary.
		Foreign particles or an excessively rough floor activate overload protection of the electronics.	Turn the machine off, wait 5 minutes if necessary and then restart it. Avoid an excessively rough floor.
	Noise development at the cleaning tool	Cleaning tool is not positioned correctly in the holder.	Insert the cleaning tool correctly, contact the customer service if necessary.
A1.005.001	Suction turbine stops.	- Foreign particles in the suction turbine - Suction turbine is damaged	Contact the customer service.
A1.009.003 A1.014.001	No water supply	Water valve defective, no audible click.	Contact the customer service.
		Water valve defective, no audible click.	Check whether the solution tank is positioned correctly.
		Fresh water filter is clogged or not screwed in fully.	Clean the fresh water filter.
A1.001.001	Power level is faulty.	Cables on battery poles are loose or detached.	Contact the customer service.
		Battery is not charged.	Charge the battery.
A1.006.007	Battery fault	- Communication error - Incorrect type of battery	Contact the customer service.
G1.INT.001 G1.INT.500	Battery fault	Cables on battery poles are loose or detached.	Contact the customer service.
		Battery is not charged.	Charge the battery.
		The battery is too hot or too cold.	Bring the battery to operating temperature.

7 Attachments and options

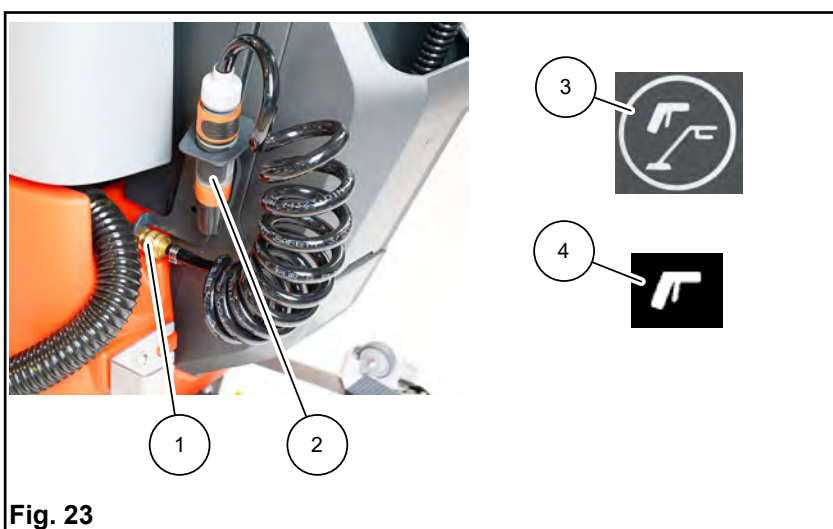
7.1 Spray tool

The spray tool is used to flush the solution and waste water tank.

WARNING

The detergent may come into contact with the skin and eyes.

- Wear protective gloves and protective goggles when there is detergent in the solution tank and you are using the spray tool.



- | | | | |
|---|------------------|---|------------------------------|
| 1 | Water connection | 3 | Button <i>tool operation</i> |
| 2 | Spray tool | 4 | Symbol – spray tool |

Proceed as follows:

1. Connect the hose of the spray tool to the water connection of the machine **Fig. 23-1**.
2. Hook the spray tool into the holder **Fig. 23-2**.
3. Press the *tool operation* button **Fig. 23-3** on the control panel to switch the water supply on and off.
4. If necessary, press the *tool operation* button again until the spray tool symbol **Fig. 23-4** appears on the display panel.
5. For switching on and off and to adjust the water flow, turn the front section of the spray tool.

7.2 Manual suction tool

The manual suction tool is used for manually cleaning difficult-to-reach points.

The *tool bar* (7748.53) and the *bottom tool holder* (7748.56) options are additionally required to attach the manual suction tool.

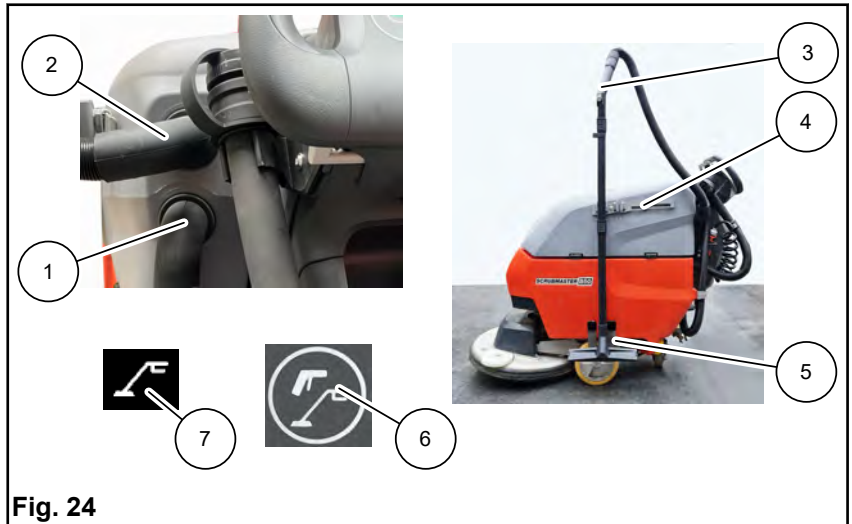


Fig. 24

- | | | | |
|---|--------------------------------|---|---|
| 1 | Suction hose park position | 5 | Bottom tool holder |
| 2 | Manual suction tool connection | 6 | Button <i>tool operation</i> |
| 3 | Manual suction tool | 7 | Symbol – manual suction tool/spray suction tool |
| 4 | Tool bar | | |

Proceed as follows:

1. Reconnect the suction hose in the park position **Fig. 24-1**.
2. Insert the connection of the manual suction tool into the vacuum system opening **Fig. 24-2**.
3. Hook the manual suction tool **Fig. 24-3** into the tool bar **Fig. 24-4** and the bottom tool holder **Fig. 24-5**.
4. Press the *tool operation* button **Fig. 24-6** on the control panel to switch the manual suction tool on and off.
5. If necessary, press the *tool operation* button again until the manual suction tool/spray suction tool symbol **Fig. 24-7** appears on the display panel.

7.3 Spray suction tool

The spray suction tool is used for manually cleaning difficult-to-reach points.

The *tool bar* (7748.53) and the *bottom tool holder* (7748.56) options are additionally required to attach the spray suction tool.

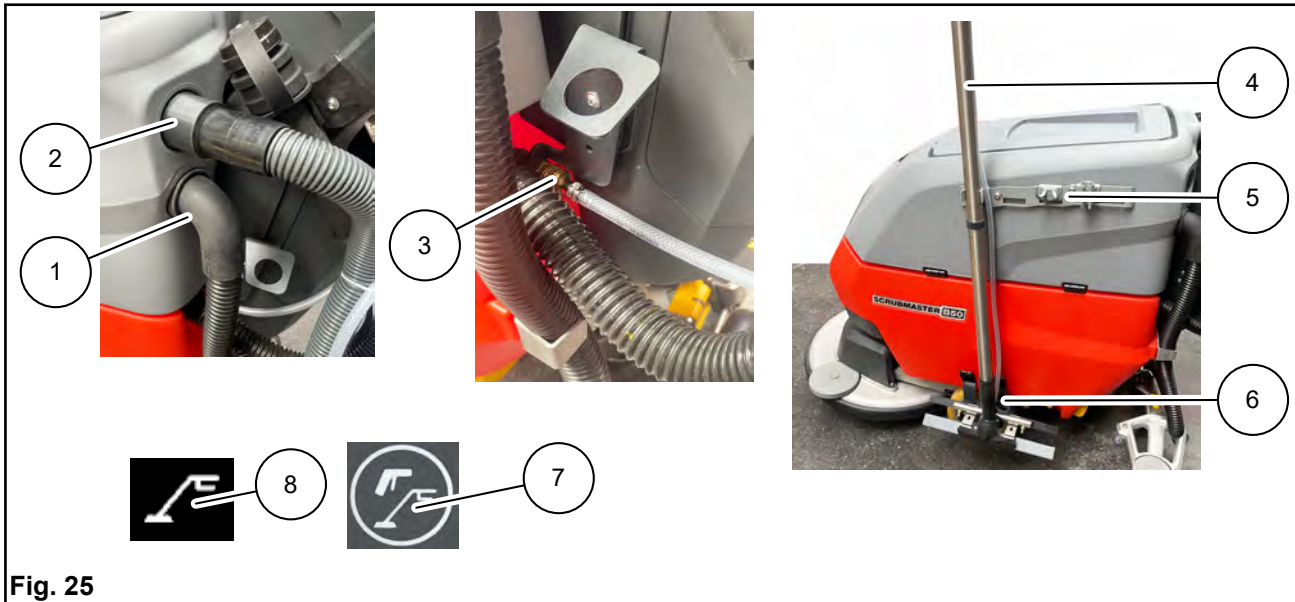


Fig. 25

- | | |
|------------------------------|---|
| 1 Suction hose park position | 5 Bottom tool holder |
| 2 Spray suction tool adapter | 6 Button <i>tool operation</i> |
| 3 Spray suction tool | 7 Symbol – manual suction tool/spray suction tool |
| 4 Tool bar | |

Proceed as follows:

1. Reconnect the suction hose in the park position **Fig. 25-1**.
2. Insert the adapter of the spray suction tool into the vacuum system opening **Fig. 25-2**.
3. Connect the water connection of the spray suction tool to the water connection of the machine **Fig. 25-3**.
4. Hook the spray suction tool **Fig. 25-4** into the tool bar **Fig. 25-5** and the bottom tool holder **Fig. 25-6**.
5. Press the *tool operation* button **Fig. 25-7** on the control panel to switch the manual suction tool on and off.
6. If necessary, press the *tool operation* button again until the manual suction tool/spray suction tool symbol **Fig. 25-7** appears on the display panel.

7.4 Squeegee holder

The squeegee holder is used to attach the released squeegee if, e.g., narrow sections, such as checkout areas, are passed through.

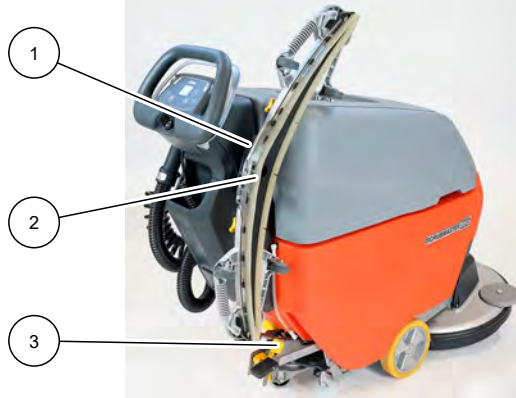


Fig. 26

- | | |
|-------------------|--------------------|
| 1 Squeegee holder | 3 Lever – squeegee |
| 2 Squeegee | |

Proceed as follows:

1. Release the squeegee **Fig. 26-2** with the *squeegee lever* **Fig. 26-3**.
2. Hook the squeegee into the squeegee holder **Fig. 26-1**.

7.5 Exhaust air filter class H

The exhaust air filter removes even the smallest particles from the exhaust air, ensuring a clean working environment during wet cleaning. In addition, the noise level of the machine is reduced slightly.



Fig. 27

- | | |
|------------------------------|----------------------|
| 1 Exhaust air filter housing | 2 Exhaust air filter |
|------------------------------|----------------------|

Proceed as follows:

1. Open the housing **Fig. 27-1**.
2. Insert the exhaust air filter **Fig. 27-2** and close the housing again.

8 Declaration of Conformity

EC Declaration of Conformity for Machinery (2006/42/EC)

Hako GmbH
Hamburger Straße 209-239
23843 Bad Oldesloe, Germany

declares in sole responsibility that the following products,

- **Scrubmaster B35 type: 7746**
- **Scrubmaster B50 type: 7747**

to which this declaration relates correspond with the relevant basic safety and health requirements of EC Directive 2006/42/EC as well as the requirements according to 2014/30/EC and 2014/53/EC.

The following standard(s) and technical specifications was/were referred to for the correct implementation of the safety and health requirements named in the EC Directive:

- **EN 60335-2-72**
- **EN 55012**
- **EN 61000-6-2**

Name of the authorised person who compiles the technical documents for Hako:

Ludger Lüttel

Bad Oldesloe, 22.04.2026



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