KÄRCHER

K 1 Upright English 6



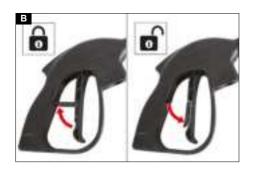












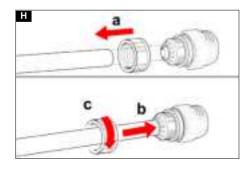


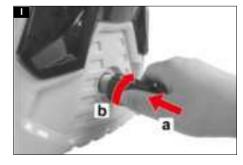


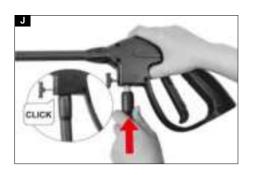




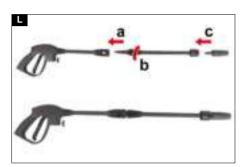


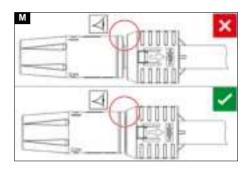


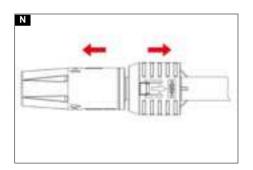




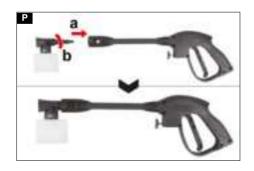


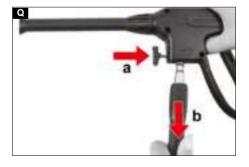


















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Safety instructions



Read this safety chapter and these original instructions before using the device for the first time. Act in accordance with

them. Keep the original instructions for future reference or for future owners.

- In addition to the notes in the operating instructions, you also need to take into consideration the general safety regulations and accident prevention guidelines applicable by law.
- Warnings and information notices attached to the device provide important information for hazard-free operation.

Hazard levels

△ DANGER

 Indication of an imminent threat of danger that will lead to severe injuries or even death.

∧ WARNING

• Indication of a potentially dangerous situation that may lead to severe injuries or even death.

△ CAUTION

 Indication of a potentially dangerous situation that may lead to minor injuries.

ATTENTION

 Indication of a potentially dangerous situation that may lead to damage to property.

Operation

⚠ DANGER • Operation in explosive atmospheres is prohibited. • Never suction solvents, liquids containing solvents or undiluted acids. This includes e.g. petrol, paint thinner or heating oil. The spray mist is highly flammable, explosive and poisonous. • Damaged wheels / tyre valves are extremely dangerous. Damaged wheels / tyre valves can be damaged by the high-pressure jet and explode. The first sign of this is discolouration of the tyres. Keep a spray distance of at least 30 cm when cleaning the wheels / tyre valves.

⚠ WARNING • Do not use the device if people without the proper protective clothing are in its reach.
• Do not aim the high-pressure jet at yourself, e.g. to clean clothes or shoes. • Do not direct the high-pressure jet at persons, animals, live electrical equipment or

at the device itself. • Do not spray any objects which contain harmful substances (e.g. asbestos). • Check the device and the accessories, such as the high-pressure hose, high-pressure gun and safety devices, to make sure they are in proper safe and reliable condition before each operation. Do not use the device if it is damaged. Replace damaged components immediately.
• Only use high-pressure hoses, control panels and

couplings specified by the manufacturer. • Risk of scalding. When disconnecting the supply or high-pressure hose, hot water can leak out of the connections after operation.

⚠ CAUTION • According to the applicable regulations, the appliance may never be used with the drinking water network without a system separator. Ensure that the connection to your house water system, with which the high-pressure cleaner is operated, is equipped with a system separator according to EN 12729 type BA. • Water that has flowed through a system separator is no longer classified as drinkable. • Never leave the device unsupervised while it is in operation. • Recoil force from the water stream emerging at the high-pressure nozzle acts on the high-pressure gun. Keep proper footing and hold the high-pressure gun and spray lance firmly. • Accidents or damage due to the device falling over. Before all actions with or on the device, you must make sure that it is stable.

ATTENTION • Do not operate the device at temperatures below 0 °C.

Protective gear

⚠ CAUTION • Wear suitable protective clothing and safety goggles to protect yourself from water or dirt backsplash. • Aerosols can be formed when using highpressure cleaners. Inhaling aerosols can be harmful for your health. Depending on the application, the use of fully shielded nozzles (e.g. surface cleaners) can significantly lower the emission of aqueous aerosols. Depending on the environment to be cleaned, wear a suitable respiratory protective mask of class FFP 2 or comparable to protect yourself from inhaling aerosols if the use of a fully shielded nozzle is not possible.

Risk of electric shock

⚠ DANGER • Only connect protection class I devices to properly earthed power sources. • Only connect the device to alternating current. The voltage indicated on the type plate must match the voltage of the power source. • Only operate the device via a fault current protection switch (maximum 30 mA). • Never touch the mains plug and socket with wet hands. • The mains plug and coupling of the extension cable must be water tight and may not be placed in water. The coupling may not be on the floor. Use cable drums to ensure that the sockets are at least 60 mm above the floor. • All live parts in the work area must be protected against water jets.

▲ WARNING • Only connect the device to an electrical connection which has been set up by a qualified electrician as per IEC 60364-1. • Check that the mains connection cable with mains plug is undamaged each time before using the device. To avoid any possible danger, a damaged mains connection cable must be immediately replaced by the manufacturer, or the authorised customer service department or a qualified electrician. • Do not damage the power supply and ex-

tension cable by running over it, crushing or yanking it or similar. Protect the power supply cable from heat, oil and sharp edges. • Unsuitable electrical extension cables are dangerous. Only use approved and appropriately marked electrical extension cables with a sufficient line cross section when outdoors: 1-10 m: 1.5 mm², 10-30 m: 2.5 mm²

⚠ CAUTION • Always fully unwind the extension cable from the cable drum. • In case of longer breaks in operation and after use, switch off the device at the main switch / device switch and pull the mains plug.

Operation with detergent

⚠ **WARNING** • Incorrect use of detergents can cause serious injuries or poisoning.

▲ CAUTION • Keep the detergent out of the reach of children. • Only use the detergents supplied or specified by the manufacturer. The use of other detergents or chemicals can impair the safety of the device.

Care and service

⚠ **WARNING** • Always pull out the mains plug before all care and maintenance work.

▲ CAUTION • Have repair work and work on electrical components carried out by the authorised customer service only.

ATTENTION • Do not use acetone, undiluted acids or solvents, as they corrode the materials used on the device.

Transportation

∧ CAUTION

 Risk of accidents and injuries. Take into account the weight of the device for transportation and storage.
 See chapter Technical data in the operating instructions.

General safety instructions

⚠ **DANGER** • Risk of asphyxiation. Keep packaging film out of the reach of children.

⚠ WARNING • Only use the device for its proper use. Take into account the local conditions and beware of third parties, in particular children, when working with the device. • Persons with reduced physical, sensory or mental capabilities and persons lacking experience and knowledge may only use the appliance if they are properly supervised, have been instructed on use of the appliance safely by a person responsible for their safety, and understand the resultant hazards involved. • Children must not operate the device. • Children must be supervised to prevent them from playing with the appliance.

▲ CAUTION • Safety devices are provided for your own protection. Never modify or bypass safety devices.

Safety devices

Danger of injury!

Serious injuries due to missing, modified or ineffective safety devices.

Do not bypass or remove the safety devices and do not render them ineffective. Safety devices are provided for your own protection.

Power switch

The power switch prevents unintentional operation of the device.

Trigger lock

Note

The trigger can be locked against unintentional operation by latching the pawl in the groove on the rear handle of the high-pressure gun.

Locking the trigger:

 Fold up the pawl on the trigger until it latches in the groove on the rear handle of the high-pressure gun. Illustration B

The trigger is locked.

Unlocking the trigger:

Disengage the pawl from the groove on the rear handle of the high-pressure gun and fold it onto the trigger.

The trigger is unlocked.

Auto-stop function

If the trigger of the high-pressure pump is released, the pressure switch turns off the pump and the high-pressure jet is stopped. The high-pressure pump switches on again when the trigger is pulled.

Motor circuit breaker

The motor circuit breaker shuts off the device if power consumption it too high.

Symbols on the device



Do not aim the high-pressure jet may at persons, animals, live electrical equipment or the device itself.

Protect the device against frost.



The device may not be connected to the public drinking water network.

Intended use

Use the high-pressure cleaner in private households only.

The high-pressure cleaner is intended for cleaning machines, vehicles, buildings, tools, façades, terraces, garden machines etc. using a high-pressure water jet.

Environmental protection



The packing materials can be recycled. Please dispose of packaging in accordance with the environmental regulations.



Electrical and electronic devices contain valuable, recyclable materials and often components such as batteries, rechargeable batteries or oil, which - if handled or disposed of incorrectly - can

pose a potential danger to human health and the environment. However, these components are required for the correct operation of the device. Devices marked by this symbol are not allowed to be disposed of together with the household rubbish.

Cleaning work produing in oily waste water, e.g. washing engines, washing undercarriages etc., may only be performed at washing stations with an oil separator.

Working with detergents may only be performed on watertight surfaces with connection to the waste water sewage system. Do not allow detergent to enter waterways or the soil.

Notes on the content materials (REACH)

Current information on content materials can be found at: www.kaercher.de/REACH

Accessories and spare parts

Only use original accessories and original spare parts. They ensure that the appliance will run fault-free and safely.

Information on accessories and spare parts can be found at www.kaercher.com.

Scope of delivery

The scope of delivery for the appliance is shown on the packaging. Check the contents for completeness when unpacking. If any accessories are missing or in the event of any shipping damage, please notify your dealer.

Device description

For the figures, please refer to the graphics page Illustration A

- (1) High-pressure hose
- 2 Jet nozzle
- (3) Spray lance
- (4) Detergent tank
- (5) Foam nozzle
- (6) High-pressure gun
- 7 Pawl
- (8) Trigger
- (9) Release button
- (10) Carrying handle
- (11) Mains cable holder
- (12) Power switch ("OFF/0" / "I/ON")
- (13) High-pressure spigot
- (14) Accessory holder
- (15) *Garden hose (fabric reinforced, diameter at least 1/2 inch (13 mm), length at least 7.5 m, with commercially available quick coupling)
- (16) Hose coupling
- (17) Hose coupling plug
- (18) Cleaning needle
- (19) Screws
- 20) Sieve
- (21) Water spigot
- (22) Type plate
- (23) Mains plug
- (24) Mains cable
- (25) High-pressure hose holder
- * additionally required

Installation

For the illustrations, refer to the graphics page.

Fit the supplied loose parts onto the device before starting up the device.

Have the included screws and the appropriate screwdriver ready.

Installing the carrying handle

 Attach the carrying handle to the device and secure it with 2 screws.

Illustration C

Mounting the mains cable holder

Attach the mains cable holder to the mounting rail.
 Illustration D

Mounting the accessory holder

Attach the accessory holder to the mounting rail.
 Illustration E

Mounting the high-pressure hose holder

 Attach the high-pressure hose holder to the device and secure it with 2 screws.

Illustration F

Mounting the hose coupling plug

- Ensure that the sieve is inserted into the water spigot.
- Screw the hose coupling plug onto the water spigot. Illustration G

Note

To dismantle, unscrew the hose coupling plug anticlockwise.

Mounting the hose coupling

- 1. Mount the hose coupling on the garden hose:
 - a Slide the union nut onto the garden hose.
 - b Insert the garden hose into the hose coupling.
 - c Tighten the union nut hand-tight.

Illustration H

Initial startup

- Place the device upright on a level, horizontal surface.
- 2. Unwind the high-pressure hose and eliminate any loops and twists.
- Mount the high-pressure hose on the high-pressure spigot:
 - Insert the high-pressure hose into the high-pressure spigot.
 - b Tighten the union nut hand-tight.

Illustration I

4. Insert the high-pressure hose into the high-pressure gun until it audibly clicks into place.

Illustration J

- Pull on the high-pressure hose to check that it is firmly seated in the high-pressure gun.
- 6. Insert the mains plug into a mains socket.

Water supply

For the connected load, see *Technical data* or type plate

Observe the water distribution company regulations.

ATTENTION

Risk of damage!

Damage to the device and accessories in case of contamination in the water or use of salt water.

Use only clean water and no salt water.

Note

Kärcher recommends the use of an optional Kärcher water filter.

Connection to the water line

ATTENTION

Risk of damage!

Damage to the pump when using a hose coupling with aquastop on the water connection of the device. Do not use a hose coupling with aquastop on the water

connection of the device.

Use a hose coupling with "aquastop" on the tap only.

- Attach the hose coupling to the hose coupling plug. Illustration K
- 2. Connect the garden hose to the tap.
- 3. Open the water tap completely.

Operation

ATTENTION

Risk of damage!

Damaging the pump during dry running.

Switch off the device if it does not build up pressure within 2 minutes.

Proceed according to the instructions in chapter Troubleshooting guide.

Vent the device

- Turn the power switch to the "I/ON" position. The device is switched on.
- 2. Unlock the trigger, see Trigger lock.
- 3. Actuate the trigger.
- Operate the device for a maximum of 2 minutes until the high-pressure jet comes out of the high-pressure gun without bubbles.
- 5. Release the trigger.
- 6. Lock the trigger, see Trigger lock.

High-pressure operation

ATTENTION

Risk of damage!

Damage to painted or sensitive surfaces if the spray distance is too short or an unsuitable spray lance is used. Keep at least 30 cm spray distance when cleaning painted surfaces.

Do not clean car tires, paint or delicate surfaces such as wood with the dirt grinder.

- 1. Lock the trigger, see Trigger lock.
- 2. Mount the spray lance and the jet nozzle:
 - a Insert the spray lance into the high-pressure gun and
 - b lock it by turning it 90°.
 - c Insert the jet nozzle into the spray lance until it is flush.

Illustration L

Illustration M

Note

To dismantle, hold the jet nozzle and the spray lance at the front and pull apart in opposite directions.

Illustration N

Risk of injury and damage!

Danger of severe injury and damage when setting the spray type during operation.

Lock the trigger before setting the spray type.

Turn the head of the jet nozzle to set the desired spray type (point jet, flat jet).

Illustration O

- Turn the power switch to the "I/ON" position.
 The device is switched on.
- 5. Unlock the trigger, see Trigger lock.
- 6. Pull the trigger and carry out the cleaning process.

Operation with detergents

△ DANGER

Health risk!

Serious damage to health due to improper use of detergents.

Observe the detergent manufacturer's safety data

sheet. Wear the prescribed personal protective gear.

Note

KÄRCHER detergents ensure fault-free operation. Ask us for a consultation, request our catalogue and our detergent information sheets.

- 1. Lock the trigger, see Trigger lock.
- Remove the spray lance from the high-pressure gun.
- 3. Mount the foam nozzle on the high-pressure gun:
 - a Insert the foam nozzle into the high-pressure gun
 - b lock it by turning it 90°.

Illustration P

- 4. Remove the detergent tank from the foam nozzle.
- 5. Fill the detergent tank with a suitable detergent in the required concentration.
- 6. Mount the detergent tank on the foam nozzle.
- 7. Unlock the trigger, see Trigger lock.

ATTENTION

Risk of damage!

Detergent can damage hot surfaces or damage surfaces if left to act for too long.

Do not apply detergent to hot surfaces.

Observe the maximum permissible contact time. Do not allow detergent to dry on the surfaces being cleaned.

- 8. Pull the trigger and spray the detergent sparingly onto the dry surfaces.
- Allow the detergent to act according to the manufacturer's instructions (do not allow to dry).
- 10. Lock the trigger, see Trigger lock.

ATTENTION

Risk of damage!

Damage and malfunction of the foam nozzle due to dried cleaning agents.

Empty the detergent tank immediately after use and rinse it and the foam nozzle with clean water until there is no more detergent in it.

- Flush the foam nozzle, see After operation with detergents.
- Mount the spray lance with the jet nozzle on the high-pressure gun, see chapter High-pressure operation.
- 13. Unlock the trigger, see Trigger lock.
- Rinse off the loosened dirt with the high-pressure jet.

After operation with detergents

ATTENTION

Risk of damage!

Damage and malfunction of the foam nozzle due to dried cleaning agents.

Empty the detergent tank immediately after use and rinse it and the foam nozzle with clean water until there is no more detergent in it.

- 1. Lock the trigger, see *Trigger lock*.
- 2. Empty the detergent out of the detergent tank.
- Rinse the detergent tank with clear water.
- 4. Fill the detergent tank with clear water and mount it on the foam nozzle.
- 5. Unlock the trigger, see Trigger lock.
- Operate the trigger for approx. 30 seconds until the detergent has been completely rinsed out of the foam nozzle.
- 7. Lock the trigger, see Trigger lock.
- 8. Empty the water out of the detergent tank.

Interrupting operation

1. Release the trigger.

The high-pressure pump stops. The high-pressure in the system is maintained.

- Lock the trigger, see Trigger lock.
- For work breaks longer than 5 minutes, turn the power switch to the "0/OFF" position.
 The device is switched off.

Ending operation

△ CAUTION

Danger of injury!

Injuries due to uncontrolled water escaping under high pressure.

Only disconnect the high-pressure hose from the highpressure gun or the device if there is no pressure in the system.

- 1. Release the trigger.
- 2. Close the water tap.
- Actuate the trigger for 30 seconds.
 The high pressure in the system is released.
- 4. Release the trigger.
- 5. Lock the trigger, see Trigger lock.
- Turn the power switch to the "0/OFF" position. The device is switched off.
- 7. Disconnect the device from the water supply.
- 8. Pull the mains plug out of the mains socket.

Transport

△ CAUTION

Risk of injury and damage!

Injury or damage due to non-observance of the weight. Be aware of the weight of the device during transport and storage.

Carrying the device

 Lift up the device by the carrying handle, and carry it.

Transporting the device in a vehicle

1. Secure the device against slipping and tipping over.

Storage

△ CAUTION

Risk of injury and damage!

Injury or damage due to non-observance of the weight. Be aware of the weight of the device during transport and storage.

Storing the device

- 1. Finish operation, see Ending operation.
- Press the release button and pull off the high-pressure hose from the high-pressure gun.
 Illustration Q
- 3. Remove the spray lance from the high-pressure gun and let the water drain.

- Store the spray lance with the jet nozzle and the high-pressure gun on the accessory holder.
 Illustration R
- 5. Remove the high-pressure hose from the device.
- 6. Store the high-pressure hose on the device.
- Store the mains cable with the mains plug on the device.

Observe the additional notes before storing the device for a long period of time, see *Care and maintenance*.

Frost protection

ATTENTION

Risk of damage!

Damage to the device and accessories due to freezing water.

Completely empty the device and accessories after each use.

Protect the device and accessories from temperatures below or equal to 0 °C (32 °F).

- 1. Disconnect the water supply from the device.
- 2. Remove the high-pressure hose from the device.
- 3. Switch the device on ("I/ON").
- 4. Wait for a maximum of 1 minute until no more water escapes from the high-pressure connection.
- 5. Switch off the device ("0/OFF").
- Store the device and accessories in a frost-protected room.

Care and maintenance

△ DANGER

Danger of death!

Fatal injuries due to electric shock when touching live parts.

Do not touch any live parts.

Switch off the device.

Pull the mains plug out of the mains socket.

The device is maintenance-free, i.e. you do not need to perform periodic maintenance work.

Cleaning the sieve

ATTENTION

Risk of damage!

Damage to the sieve due to improper cleaning. Clean the sieve only under running water against its flow direction.

Do not use sharp or hard objectse.g. needles or wire brushes.

ATTENTION

Risk of damage!

Damage to the device and accessories when operating without a sieve or with a damaged sieve.

Check the sieve for damage before inserting it into the water connection. Replace a damaged sieve immediately.

Do not operate the device without a sieve.

If necessary, clean the sieve.

- Pull off the hose coupling from the hose coupling plug.
- Remove the hose coupling plug on the water spigot, see Mounting the hose coupling plug.
- 3. Remove the sieve.
- Clean the sieve under running water.
 Illustration S
- 5. Install the sieve in reverse order.

Cleaning the jet nozzle

- Remove the jet nozzle from the spray lance, see High-pressure operation.
- 2. Insert the cleaning needle into the jet nozzle and loosen the dirt.

Illustration T

- Flush the jet nozzle with water from the front and rear
- Mount the jet nozzle on the spray lance, see Highpressure operation.

Troubleshooting guide

Malfunctions often have simple causes that you can remedy yourself using the following overview. When in doubt, or in the case of malfunctions not mentioned here, please contact your authorized Customer Service.

△ DANGER

Danger of death!

Fatal injuries due to electric shock when touching live parts.

Do not touch any live parts.

Switch off the device.

Pull the mains plug out of the mains socket.

Device is not running

- 1. Unlock and actuate the trigger. The device starts up.
- Check if the voltage specified on the type plate matches the voltage of the power source.
- Unplug the mains plug and check the mains cable for damage.

Have a damaged mains cable replaced immediately by authorised Customer Service.

The device does not reach required pressure

The water supply is too low.

- 1. Open the water tap completely.
- 2. Check the water inlet for sufficient flow rate.
- 3. Lay the garden hose without kinks.

The sieve is contaminated.

1. Clean the sieve, see Cleaning the sieve.

There's air in the device.

- Ensure that the high-pressure hose and garden hose are installed correctly.
- 2. Vent the device:
 - a Disconnect the high-pressure hose from the device and operate the device for a maximum of 2 minutes until water emerges from the high-pressure nozzle without bubbles
 - b Switch off the device.
 - c Connect the high-pressure hose.

Strong pressure fluctuations

- 1. Clean the jet nozzle, see Cleaning the jet nozzle.
- 2. Check the water supply volume.

Device leaking

 The device leaks a small amount for technical reasons. If the leak is severe, request authorised Customer Service.

Warranty

The warranty conditions issued by our relevant sales company apply in all countries. We shall remedy possible malfunctions on your appliance within the warranty period free of cost, provided that a material or manufacturing flaw is the cause. In a warranty case, please contact your dealer (with the purchase receipt) or the next authorised customer service site.

(See overleaf for the address)

Further warranty information (if available) can be found in the service area of your local Kärcher website under "Downloads".

Downloads .			
Technical data			
Electrical connection			
Voltage	V	230	
Phase	~	1	
Frequency	Hz	50-60	
Power rating	kW	1,2	
Degree of protection		IPX5	
Water connection			
Feed pressure (max.)	MPa	0,6	
Input temperature (max.)	°C	40	
Input amount (min.)	l/min	6,6	
Device performance data			
Operating pressure	MPa	6,7	
Max. permissible pressure	MPa	10,0	
Water flow rate	l/min	4,5	
Maximum flow rate	l/min	6,0	
High-pressure gun recoil force	N	<9	
Dimensions and weights			
Typical operating weight	kg	3,7	
Length	mm	210	
Width	mm	274	
Height	mm	395	

Subject to technical modifications.



