



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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Device elements

Please unfold the front picture side

- 1 Union joint
- 2 Nozzle
- 3 Spray lance EASY!Lock
- 4 Trigger gun EASY!Force
- 5 Safety catch
- 6 Trigger
- 7 Safety lever
- 8 High pressure hose EASY!Lock
- 9 Push handle, top (extended)
- 10 Push handle, bottom (slid in)
- 11 Holder for storage of a nozzle with screw connection or a surface cleaner**
- 12 Nozzle rack for triple nozzle**
- 13 Recessed grip
- 14 Nameplate
- 15 Skid
- 16 High-pressure connection EASY!Lock
- 17 Wheel
- 18 Nozzle rack for rotor nozzle (rotor nozzle is only included in the scope of delivery with model HD...Plus)
- 19 Spray lance holder with clamping, for transportation

- 20 Sieve
- 21 Water connection
- 22 Quiver for spray lance
- 23 Power switch
- 24 Cable clamp
- 25 Carrying handle
- 26 Spray lance holder without clamping
- 27 Rubber band
- 28 Storage compartment for hoses
- ** not included in the scope of delivery

Colour coding

- The operating elements for the cleaning process are yellow.

Safety instructions

- Before first start-up it is definitely necessary to read the operating instructions and safety indications Nr. 5.951-949.0!
- Please follow the national rules and regulations for fluid spray jets of the respective country.
- Please follow the national rules and regulations for accident prevention of the respective country. Fluid spray jets must be tested regularly and the results of these tests must be documented in writing.
- The appliance/accessories must not be modified.

Hazard levels

⚠ **DANGER**

Pointer to immediate danger, which leads to severe injuries or death.

⚠ **WARNING**

Pointer to a possibly dangerous situation, which can 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.

Symbols on the machine

High-pressure jets can be dangerous if improperly used. The jet may not be directed at persons, animals, live electrical equipment or at the appliance itself.



According to applicable regulations, the appliance must never be used on the drinking water net without a system separator. A suitable system separator by KÄRCHER or alternatively a system separator according to EN 12729 type BA must be used.

Water that was flowing through a system separator is considered non-drinkable.



Proper use

Use this high pressure cleaner exclusively for

- for cleaning with high-pressure jet (e.g. cleaning of facades, terraces, gardening tools).

With optional accessories detergent can be added.

For stubborn soiling we recommend the use of a rotor nozzle (only included in the scope of delivery with model HD...Plus)

Quality requirements for water:

ATTENTION

Only clean water may be used as high pressure medium. Impurities will lead to increased wear and tear or formation of deposits in the appliance.

If recycled water is used, the following limit values must not be exceeded.

pH value	6,5...9,5
electrical conductivity *	Conductivity fresh water +1200 µS/cm
settleable solids **	< 0,5 mg/l
total suspended solids ***	< 50 mg/l
Hydrocarbons	< 20 mg/l
Chloride	< 300 mg/l
Sulphate	< 240 mg/l
Calcium	< 200 mg/l
Total hardness	< 28 °dH < 50 °TH < 500 ppm (mg CaCO ₃ /l)

Iron	< 0,5 mg/l
Manganese	< 0,05 mg/l
Copper	< 2 mg/l
Active chloride	< 0,3 mg/l
free of bad odours	
* Maximum total 2000 µS/cm	
** Test volume 1 l, settling time 30 min	
*** no abrasive substances	

Safety Devices

Safety devices serve for the protection of the user and must not be put out of operation or bypassed with respect to their function.

Pressure switch

If the pulling lever on the trigger gun is released the pressure switch turns off the pump, the high-pressure jet is stopped. If the pulling lever is pulled the pump is turned on again.

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 materials that can be recycled; these should be sent for recycling. Batteries, oil, and similar substances must not enter the environment. Please dispose of your old appliances using appropriate collection systems.

Electrical and electronic devices often contain components which could potentially pose a danger to human health and the environment if handled or disposed of incorrectly. However, these components are necessary for the proper operation of the device. Devices marked with this symbol must not be disposed of with regular household rubbish.

Notes about the ingredients (REACH)

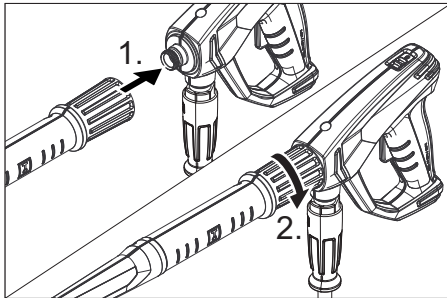
You will find current information about the ingredients at:

www.kaercher.com/REACH

Before Startup

Attaching the Accessories

Note: The EASY!Lock system joins components with a quick-fasten thread solidly and securely with just one turn.



- ➔ Insert the high pressure nozzle onto the spray lance.
- ➔ Install union nut and hand-tighten it (EASY!Lock).
- ➔ Join the spray lance with the trigger gun and tighten until hand-tight (EASY!Lock).
- ➔ Join the high-pressure hose with trigger gun and high-pressure connection of the appliance and tighten until hand-tight (EASY!Lock).

Start up

⚠ **WARNING**

Risk of injury! Appliance, accessories, supply lines and connections must be in fault-free condition. If they are not in a perfect state then the appliance must not be used.

Electrical connection

⚠ **DANGER**

Danger of injury by electric shock.

- *It is imperative to connect the appliance to the electric mains by means of a plug. It is forbidden to permanently connect the appliance to the power supply. The plug serves for the disconnection from the mains.*
- *The plug and coupling of the extension cable used must be watertight.*
- *Use an extension cable with protective earth conductor (protection class 1) and*

an adequate cross section (see "Technical data") and fully uncoil it from the cable drum.

For connection values, see type plate/technical data.

- ➔ Unwind the mains cable and place it on the floor.
- ➔ Insert the mains plug into a socket.

Water connection

Connection to the water supply

⚠ **WARNING**

Observe regulations of water supplier.

According to applicable regulations, the appliance must never be used on the drinking water net without a system separator. A suitable system separator by KÄRCHER or alternatively a system separator according to EN 12729 type BA must be used. Water that was flowing through a system separator is considered non-drinkable.



⚠ **CAUTION**

Always connect the system separator to the water supply, never directly to the appliance!

For connection values refer to technical specifications.

- ➔ Connect the supply hose (min. length 7.5 m, minimum diameter 1/2") to the water connection point of the machine and at the water supply point (for e.g. a tap).

Note:

The supply hose is not included.

- ➔ Open the water supply.

Drawing in water from open reservoirs

- ➔ Screw the suction hose with filter (optional accessory) to the water connection.
- ➔ Appliance ventilation:
Unscrew the nozzle from the spray lance.
Switch on the appliance and let it run until the water exiting is bubble-free. Let the appliance run for 10 seconds – then switch off the appliance switch. Repeat the procedure several times.
- ➔ Switch off the appliance and fit the nozzle again.

Operation

⚠ DANGER

Risk of explosion!

Do not spray flammable liquids.

If the appliance is used in hazardous areas (e.g. filling stations) the corresponding safety regulations must be observed.

Risk of injury! Hold the hand spray gun and the spray pipe firmly with both hands.

Risk of injury! The trigger and safety lever may not be locked during the operation.

Risk of injury! Contact Customer Service if the safety lever is damaged.

Risk of injury from high-pressure water jet. Slide the safety catch on the trigger gun forward before performing any work with the appliance.

⚠ CAUTION

Environmental damage. Clean motors at places with a corresponding oil separator only.

Opening/closing the trigger gun

- ➔ To open the trigger gun: Actuate the safety lever and trigger.
- ➔ To close the hand spray gun: Release the safety lever and trigger.

Operation

The appliance can be operated in a vertical or horizontal position.

Note:

The appliance is equipped with a pressure switch. The motor starts up only when the trigger gun is open.

- ➔ Set the appliance switch to "I".
- ➔ Release the trigger gun. To do so, push the safety catch towards the back.
- ➔ Open the hand spray gun.

Interrupting operation

- ➔ Close the hand spray gun.
The appliance switches off.
- ➔ Secure the trigger gun. To do so, push the safety catch towards the front.

After the interruption:

- ➔ Release the trigger gun. To do so, push the safety catch towards the back.
- ➔ Open the hand spray gun.
The appliance will switch on again.

Turn off the appliance

- ➔ Shut off water supply.
- ➔ Open the hand spray gun.
- ➔ Switch on the pump with the power switch and allow to run for about 5-10 seconds.
- ➔ Close the hand spray gun.
- ➔ Set the appliance switch to "0/OFF".
- ➔ Pull main plug out of socket with dry hands only.
- ➔ Remove water connection.
- ➔ Activate hand spray gun until device is pressure less.
- ➔ Secure the trigger gun. To do so, push the safety catch towards the front.

Storing the Appliance

- ➔ Place the spray lance with the trigger gun into the quiver for the spray lance and snap it into place in the spray lance holder.
- ➔ Wind the connection cable around the cable holder.
- ➔ Fasten the plug with the mounted clip.
- ➔ Slide in push handle.
- ➔ Wind up the high-pressure hose and hang it over the hose storage.

Frost protection

ATTENTION

Frost will destroy the not completely water drained device.

Store the appliance in a frost free area.

If you cannot store it in a frost-free place:

- ➔ Drain water.
- ➔ Pump in conventional frost protection agents through the appliance.

Note:

Use normal glycol-based anti-freezing agents for automobiles.

Observe handling instructions of the anti-freeze agent manufacturer.

- ➔ Operate device for max. 1 minute until the pump and conduits are empty.

Transport

⚠ CAUTION

Risk of injury and damage! Observe the weight of the appliance when you transport it.

ATTENTION

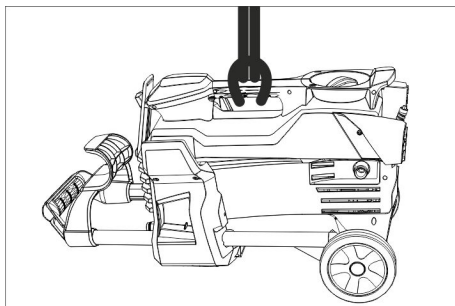
Protect the trigger from damage during transport.

- ➔ Hold the appliance at the carrying handle and the recessed grip for carrying it.
- ➔ When transporting in vehicles, secure the appliance according to the guidelines from slipping and tipping over.
- ➔ For transport over longer distances, pull out the push handle to the end position and drag the appliance behind you holding the push handle.
- ➔ In order to climb stairs, pull the appliance up step by step. The skids protect the casing from damage.

Holder for surface cleaner

- ➔ Attach the connecting piece of the surface cleaner to the holder on the high-pressure cleaner.
- ➔ Screw union nut.

Transport by crane



- ➔ Attach the lifting device to the carrying handle of the appliance.

Safety information about cranes

⚠ DANGER

Risk of injury due to machine dropping.

- Adhere to the local accident prevention guidelines and safety notes.
- Check the carrying handle for damage prior to every transportation by crane.
- Check the lifting unit for damage prior to each transport by crane.

- Only lift the appliance using the carrying handle.
- Do not use stop chains.
- Protect the lifting device from inadvertent load release.
- Remove spray lance with trigger gun, nozzles, surface cleaner and other loose objects prior to transportation by crane.
- Do not transport any articles on the appliance during the lifting process.
- The appliance must only be transported by properly trained crane personnel.
- Do not stand below the load.
- Ensure that no persons are present in the immediate vicinity of the crane.
- Do not leave the appliance on the crane unattended.

Storage

⚠ CAUTION

Risk of injury and damage! Note the weight of the appliance in case of storage.

This appliance must only be stored in interior rooms.

Care and maintenance

⚠ DANGER

Risk of injury by inadvertent startup of appliance and electrical shock.

First pull out the plug from the mains before carrying out any tasks on the machine.

Safety inspection/ maintenance contract

You can sign with your dealer a contract for regular safety inspection or even sign a maintenance contract. Please take advice on this matter.

Before each use

- ➔ Check connection cable for damages (risk of electrical shock); get the damaged connection cable replaced immediately by an authorised customer service person/ electrician.
- ➔ Check the high pressure hose for damages (risk of bursting). Please arrange for the immediate exchange of a damaged high-pressure hose.

- Check appliance (pump) for leaks. 3 drops per minute are permitted and can come out from the lower side of the appliance. Call Customer Service if there is heavy leakage.

Weekly

- Clean the sieve in the water connection.

Clean the sieve in the water connection

- Take out sieve.
- Clean the sieve from the outside and rinse it.
- Insert sieve.

Every 500 operating hours, at least annually

- Have the maintenance of the device performed by the customer service.

Troubleshooting

⚠ DANGER

Risk of injury by inadvertent startup of appliance and electrical shock.

- Prior to all work on the appliance, switch off the appliance and pull the power plug.
- Get the electrical components checked and repaired only by authorised customer service persons.
- Contact an authorised customer service person in case of problems not mentioned in this chapter or if you are in doubt or when you have been explicitly asked to do so.

Appliance is not running

- Check connection cable for damages.
- Check the supply voltage.
- If the appliance is overheated: Set the appliance switch to "0". Allow machine to cool down at least for 15 minutes. Set the appliance switch to "1".
- Call Customer Service in case of electrical defects.

Pressure does not build up in the appliance

- Check the nozzle size, install correct nozzle.
- Deaerate the appliance (see "Start-up")
- Clean the sieve in the water connection.
- Check water supply level (refer to technical data).
- Clean the nozzle.
- Replace the nozzle.
- Contact Customer Service if needed.

Pump leaky

3 drops of water per minute are permitted and can leak from the bottom of the appliance.

- With stronger leak, have device checked by customer service.

Pump is vibrating

- Check the water suction pipe for leaks.
- Deaerate the appliance (see "Start-up")
- Contact Customer Service if needed.

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.

Warranty

The warranty terms published by the relevant 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 manufacturing. In the event of a warranty claim please contact your dealer or the nearest authorized Customer Service centre. Please submit the proof of purchase.

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: High pressure cleaner
Type: 1.520-xxx

Relevant EU Directives

2006/42/EC (+2009/127/EC)

2014/30/EU

2000/14/EC

2011/65/EU

Applied harmonized standards

EN 60335-1

EN 60335-2-79

EN 55014-1: 2006+A1: 2009+A2: 2011

EN 55014-2: 2015

EN 62233: 2008

EN 61000-3-2: 2014

EN 61000-3-3: 2013

EN 50581

Applied conformity evaluation method

2000/14/EC: Appendix V

Sound power level dB(A)

HD 4/9 P

Measured: 83

Guaranteed: 85

HD 5/11 P

Measured: 86

Guaranteed: 89

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



H. Jenner

Chairman of the Board of Management



S. Reiser

Director Regulatory Affairs & Certification

Documentation supervisor:

S. Reiser

Alfred Kärcher SE & Co. KG
Alfred-Kärcher-Straße 28-40
71364 Winnenden (Germany)
Tel.: +49 7195 14-0
Fax: +49 7195 14-2212

Winnenden, 2019/11/01

Technical specifications

Type		HD 4/9 P	HD 4/9 P	HD 5/11 P
		GB	KAP	SA
Main Supply				
Voltage	V	110	120	220
Current type	Hz	50	60	
Connected load	kW	1,4	1,3	2,0
Protection (slow, char. C)	A	15	13	
Type of protection	--	IPX5		
Extension cable, max. 30 m (Protection class 1)	mm²	2,5		
Water connection				
Max. feed temperature	°C	60		
Min. feed volume	l/min	9,5		12
Suck height from open container (20 °C)	m	0,5		
Max. feed pressure	MPa	1		
Performance data				
Operating pressure of water (using standard nozzle)	MPa	9		11
Size of standard nozzle	--	030		036
Max. operating over-pressure	MPa	12	13	16,5
Water flow rate	l/min	6,5	6,2	8,0
Max. recoil force of trigger gun	N	14,76		20,4
Values determined as per EN 60335-2-79				
Hand-arm vibration value	m/s²	<2,5	2,1	3,2
Uncertainty K	m/s²	0,6	0,7	0,8
Sound pressure level L _{pA}	dB(A)	70	69	73
Uncertainty K _{pA}	dB(A)	3		
Sound power level L _{WA} + Uncertainty K _{WA}	dB(A)	85	85	89
Dimensions and weights				
Length	mm	351		
Width	mm	312		
Height	mm	904		
Typical operating weight	kg	21,6	20,5	21,0

Type		HD 5/11 P	HD 5/11 P	HD 5/11 P
		EU CH	AR CN	GB AU
Main Supply				
Voltage	V	230	220	230...240
Current type	Hz	50		
Connected load	kW	2,2		
Protection (slow, char. C)	A	10		
Type of protection	--	IPX5		
Extension cable, max. 30 m (Protection class 1)	mm²	2,5		
Water connection				
Max. feed temperature	°C	60		
Min. feed volume	l/min	12		
Suck height from open container (20 °C)	m	0,5		
Max. feed pressure	MPa	1		
Performance data				
Operating pressure of water (using standard nozzle)	MPa	11		
Size of standard nozzle	--	036		
Max. operating over-pressure	MPa	16		
Water flow rate	l/min	8,1		
Max. recoil force of trigger gun	N	20,4		
Values determined as per EN 60335-2-79				
Hand-arm vibration value	m/s²	2,7		
Uncertainty K	m/s²	0,8		
Sound pressure level L _{pA}	dB(A)	73		
Uncertainty K _{pA}	dB(A)	3		
Sound power level L _{WA} + Uncertainty K _{WA}	dB(A)	89		
Dimensions and weights				
Length	mm	351		
Width	mm	312		
Height	mm	904		
Typical operating weight	kg	20,5		