 Please read and comply with these original instructions prior to the initial operation of your appliance and store them for later use or subsequent owners.

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Safety instructions

Before using the appliance for the first time, read and observe these operating instructions and the accompanying brochure: Safety information for brush cleaning units and spray-extraction units, No. 5.956-251.0.

The device may only be operated when the cover and all lids are closed.

The appliance must only be operated on surfaces that do not exceed the max. permitted incline (see "Technical Specifications").

WARNING

Do not use the appliance on inclines.

Safety Devices

Safety devices serve to protect the user and must not be rendered in operational or their functions bypassed.

Safety Switch

If the safety switch is released, the brush drive shuts off.

Danger or hazard levels

DANGER

For an immediate danger which can lead to severe injuries or death.

WARNING

For a possibly dangerous situation which could lead to severe injuries or death.

CAUTION

Pointer to a possibly dangerous situation, which can lead to minor injuries.

ATTENTION

Pointer to a possibly dangerous situation, which can lead to property damage.

Function

The scrubbing vacuum cleaner is used for the wet cleaning of level floors.

- The device can be easily adjusted to the respective cleaning task by adjusting the water volume and the detergent volume.

The detergent dosing unit can be adjusted via the addition in the tank.

- The device is equipped with a fresh water and a waste water tank (25 litres each). These allow an effective cleaning with a long usage life.

- A working distance of 430 mm will improve the efficiency when you are using the appliance for a long period.

- Propulsion is accomplished by manually pushing the appliance and is supported by the rotation of the brushes. The brush drive is powered by two batteries.

- Batteries can be selected depending on the configuration (refer to Chapter "recommended batteries")

Note:

The appliance can be equipped with various accessories depending on the cleaning task.

Please request our catalogue or visit us on the Internet at www.kaercher.com.

Proper use

Use this appliance only as directed in these operating instructions.

- The appliance may only be used for the cleaning of hard surfaces that are not sensitive to moisture and polishing operations.

- The appliance is not suited for the cleaning of frozen grounds (e.g. in cold stores).

- The appliance may only be equipped with original accessories and spare parts.

- The appliance is not suited for the use in potentially explosive environments.

- The machine should not be used to suck in inflammable gases, undiluted acids or solvents.

This includes petrol, thinning agents or hot oil that can form an explosive mixture when it comes in contact with sucked air. Do not use acetone, undiluted acids and solvents as they are aggressive towards the materials from which the appliance is made.

- The machine has been approved for use on surfaces with max. gradients as listed under "Technical Specifications".

- This appliance is suited for the commercial use, e.g. in hotels, schools, hospitals, factories, shops, offices, and rental companies.

- The appliance was designed for the cleaning of floors inside or of covered surfaces.

Environmental protection



The packaging material can be recycled. Please do not throw the packaging material into household waste; please send it for recycling.



Old appliances contain valuable recyclable materials that should be recycled properly. Batteries, oil, and similar substances must not be released into the environment. Please dispose of your old appliances using appropriate collection systems.

Information on ingredients (REACH)

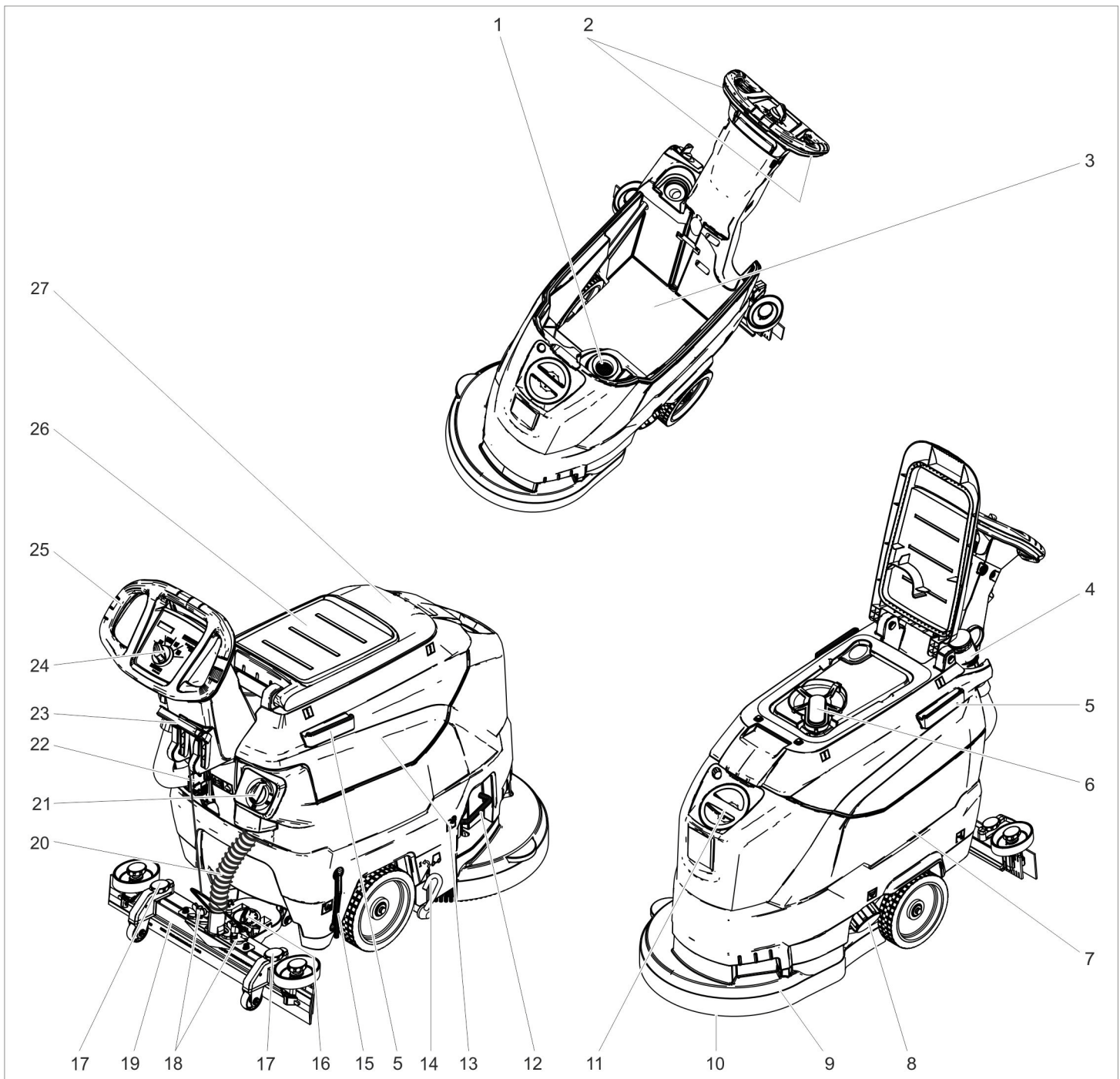
The latest information on ingredients can be found under:

www.kaercher.de/REACH

Warranty

The warranty terms published by our competent sales company are applicable in each country. We will repair potential failures of your accessory within the warranty period free of charge, provided that such failure is caused by faulty material or defects in fabrication. In the event of a warranty claim please contact your dealer or the nearest authorized Customer Service center. Please submit the proof of purchase.

Operating and Functional Elements



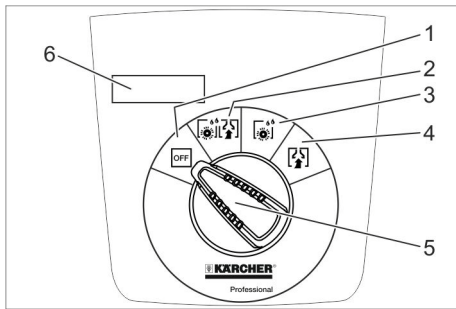
- | | |
|--|---|
| 1 Fluff filter | 20 Suction hose |
| 2 Safety button | 21 Water quantity regulator |
| 3 Battery * | 22 Battery socket |
| 4 Drain hose for wastewater with dosing unit | 23 Vacuum bar lowering lever |
| 5 Holding rail for home base | 24 Operator console |
| 6 Float | 25 Push handle |
| 7 Fresh water tank | 26 Storage surface for cleaning set "Home base box" |
| 8 Fresh water tank lock | 27 Cover waste water tank |
| 9 Cleaning head | |
| 10 Disc brush | |
| 11 Fresh water reservoir filler neck | |
| 12 Bow brush change | |
| 13 Waste water tank | |
| 14 Pedal transport chassis | |
| 15 Fresh water level display | |
| 16 Rotary handle to incline the vacuum bar | |
| 17 Height adjustment of suction bar * | |
| 18 Wing nuts for fastening the vacuum bar | |
| 19 Vacuum bar * | |

* not included in the delivery

Colour coding

- The operating elements for the cleaning process are yellow.
- The controls for the maintenance and service are light gray.

Operator console



- 1 OFF**
Device is switched off
- 2 Normal mode**
Wet clean the floor and vacuum up dirt water.
- 3 Intense mode**
Wet clean the floor and allow the detergent to react.
- 4 Vacuum mode**
Suck in the dirt fleet.
- 5 Program selection switch**
- 6 Display**

Symbols on the machine

	Battery socket
	Lashing point
	Mop holder **
	Filling level fresh water tank 25%
	Bow brush change
	Vacuum bar lowering lever
	Drain outlet fresh water tank
	Dirt water discharge hose
	Transport chassis 1: Transport 0: Operation

** option

Before Startup

Unloading

- ➔ Unscrew the screws from the middle board of the pallet.
- ➔ Push down the device holding the push handle and pull out the middle board.
- ➔ Remove the chocks in front of and next to the wheels.

- ➔ Push down the device holding the push handle and push it forwards up to the edge of the pallet.
- ➔ Lift the device off the pallet and set it on the floor.

Install batteries

Install the batteries (see "Care and Maintenance/Install and connect batteries").

Using batteries made by other manufacturers

We recommend using our batteries as described in chapter "Care and Maintenance/Recommended batteries".

Charging battery

Note:

The device is equipped with a safety mechanism to prevent total discharge, i.e. when the permissible minimum capacity is reached, the brush motor and the turbine are switched off.

- ➔ Drive the machine directly to the charging station; avoid any steep gradients in the process.

⚠ DANGER

Danger of injury due to electric shock. Observe the mains voltage and fuse protection on the type plate of the device.

Charging process

Average charging time is approx. 10 -15 hours. The appliance must not be used during the charging process.

⚠ DANGER

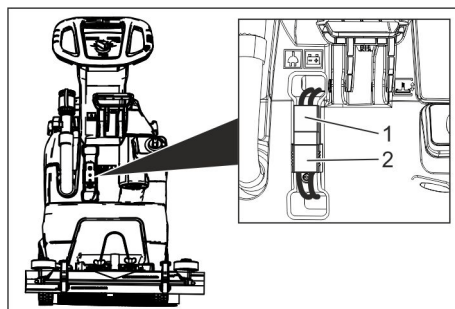
Danger of explosion

Prior to charging low-maintenance batteries

Remove waste water tank (see Chapter "Maintenance and care/Maintenance tasks/Removing the waste water tank"). This prevents the accumulation of hazardous gases underneath the tank during the charging process.

ATTENTION

Risk of damage. Do not clean the device with water while the tank is removed.



- 1 Battery plug, appliance side
- 2 Battery plug, battery side

- ➔ Detach the battery plug on the unit side.

ATTENTION

Risk of damage!

- Do **not** connect the charger with the battery plug on the unit side.
- Only use a charger that is suitable for the installed battery type:

Battery type	Battery set 24 V	Charger
6.654-093.0	4.035-447.0	6.654-329.0
6.654-290.0	4.035-990.0	6.654-332.0

Note: Please read the operating instructions of the charger manufacturer, especially the chapters on safety instructions!

- ➔ Connect the battery plug on the battery side with the charger.
- ➔ Plug the mains plug of the charger into a power outlet.
- ➔ Execute the charging process according to the information in the operating instructions of the charger.
- ➔ Connect the battery plug on the device side with the battery plug on the battery side.

Low maintenance batteries (wet batteries)

⚠ WARNING

Danger of causticization!

- Adding water to the battery in its discharged state can cause the acid to leak.
- Use safety glasses while handling battery acid and follow the safety instructions to avoid personal injury or damage to clothes.
- Should the acid spray on to the skin or clothes, rinse immediately with lots of water.

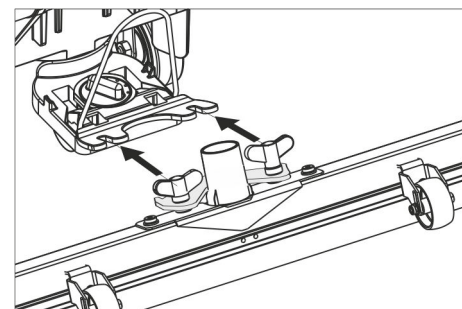
ATTENTION

Risk of damage!

- Use only distilled or desalinated water (EN 50272-T3) for filling the battery.
- Do not add any substances (so-called performance improving agents), else warranty claims will not be entertained.
- Replace batteries with the same battery type only.

Installing the Vacuum Bar

- ➔ Insert the vacuum bar into the vacuum bar suspension in such a manner that the profiled sheet is positioned above the suspension.
- ➔ Tighten the wing nuts.



- ➔ Insert the suction hose.

Operation

⚠ DANGER

Risk of injury!

In dangerous situations, release the safety switch/drive lever.

Filling in detergents

Fresh water

- ➔ Open the lock of the fresh water reservoir.
- ➔ Fill fresh water (maximum 60 °C) until the lower edge of the filling nozzle.
- ➔ Close the lock of the fresh water reservoir.

Detergent

⚠ WARNING

Risk of damage. Only use the recommended detergents. With other detergents, the operator bears the increased risk regarding the operational safety and danger of accident.

Only use detergents that are free from solvents, hydrochloric acid and hydrofluoric acid.

Follow the safety instructions for using detergents.

Note:

Do not use highly foaming detergents.

Recommended detergents:

Application	Detergent
Routine cleaning of all water resistant floors	RM 746 RM 780
Routine cleaning of glossy surfaces (e.g. granite)	RM 755 es
Routine cleaning and basic cleaning of industrial floors	RM 69 ASF
Routine cleaning and basic cleaning of fine stoneware tiles	RM 753
Routine cleaning of tiles in sanitary areas	RM 751
Cleaning and disinfection in sanitary areas	RM 732
Removal of coating from all alkali-resistant floors (e.g. PVC)	RM 752
Removal of coating from linoleum floors	RM 754

→ Add the detergent to the fresh water reservoir.

Note:

If the fresh water tank is empty, the cleaning head continues working without liquid supply.

Setting the water quantity

→ Adjust the water quantity using the regulating button according to the dirt on the floor covering.

Note:

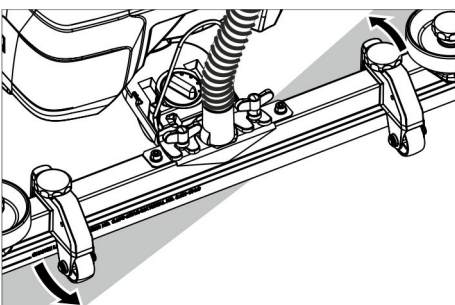
Carry out initial cleaning attempts with low water volume. Increase water volume step-by-step until the desired cleaning result is achieved.

Setting the Vacuum Bar

Oblique position

To improve the vacuuming result on tiled floors the vacuum bar can be turned to an oblique position of up to 5°.

- Loosen the wing nuts.
- Turn the vacuum bar.



→ Tighten the wing screws.

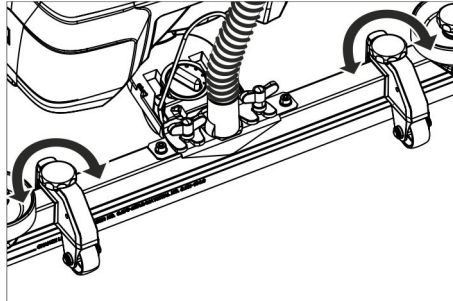
Inclination

If the vacuum result is unsatisfactory the inclination of the straight vacuum bar can be modified.

→ Adjust the rotary handle to incline the suction bar.

Height

The bend of the suction lips upon contact with the floor is influenced with the height adjustment.



→ Try adjusting the twist handles of the height adjustment until the best vacuuming result is achieved.

Cleaning

ATTENTION

Risk of damage to the floor covering. Do not operate the appliance on the spot.

- Swivel the pedal for the transport chassis down.
- Turn the program selection switch to the desired cleaning program.

Lower the vacuum bar

→ Pull the lever out and press it down; the vacuum bar is lowered.

Note:

- For cleaning tiled floors, adjust the straight suction bar in such a way that cleaning is not done at an angle of 90 degrees to the joints.
- The inclined position and the inclination of the suction bar can be adjusted to achieve better suction results (see "Adjusting the suction bar").
- If the waste water tank is full, the float closes the suction opening and the suction turbine runs at an increased speed. If this is the case, shut the vacuum off and drive to empty the waste water tank.

Shutting Down the Appliance

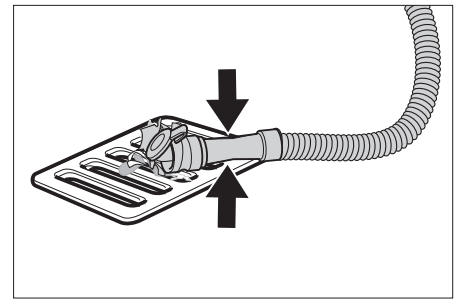
- Release the safety switch.
- Set the program selection switch to suction or vacuuming.
- Briefly drive forward and suck of the remaining water.
- Raise the vacuum bar.
- Charge battery, if required.

Drain off dirt water

⚠ WARNING

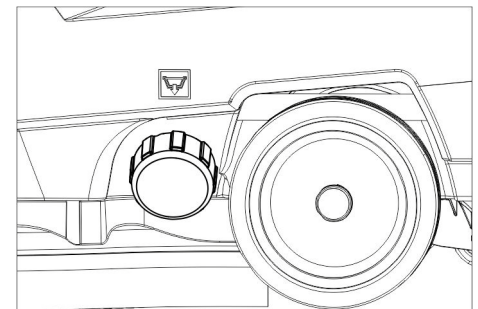
Please observe the local provisions regarding the wastewater treatment.

→ Take the water discharge hose from the support and lower above a suited collection device.



- Crush or bend the dosing equipment.
- Open the lid of the dosing equipment.
- Drain off the dirt water - regulate the water quantity by pressing or bending.
- Rinse the waste water tank with clear water.

Drain off clean water



→ Unscrew the lock of the fresh water reservoir.

Transport

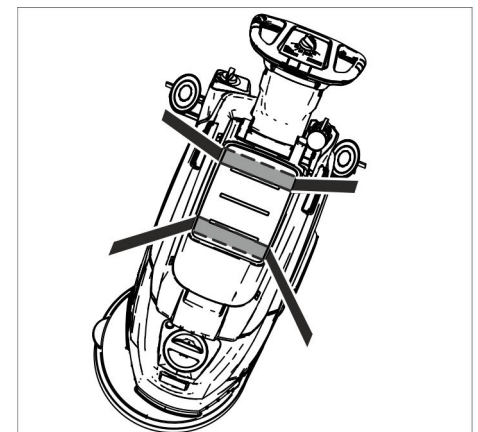
⚠ DANGER

Risk of injury! When loading or unloading the machine, it may only be operated on gradients up to the maximum value (see "Technical Specifications"). Drive slowly.

⚠ CAUTION

Risk of personal injury or damage! Mind the weight of the appliance during transport.

- Lift the pedal for the transport chassis.
- Use the pushing handle to push the appliance.



→ When transporting in vehicles, secure the appliance according to the guidelines from slipping and tipping over.

Storage

⚠ CAUTION

Risk of personal injury or damage! Consider the weight of the appliance when storing it. This appliance must only be stored in interior rooms.

Care and maintenance

⚠ DANGER

Risk of injury! Set the programme selector switch to "OFF" and pull the mains plug of the charger prior to performing any work on the appliance.

Remove the battery plug from machine.

- Drain and dispose of the dirt water and the residual fresh water.

Maintenance schedule

After each operation

ATTENTION

Risk of damage. Do not sluice the appliance with water and do not use aggressive detergents.

- Drain off dirt water.
- Rinse the waste water tank with clear water.
- Clean the outside of the appliance with a damp cloth which has been soaked in mild detergent.
- Check the fluff filter, clean if required.
- Clean the vacuum lips and the wiping lips, check for wear and replace if required.
- Check the brush for wear and replace if required (see "Maintenance tasks").
- Charge the battery:
If the charging state of the battery is under 50%, charge the battery fully and without interruption.
If the charging state of the battery is over 50%, only recharge the battery if the entire operation duration will be required when next used.

Weekly

- When used regularly, charge the battery fully and without interruption at least once a week.

Monthly

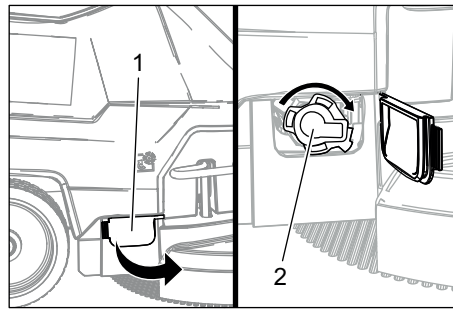
- Check battery poles for oxidation, brush off if necessary. Ensure that the connection cable sits firmly.
- Clean the seals between waste water tank and cover and check for tightness, replace if required.
- Clean sieve.
- Check the acid density of the cells if the batteries are not maintenance-free batteries.
- For long periods of disuse, only turn the device off when the battery is fully charged. Fully recharge the battery at least every month.

Yearly

- Have the prescribed inspection carried out by the customer service.

Maintenance Works

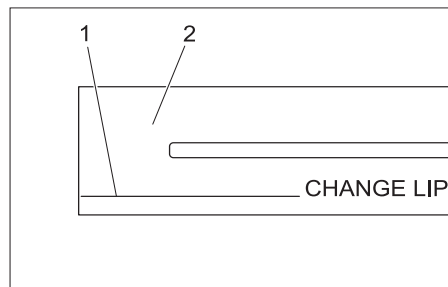
Cleaning the sieve



- 1 Cover
- 2 Cover

- Open the cover.
- Turn cover the clockwise and remove it.
- Remove and clean the sieve lying beneath it.
- Insert the sieve.
- Replace the cover and lock it by turning it anti-clockwise.
- Close cover.

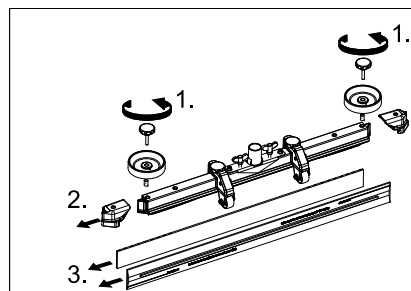
Replace or turn vacuum lips



- 1 Wear indicator
- 2 Vacuum lip

The vacuum lips must be replaced or reversed if they are worn down to the wear indicator.

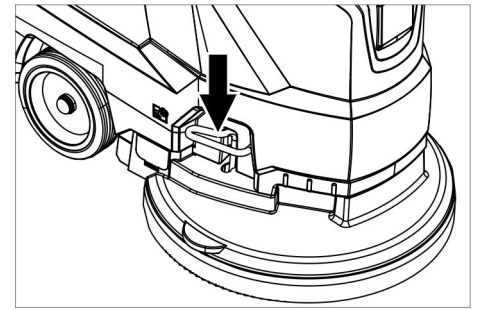
- Remove the vacuum bar.
- Unscrew the star grips.



- Remove the plastic parts.
- Remove the vacuum lips.
- Insert new or reversed vacuum lips.
- Insert the plastic parts.
- Screw in and tighten the star grips.

Replacing the disk brushes

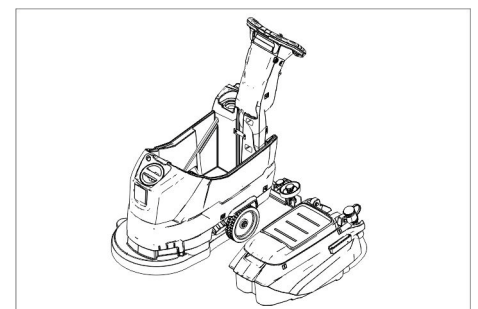
- Push down the device holding the push handle so that the cleaning head is raised.
- Press the pedal for changing the brushes downward beyond its resistance.



- Pull the device towards the back so that the disc brush becomes accessible.
- Place a new disc brush on the floor in front of the device.
- Drive the device with the raised cleaning head over the new disc brush and lower the cleaning head. The brush locks into the drive.

Removing the waste water tank

- Drain off dirt water.



- Lift up the waste water tank and put it aside.

Batteries

Please observe the following warning notes when handling batteries:

	Observe the directions on the battery, in the instructions for use and in the vehicle operating instructions
	Wear eye protection
	Keep children away from acid and batteries
	Danger of explosion
	Fire, sparks, naked flames and smoking must be strictly avoided
	Danger of chemical burns
	First aid
	Warning note
	Disposal
	Do not throw the battery into the regular waste

⚠ DANGER

Risk of explosion. Do not place tools or the like on the battery, i.e. on the terminal poles and cell connectors.

Risk of injury. Ensure that wounds never come into contact with lead. Always clean your hands after having worked with batteries.

Recommended batteries

	Order No.	Volume [m ³]*	Air flow [m ³ /h]**
76 Ah - maintenance-free	6.654-093.0 ¹⁾	1.82	0.73
80 Ah, - low maintenance	6.654-290.0 ¹⁾	6.60	2.64

* Minimum volume of the battery charging room

** Minimum air flow between the battery charging room and the surroundings

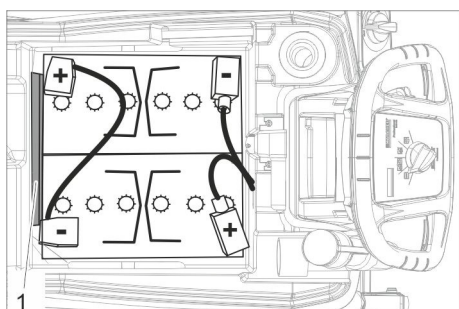
The device requires 2 batteries

¹⁾ Complete set (24 V/76 Ah) incl. connecting cable, order no. 4.035-447.0

²⁾ Complete set (24 V/80 Ah) incl. connecting cable, order no. 4.035-990.0

Insert batteries and connect

- ➔ Drain off dirt water.
- ➔ Lift up the waste water tank and put it aside.
- ➔ Pull out the battery plug.



Battery 6.654-093.0

Battery 6.654-290.0

1 Spacer

- ➔ Insert the battery into the device as shown above.
- ➔ Insert the spacer between the battery and the device on the side indicated in the illustration.

⚠ CAUTION

When the batteries are installed and removed, the stability of the appliance can be compromised; ensure a safe stance.

- ➔ Connect pole using the enclosed connecting cable.
- ➔ Connect the connection cable to the free battery poles (+) and (-).

ATTENTION

If the polarity is reversed (positive and negative terminals), the control electronics are destroyed.

Pay attention to correct poles.

- ➔ Place the waste water tank on the appliance.

Note:

Charge the batteries before commissioning the appliance.

See also "Charging the batteries".

Removing the batteries

- ➔ Set the programme selector switch to "OFF".
- ➔ Pull out the battery plug.
- ➔ Lift up the waste water tank and put it aside.
- ➔ Clamp off the minus pole of the battery.
- ➔ Clamp off the remaining cables from the battery.
- ➔ Remove the support blocks or the foam pieces.

⚠ CAUTION

When the batteries are installed and removed, the stability of the appliance can be compromised; ensure a safe stance.

- ➔ Remove the batteries.
- ➔ Dispose of the used batteries according to the local provisions.

Maintenance contract

To ensure a reliable operation of the appliance maintenance contracts can be concluded with the competent Kärcher sales office.

Frost protection

In case of danger of frost:

- ➔ Empty the fresh and waste water tank.
- ➔ Store the appliance in a frost-protected room.

Faults

⚠ DANGER

Risk of injury! Set the programme selector switch to "OFF" and pull the mains plug of the charger prior to performing any work on the appliance.

Remove the battery plug from machine.

- ➔ Drain and dispose of the dirt water and the residual fresh water.

Faults with display

Display	Correction
ERR B	Check if foreign objects block the brush; remove foreign object if required.
ERR T	Call customer service.
LOW BAT	Charging battery
ERR TEMP	Allow device to cool down.
HANDS OFF	Release the safety switch and wait until the operating hours or the battery status are displayed. Then operate the safety switch again.
ERR REL	Set the programme selector switch to "OFF", release the safety switch, wait for 3 seconds, restart. If the event recurs, call Customer Service.
ERR PWM	Call customer service.

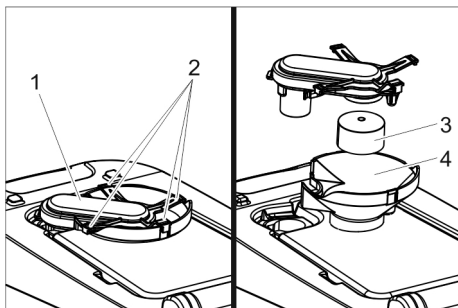
Faults without display on the console

Failure	Correction
Appliance cannot be started	Turn the program selection switch to the desired programme.
	Operate the safety switch.
	Insert battery plug.
	Check battery; charge it if required.
	Make sure that all battery terminals are connected.
Insufficient water quantity	Check fresh water level, refill tank if necessary.
	Increase the water volume on the regulating knob for water volume.
	Clean sieve.
Insufficient vacuum performance	Clean the seals between waste water tank and cover and check for tightness, replace if required.
	Wastewater reservoir is full; shut off the appliance and empty the wastewater reservoir
	Clean the fluff filter.
	Clean the vacuum lips on the vacuum bar, replace if required
	Check if the cover on the dirt water discharge hose is closed
	Check the setting of the vacuum bar.
	Check suction hose for blockages; clean if required.
	Check the suction hose for tightness; replace if required.
Insufficient cleaning result	Check the brushes for wear, replace if required.
Suction turbine is running rough	Clean the swimmer.
Brush does not turn	Check if foreign objects block the brush; remove foreign object if required.
	If over-current switch in the electronics system has been triggered, turn programme selection switch to "OFF". Afterwards, set it back to the desired programme.
Vibrations during cleaning	You might need to use a softer brush.

In case of faults that cannot be remedied using the table below please contact the customer service.

Cleaning the floater

→ Open the cover of the waste water tank.



- 1 Swimmer casing
- 2 Lock hook
- 3 Float
- 4 Lower part

- Pull out the float casing towards the top.
- Detach locking hooks.
- Clean float and bottom part.
- Assemble the float casing and insert it into the device.

Accessories

Description	Part no.:	Description
Disc brush, white (very soft)	4.905-024.0	For the gentle cleaning of sensitive surfaces.
Disk brush, natural (white)	4.905-023.0	Made of natural fibres for spot cleaning and polishing.
Disk brush, red (medium, standard)	4.905-022.0	For the use with all common cleaning tasks.
Disk brush, black (hard)	4.905-025.0	For heavy soiling and for deep cleaning. For robust floorings only.
Driver plate pad	4.762-533.0	For cleaning with pads. With quick change coupling and center lock.
Pad, red (medium soft)	6.369-470.0	For cleaning and cleaning of all floors.
Pad, green (medium hard)	6.369-472.0	For cleaning heavily soiled floors and for deep cleaning.
Pad, white	6.369-469.0	For polishing floors.
Pad, black (hard)	6.369-473.0	With stubborn soiling and for deep cleaning.
Microfiber pad	6.905-526.0	Routine cleaning and basic cleaning of fine stoneware tiles
Pad, beige (natural hair proportion)	6.371-081.0	For polishing and refreshing of hard and flexible floorings.
Diamond pad, white	6.371-256.0	For coarse cleaning and upvaluation. Removes small scratches and ensures a clean, semi-gloss surface.
Diamond pad, yellow	6.371-257.0	For coarse cleaning and upvaluation. Removes fine scratches and ensures an even more homogenous and shiny surface.
Diamond pad, green	6.371-238.0	For polishing high-gloss coated floor coverings and for quick polishing of terrazzo and natural stone surfaces.
Suction bar, 850 mm, straight	4.777-401.0	
Suction bar, 850 mm, bent	4.777-411.0	
Set homebase box	4.035-406.0	
Mop holder	9.753-023.0	
Adapter Homebase	5.035-488.0	
Double hook	6.980-077.0	
Mop clip	6.980-078.0	
Bottle hook	6.980-080.0	
Universal hook	4.070-075.0	

Technical specifications

Power		
Nominal voltage	V	24
Battery capacity	Ah (5h)	80/76
Average power consumption	W	1100
Rated power suction turbine	W	500
Rated power brush drive	W	600
Vacuuming		
Vacuum power, air volume (max.)	l/s	24
Vacuuming power, negative pressure (max.)	kPa (mbar)	12 (120)
Cleaning brushes		
Brush speed	1/min	155
Brush diameter	mm	430
Dimensions and weights		
Theoretical surface cleaning performance	m ² /h	1600
Max. working range incline	%	2
Fresh/waste water tank volume	l	25/25
Max. water temperature	°C	60
Ambient temperature	°C	5...40
Net weight (transport weight)	kg	109(107)
Total weight (ready to operate)	kg	137 (135)
Dimensions of battery compartment	mm	350 x 350

Values determined as per EN 60335-2-72

Total oscillation value	m/s ²	<2.5
Uncertainty K	m/s ²	0.2
Sound pressure level L _{pA}	dB(A)	66
Uncertainty K _{pA}	dB(A)	1
Sound power level L _{WA} +	dB(A)	81
Uncertainty K _{WA}		

EU Declaration of Conformity

We hereby declare that the machine described below complies with the relevant basic safety and health requirements of the EU Directives, both in its basic design and construction as well as in the version put into circulation by us. This declaration shall cease to be valid if the machine is modified without our prior approval.

Product: Floor cleaner
Type: 1.127-xxx
 1.515-xxx

Relevant EU Directives

2006/42/EC (+2009/127/EC)
 2014/30/EU

Applied harmonized standards

EN 55012: 2007 + A1: 2009
 EN 60335-1
 EN 60335-2-72
 EN 61000-6-2: 2005
 EN 62233: 2008

Applied national standards

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The signatories act on behalf of and with the authority of the company management.


 H. Jenner
 Chairman of the Board of Management


 S. Reiser
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Winnenden, 2019-03-01

Accessories and Spare Parts

Only use original accessories and spare parts, they ensure the safe and trouble-free operation of the device.

For information about accessories and spare parts, please visit www.kaercher.com.