

Frost protection

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Please read and comply with these instructions prior to the initial operation of your appliance. Retain these operating instructions for future reference or for subsequent possessors.

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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. The machine has been approved for use on surfaces with gradients of up to 2%.

The appliance may only be operated when the hood and all lids are closed.

Safety Devices

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

Emergency-stop button

To put all functions out of operation immediately.

Symbols

The following symbols are used in this operating manual:

⚠ Danger

indicates an immediate threat of danger. Failure to observe the instruction may result in death or serious injuries.

⚠ Warning

indicates a possibly dangerous situation. Failure to observe the instruction may result in light injuries or damage to property.

Note

indicates useful tips and important information.

Function

The appliance is used for the wet cleaning of carpets.

- This appliance can perform different cleaning functions: Intermediate cleaning: Applying and brushing in of a detergent solution, which is vacuumed up together with the bound dirt after drying.
 - Basic cleaning: Applying, brushing and vacuuming up the detergent solution in one work cycle.
- The device is self-moving; the drive motor is feed by three batteries.
- The batteries can be charged using a charger connected to a 230 V socket.
- With model Bp, the battery is already integrated.
- A charger is included with model Bp.

Note

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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 should only be used to clean non-moisture sensitive carpeting.
- The appliance may only be equipped with original accessories and spare
- 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.

- Reactive metal dusts (for e.g. aluminium, magnesium, zinc) can form explosive gases when they come in contact with highly alkaline or acidic detergents.
- The machine has been approved for use on surfaces with gradients of up to 2%.

Environmental protection

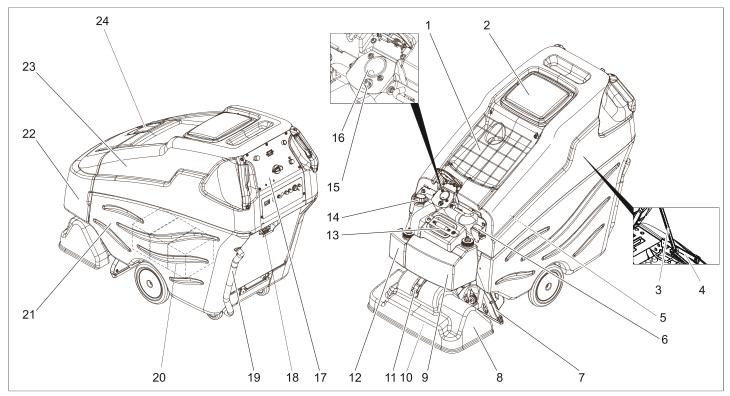


The packaging materials are recyclable. Please do not throw packaging in the domestic waste but pass it on for recycling.



Old units contain valuable recyclable materials. Batteries, oil and similar substances may not be released into the environment. Therefore please dispose of old units through suitable collection systems.

Operating and Functional Elements

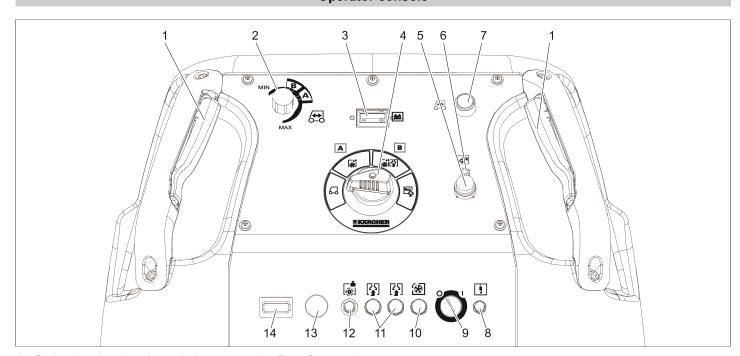


- 1 Rest
- 2 Cover dirt water reservoir
- 3 Waste water reservoir support
- 4 Locking
- 5 Fresh water strainer
- 6 Ventilation switch
- 7 Vacuum bar
- 8 Cleaning head

- 9 Detergent tank A
- 10 Nozzles
- 11 Lock for cleaning head housing
- 12 Detergent tank B
- 13 Filling nozzle for fresh water tank
- 14 Dirt water discharge hose
- 15 Detergent hose coupling
- 16 Coupling of suction hose

- 17 Operator console
- 18 Battery socket
- 19 Drainage hose for fresh water
- 20 Battery
- 21 Fresh water tank
- 22 Front panel
- 23 Dirt water reservoir
- 24 Cover of accessory tool

Operator console



- 1 Sliding handle with drive switch
- 2 Rotating button for drive speed
- 3 Battery control display
- 4 Program selection switch
- 5 Key to apply detergent solution
- 6 Control lamp to apply detergent solution
- 7 Switch for reverse drive

- 8 Fuse for controls
- 9 Key switch
- 10 Fuse for traction drive
- 11 Fuse for suction turbine
- 12 Fuse for brush drive
- 13 Emergency-stop button (turn to release)
- 14 Operating hour counter

Before Startup

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

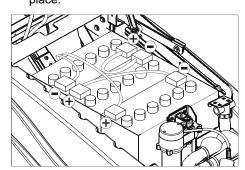
Danger of explosion. Do not put tools or similar on the battery, i.e. on the terminal poles and cell connectors.

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

Insert batteries and connect

The Bp package model contains a built-in battery.

→ Swivel waste water reservoir upward until the latch of the support locks into place.



- Insert the batteries in the battery compartment.
- → Grease the battery poles using pole grease.
- Connect poles with the enclosed connecting cables.

⚠ Warning

Pay attention to correct poles.

- → Connect the connection cable to the free battery poles (+) and (-).
- → Lift the lock of the fresh water tank support and lower fresh water tank.

⚠ Warning

Charge the battery before commissioning the machine.

Battery load indicator

The load status of the battery is displayed with leds on the battery control display. Deep battery discharge is indicated as follows:

- The leds on the left side of the display are blinking on the battery control display.
- A warning beeps if a drive switch is pressed.

Protection against deep discharge:

- → Switch the suction turbine and the side brushes off.
- → Drive the machine directly to the charging station; avoid any steep gradients in the process.

Charging battery

⚠ Danger

Danger of explosion. The charging of wet batteries is only permitted if the waste water reservoir is tilted up.

🛆 Danger

Risk of injury on account of electric shock. Ensure proper mains connection voltage and the socket fuse.

Use the charger only in dry rooms with sufficient ventilation!

Note

Average charging time is approx. 10 -15 hours.

The recommended chargers (matching the batteries used) are regulated electronically and will automatically switch off the charging process.

All functions of the machine are automatically interrupted during the charging process.

- → Swivel waste water reservoir upward until the latch of the support locks into place
- → Remove battery plug and join it to the charging cable.
- → Connect the charger to the mains and turn it on.

Further, in case of maintenance-free batteries (wet batteries):

→ Add distilled water one hour before the charging process comes to an end; follow the correct acid level. There are corresponding indicators on the battery.

△ Danger

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 instruc-

- tions to avoid personal injury or damage to clothes.
- Should the acid spray on to the skin or clothes, rinse immediately with lots of water

⚠ Warning

Risk of damage!

- Use only distilled or desalinated water (VDE 0510) for filling the battery.
- Do not add any substances (so-called performance improving agents), else warranty claims will not be entertained.

△ Warning

Only use maintenance-free batteries while replacing batteries in package appliances.

Recommended batteries

Manufactur- er, Kärcher order no.	Description
6.654-141.0	3 x 12V/105 A, mainte- nance-free (Gel)

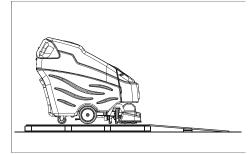
Recommended chargers

Kärcher Order No.	Description
6.654-229.0	36V, for maintenance-free batteries

Unloading

⚠ Danger

Risk of injury. Press emergency-stop switch to immediately switch off all functions of the machine.



- → Insert batteries and connect (see "Before Start-up").
- → Place long lateral boards of the packaging as a ramp next to the pallet.
- → Fix the ramp on the pallet with nails.
- → Place short boards as a support underneath the ramp.
- → Remove the wooden bars in front of the wheels.
- → Remove fastening bracket at the axle.
- → Set main switch to "1".
- → Turn the programme selection switch to Drive
- → Set the rotary knob for drive speed to "MIN".
- → Press drive switch.
- → Drive the appliance off the ramp.
- → Set main switch to "0".

Operation

Note

Press the emergency-stop button to immediately deactivate all functions and turn the key switch to the "0" position.

→ Carry out maintenance jobs "daily before starting work" (see section "Maintenance and Care").

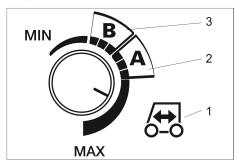
Driving

Note

The machine is designed in such a way that the brush head protrudes on the right. This helps in working in a proper way even close to the edges.

The machine has been approved for use on surfaces with gradients of up to 2%.

- → Release emergency-stop button by turning.
- → Insert key in key switch at the operator console and turn to "1".
- → First select the driving speed at the rotary knob.



- 1 Driving
- 2 Intermediate cleaning
- 3 Basic cleaning
- Turn the programme selection switch to Drive.
- → Hold the device firmly at both the sliding handles and press one driving switch the device will move.
- → Release the driving switch to stop it.

Reverse drive

→ Also press the switch for reverse drive in addition to the drive switch.

Filling in detergents

→ Remove front planel, then swivel up and then lift up.

Fresh water

- → Open the cover of the fresh water reservoir
- → Fill in fresh water (maximum 60 °C).
- → Close the cover of the fresh water reservoir

Detergent

The detergent is filled into the detergent tanks undiluted. During operation, the detergent is added to the fresh water. The detergent solution is sprayed onto the floor via nozzles in the cleaning head.

⚠ Warning

Risk of damage. Only use the recommended detergents. With respect to different de-

tergents 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

Note

Do not use highly foaming detergents. Recommended detergents:

Application	Detergent
Intermediate clean- ing	RM 768, i capsol
Basic cleaning	RM 764, press ex liquid

- → Move the front panel to the side.
- → Fill the detergent tanks "A" and "B" with detergent as follows:

	Intermediate cleaning	Basic cleaning
Α	Detergent	-
В	-	Detergent

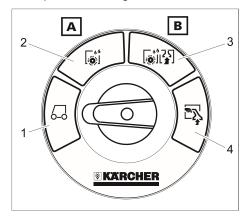
- → Screw the cover onto the tanks with the suction hose and filter.
- Set main switch to "1".
- → Ventilate the suction hoses of the filled cleaning tanks:

Press the ventilation switch for the respective tank for 30 seconds.

→ Replace front panel.

Cleaning

- → Large waste such as cardboard cups, cardboard plates, strings and similar objects must be picked up.
- → Vacuum loose dirt with a vacuum cleaner prior to cleaning.



- 1 Driving
- 2 Spray on and brush in the detergent solution consisting of fresh water and detergent from tank "A".
- 3 Spray on, brush in and vacuum up the detergent solution consisting of fresh water and detergent from tank "B".
- 4 Operation with accessory tools (such as hand nozzle).
- → Turn the program selection switch to the desired cleaning program.

Depending on the programme selected, the cleaning head is lowered, the brush

- drive is turned on and the detergent is applied.
- → Adjust the drive speed matching the cleaning programme ("A" or "B") at the rotary knob.
- → Press the button to apply the detergent solution to activate the application of the detergent.

Note

The control lamp Apply detergent illuminates when this function is activated.

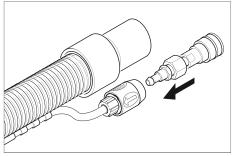
→ Press drive switch.

Note

The application of the detergent solution is interrupted during a standstill or while driving backwards.

The brush drive is turned off during drive breaks.

Operation with accessory tools



- → Connect the provided adapter to the detergent hose of the accessory tools.
- → Flip up the cover of accessory tool.
- → Connect the detergent hose and suction hose of the accessory tool to the connectors on the appliance.
- → Turn the programme selector switch to the operation with accessory tool.
- → Carry out the cleaning tasks using the accessory tool.

Note

The accessory tools are only supplied with fresh water (without detergent).

Important

When unplugging the accessory tools, the adapter must be removed from the appliance, so that the water output on the appliance is closed.

Recommendation: Leave the adapter on the hose of the accessory tool.

Shutting Down the Appliance

- → Turn off the application of detergent solution.
- Briefly drive forward and suck of the remaining water.
- → Release the drive switch.
- → Set the programme selector switch to operation with accessory tools to suction off the remaining water from the suction system - the cleaning head will be lifted.
- → Turn the programme selection switch to Drive.
- → Set the key switch at the operator console to "0" and remove the key.
- → Charge battery, if required.

Drain off clean water

- → Pull out the upper end of the fresh water drain hose from the hose nipple.
- → Lower the drain hose into a suitable collector and drain off the fresh water.

Note

The liquid will exit in a strong stream. Do not stand in front of the hose end.

- → Remove front planel, then swivel up and then lift up.
- → Open the cover of the fresh water reservoir.
- → Rinse the fresh water tank with clear water (max. 60°C).
- → Reattach the drain hose to the hose connection
- → If the appliance is switched off, leave the cover of the fresh water tank open.

Rinse the detergent system.

- → Remove front planel, then swivel up and then lift up.
- → Unscrew the cover with the suction hose and the filter from the detergent tanks and submerge them in a container with clear water.
- → Press the ventilation switch for the respective tank for 30 seconds.

If the detergent is to stay in the detergent tanks:

Screw the enclosed covers without holes for the suction hoses onto the detergent tanks.

If the detergent is to be removed from the detergent tanks:

- → Lift the tank unit up from the fill neck for fresh water.
- → Close one tank with the enclosed cover and pour the other tank out.
- → Rinse both tanks with clear water.

Drain off dirt water

⚠ Warning

Please observe the local provisions regarding the wastewater treatment.

- → Remove front planel, then swivel up and then lift up.
- → Remove the dirt water drain hose from the holder.
- → Screw the cover off the drain hose.
- → Lower the drain hose into a suitable collector and drain off the dirt water.

Note

The liquid will exit in a strong stream. Do not stand in front of the hose end.

- → Remove the cover from the waste water reservoir.
- → Rinse the waste water reservoir with clear water (max. 60°C).
- → Attach and tighten the cover of the drain hose
- → Insert the drain hose into the holder.
- → Replace front panel.
- → If the appliance is switched off, leave the cover of the waste water reservoir open.

Maintenance and care

⚠ Danger

Risk of injury! Before carrying out any tasks on the machine, set the main key to "0" and remove it. Pull out the battery plug.

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

Maintenance schedule

Daily

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

Before starting working:

- → Check acid level in wet batteries; refill distilled water, if required.
- → Check the brushes for correct positioning.
- → Check whether the drain hoses have been attached correctly and if they are closed.
- → Check the tight fit of the cover of the waste water and fresh water tanks.
- Check tyre status.
- → Check spray pattern of the nozzles. Clean the nozzles as needed.

After finishing working:

- Check the brushes for wear, replace if required.
- → Clean below the cleaning head.
- → Drain off dirt water.
- → Rinse the dirt water tank with clear water.
- → Clean fresh water tank.
- → Clean the fresh water filter.
- → Clean the vacuum bar.
- Clean the outside of the appliance with a damp cloth which has been soaked in mild detergent.
- → Check appliance for damages.
- → Rinse the detergent system.
- → Do not close the lids of the fresh water and dirt water tanks so that the tanks can dry up.
- Charge battery.

Every 50 operating hours

- → Exchange front and rear brush rollers.
- → Clean upper side of the batteries.
- → Check battery pole for oxidation; brush it if required and lubricate it using pole grease. Ensure that the connection cable sits firmly.
- → Check the acid density of the cells if the batteries are not maintenance-free batteries.

Every 100 operating hours

- → Clean the battery housing and battery compartment.
- → Lubricate the drive axle and the steering rollers.

Every 200 operating hours

- → Clean the joints on the lever of the cleaning head.
- → Check carbon brushes and commutators of all motors for wear and tear. *

Yearly

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

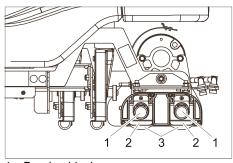
Maintenance Works

Maintenance contract

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

Replacing the brush rollers

- → Set key switch to "0" with the cleaning head raised.
- → Open the cover of the cleaning head housing.
- Remove the housing.



- Bearing block
- 2 Locking plate
- 3 Brush roller
- → Bend the locking plate outward and pull the bearing block out from the bottom.
- → Pull the brush roller off the driver and remove
- → Pull the bearing block off the brush roller.
- → Insert the bearing block onto the new brush roller.
- → Insert the brush roller onto the driver and turn until the driver pin locks into the brush.
- → Insert the bearing block into the appliance and push in far enough for the locking plate to lock into place.
- → Repeat process on the second brush roller.

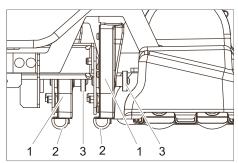
Clean the nozzles

- → Open the cover of the cleaning head housing.
- → Remove the housing.
- → Turn the nozzle out counter-clockwise.
- → Blow out the nozzle against the flow.

Δ Warning

Risk of damage. Do not use pointed objects to clean the nozzles.

Clean the vacuum bar

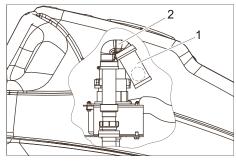


- Vacuum bar
- 2 Slide shoe
- 3 Knurled head screw

^{*} To be done by Customer Service.

- → Set key switch to "0" with the cleaning head raised.
- → Unscrew the knurled-head screw.
- → Remove the vacuum bar.
- → Pull out the suction hose from the vacuum bar.
- → Rinse the vacuum bar from the top with water.
- → Obstructions in the gap between the slide shoes can be removed with a spatula. If necessary, the slide shoes can be unscrewed from the vacuum bar for cleaning.
- → Repeat the cleaning process on the second vacuum bar.
- Reattach both vacuum bars to the appliance in reverse sequence.

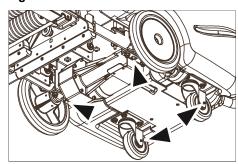
Cleaning the floater



- 1 Sieve with floater ball
- 2 Pipe

- → Clean the sieve from the outside and rinse it.
- → Check the mobility of the floater ball. If it is too dirty:
- → Hold the pipe firmly and pull out the sieve from the pipe.
- → Clean sieve and ball.
- → Hold the pipe firmly and reinsert the sieve

Lubricating the drive axle and the steering rollers



→ Lubricate the greasing nipple with a grease press.

Frost protection

In case of danger of frost:

Empty the fresh and dirt water reservoirs.

→ Store the appliance in a frost-protected room.

Transport

\land Danger

Risk of injury! When loading or unloading the machine, it may only be operated on gradients of max. 2%. Drive slowly.

Danger of damage to the control. The appliance should only be operated with the drive motor removed. The pushing speed must not exceed 8 km/h.

- → Remove the vacuum bar and lift up the cleaning head prior to loading the appliance via a ramp.
- → If you want to transport the machine on a vehicle secure it from slipping using belts/ ropes.
- → Secure the wheels of the machine with wheel chocks.

Faults

⚠ Danger

Risk of injury! Before carrying out any tasks on the machine, set the main key to "0" and remove it. Pull out the battery plug.

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

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

Fault	Remedy	By whom
Appliance cannot be	Insert the battery plug on the device.	Operator
started	Release emergency-stop button by turning.	Operator
	If battery is low, charge the battery.	Operator
	Check battery cable for correct sitting.	Operator
	Check battery cable for corrosion; clean, if required.	Operator
Device does not drive	Reset fuse of traction drive	Operator
or drives only slowly	If battery is low, charge the battery.	Operator
	The appliance was switched on while a drive key was pressed. Release the drive switch.	Operator
	Control system overheated; switch off device and let it cool down.	Operator
Insufficient vacuum	Empty the dirt water reservoir.	Operator
performance	Clean the seals between dirt water reservoir and cover and check for tightness, replace if required.	Operator
	Check suction hose for blockages; clean if required.	Operator
	Check connection between suction hose and vacuum bar and suction hose and the device.	Operator
	Check the suction hose for tightness; replace if required.	Operator
	Check if the cover on the dirt water discharge hose is closed	Operator
	Clean the floater in the dirt water tank.	Operator
	Reset fuse of suction turbine.	Operator
Insufficient cleaning re-	Check the brushes for wear, replace if required.	Operator
sult	Check brushes for wear and tear, clean.	Operator
	If battery is low, charge the battery.	Operator
Brushes are rotating slowly or not at all	Reset fuse of brush drive.	Operator
	Check the brushes for blockage due to foreign particles, remove them if found.	Operator
	If battery is low, charge the battery.	Operator
No or very little deter-	Check level of detergent solution in the fresh water tank; refill, if required.	Operator
gent solution gets add-	Turn on the key Apply detergent solution - the control lamp must illuminate.	Operator
ed	Check nozzles for blockages; clean if required.	Operator
	Check fresh water filter; clean if required.	Operator
Do not add detergents	Refill detergent tank.	Operator
	Press the ventilation switch for the respective tank for 30 seconds.	Operator
	Flush the pipe system for the detergent with water.	Operator
The cleaning head can- not be raised/lowered	Reset fuse of control system.	Operator

Technical specifications

Power		
Nominal voltage	V	36
Battery capacity (Pack model)	Ah (5h)	105
Average power consumption	W	1926
Drive motor output (rated output)	W	375
Suction engine output	W	2 x 560
Brush engine output	W	375
Vacuuming		
Cleaning power, air quantity	l/s	29
Cleaning power, negative pressure	kPa	17
Cleaning brushes		
Working width	mm	500
Brush diameter	mm	85
Brush speed	1/min	1084
Spray system		
Pressure	MPa	0,69
Apply detergent solution (position A)	I/min	0,9
Apply detergent solution (position B)	I/min	4
Mixing ratio of fresh water/detergent A		16:1
Mixing ratio of fresh water/detergent B		64:1
Dimensions and weights		
Drive speed (max.)	km/h	4,6
Drive speed (position A)	km/h	2
Drive speed (position B)	km/h	1
Climbing capability (max.)	%	10
Theoretical surface performance (position A).	m²/h	920
Theoretical surface performance (position B)	m²/h	460
Fresh/dirt water reservoir volume	I	74/66
Volume detergent tank A	I	4,6
Volume detergent tank B	I	1,25
Max. water temperature	°C	60
Weight (with/ without battery)	kg	295/172
Surface load	kPa	3500
Length	mm	1400
Width	mm	700
Height	mm	1100
Noise emission		
Sound pressure level (EN 60704-1)	dB(A)	69,5
Machine vibrations		
Vibration total value (ISO 5349)	m/s²	0,3

Spare parts

- Only use accessories and spare parts which have been approved by the manufacturer. The exclusive use of original accessories and original spare parts ensures that the appliance can be operated safely and troublefree.
- At the end of the operating instructions you will find a selected list of spare parts that are often required.
- For additional information about spare parts, please go to the Service section at www.kaercher.com.

Warranty

The warranty terms published by our competent sales company are applicable in each country. We will repair potential failures of your appliance 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.

CE declaration

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: 1.008-xxx

Relevant EU Directives 98/37/EC 2006/95/EC 2004/108/EC

Applied harmonized standards

EN 55014-1: 2006

EN 55014-2: 1997 + A1: 2001 EN 50336: 2003 + A1: 2006

The undersigned act on behalf and under the power of attorney of the company management.

H. Jenner S. Reiser
CEO Head of Approbation

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