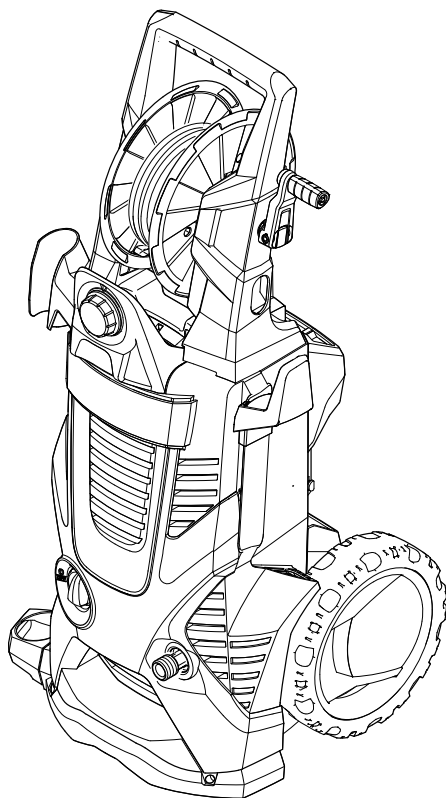


## Operating Instructions

Please read the operating instructions carefully before using the unit.



## Contents

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## General information

### Dear Customer,



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.

### Scope of delivery

The scope of delivery of your appliance is illustrated on the packaging. Check the contents of the appliance for completeness when unpacking.

In the event of missing accessories or any transport damage, please contact your dealer.

### Proper Use

This high-pressure cleaner is designed for domestic use only:

- to clean machines, vehicles, buildings, tools, facades, terraces, garden equipment etc. using a high-pressure water jet (and detergents if required).
- with accessories, replacement parts and detergents approved by KÄRCHER. Observe the instructions provided with these detergents.

## Symbols in the operating instructions

### **Danger**

*Immediate danger that can cause severe injury or even death.*

### **Warning**

*Possible hazardous situation that could lead to severe injury or even death.*

### **Caution**

*Possible hazardous situation that could lead to mild injury to persons or damage to property.*

## Symbols on the machine



*The high pressure jet may not be directed at persons, animals, live electrical equipment or at the appliance itself. Protect the appliance against frost.*

## Environmental protection



The packaging material can be recycled. Please do not place the packaging into the ordinary refuse for disposal, but arrange for the proper recycling.



Old appliances contain valuable materials that can be recycled. Please arrange for the proper recycling of old appliances. Please dispose your old appliances using appropriate collection systems.



The extraction of water from public waters is prohibited in some countries.



Work with detergents must only be performed on liquid-tight work surfaces with connections to the wastewater runoff. Do not let release detergent into waters or earth.



Cleaning operations which produce oily waste water, e.g. engine washes, underbody washes, may only be carried out using washing stations equipped with an oil separator.



Lower water and energy use thanks to the "eco" setting (see chapter "Operation").

### Notes about the ingredients (REACH)

You will find current information about the ingredients at:

**[www.kaercher.com/REACH](http://www.kaercher.com/REACH)**

## Safety instructions

### **Danger**

- Never touch the mains plug and the socket with wet hands.
- The appliance must not be used if the power cord or important parts of the appliance, e.g. high pressure hoses, trigger gun or safety devices are damaged.
- Check the power cord and mains plug for damage before every use. If the power cord is damaged, please arrange for it to be replaced immediately by an authorised repair agent or a skilled electrician.
- Check the high pressure hose for damage before every use. Please arrange for the immediate replacement of a damaged high pressure hose.
- The appliance may not be used in areas where a risk of explosion is present.
- If the appliance is used in hazardous areas (e.g. filling stations) all of the safety provisions and operating instructions detailed in this manual must be observed.
- High pressure jets can be dangerous if improperly used. The jet must not be directed at persons, animals, live electrical equipment or at the appliance itself.
- The high pressure jet must not be directed at other persons or directed by the user at him/herself to clean clothing or footwear.
- Never use the appliance to clean objects containing hazardous substances (e.g. asbestos).
- Vehicle tyres or tyre valves are susceptible to damage from the high pressure jet and may burst. The first indication of this is a discolouration of the tyre. Damaged vehicle tyres/tyre valves are highly dangerous. Ensure that a distance of at least 30 cm is observed when cleaning with the jet!
- Risk of explosion!  
Do not spray flammable liquids.  
Never draw in fluids containing solvents or undiluted acids! This includes petrol,

paint thinner and heating oil. The spray mist thus generated is highly inflammable, explosive and poisonous. Do not use acetone, undiluted acids or solvents as they are damaging to the materials from which the appliance is made.

### **Warning**

- The mains plug and the coupling of an extension cable must be watertight and must never lay in the water.
- Unsuitable extension cables can be hazardous. Only use extension cables outdoors which have been approved for this purpose and labelled with a sufficient cable cross-section:  
1 - 10 m: 1.5 mm<sup>2</sup>; 10 - 30 m: 2.5 mm<sup>2</sup>
- Always fully unroll electrical cables from the cable drum.
- High pressure hoses, fixtures and couplings are important for the safety of the appliance. Only use high pressure hoses, fixtures and couplings recommended by the manufacturer.
- This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities.  
The appliance must not be operated by children or persons who have not been instructed accordingly.  
Children should be supervised to prevent them from playing with the appliance.
- The operator must use the appliance correctly. When working with the appliance, he must consider the local conditions and pay due care and attention to other persons, in particular children, who are nearby.
- Do not use the appliance when there are other persons around unless they are also wearing safety equipment.
- Wear protective clothing and safety goggles to protect against splash back containing water or dirt.

## Caution

- *In case of extended downtimes, switch the appliance off at the main switch / appliance switch or remove the mains plug.*
- *Do not operate the appliance at temperatures below 0 °C.*
- *Observe a distance of at least 30 cm when using the jet to clean painted surfaces to avoid damaging paintwork.*
- *Never leave the appliance unattended when it is in operation.*
- *Make sure that the power cable or extension cables are not damaged by running over, pinching, dragging or similar. Protect the power cable from heat, oil, and sharp edges.*
- *All current-conducting parts in the working area must be protected against jet water.*
- *The appliance may only be connected to an electrical supply which has been installed in accordance with IEC 60364.*
- *The appliance may only be connected to alternating current. The voltage must correspond with the type plate on the appliance.*
- *For safety reasons, we recommend that you operate the appliance only via an earth-leakage circuit breaker (max. 30 mA).*
- *Cleaning operations which produce oily waste water, e.g. engine washes, underbody washes, may only be carried out using washing stations equipped with an oil separator.*
- *This appliance was designed to be used with detergents which are supplied or recommended by the manufacturer. The use of other detergents or chemicals may compromise the safety of the appliance.*

## High pressure hose

The high pressure hose is specially constructed with reinforced walls to handle water pressure up to 16 MPa (2400 psi) - it can be easily damaged and should be stored carefully.

- *Do not kink.*
- *Do not drive vehicles over the hose.*
- *Do not expose the hose to sharp edges or corners.*

Misuse will lead to ballooning or premature failure and will invalidate warranty.

## Safety Devices

### Caution

*Safety devices protect the user and must not be modified or bypassed.*

### Power switch

The appliance switch prevents unintentional operation of the appliance.

### Lock trigger gun

This lock locks the lever of the trigger gun and prevents the inadvertent start of the appliance.

### Overflow valve with pressure switch

The overflow valve prevents the permissible working pressure from being exceeded. If the lever on the trigger gun is released the pressure switch turns off the pump, the high pressure jet is stopped. If the lever is pulled the pump is turned on again.

## Prerequisites for the appliance's stability

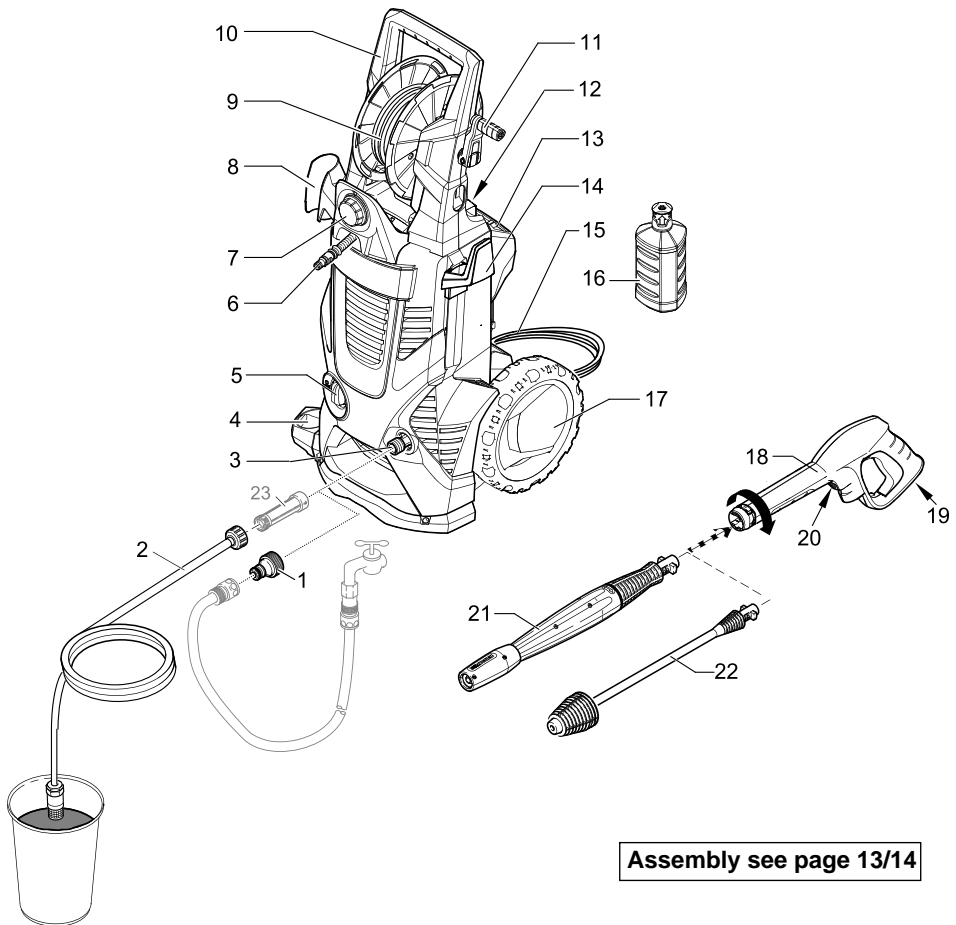
### Caution

*Create stability for the appliance prior to all work on or with the appliance to prevent accidents or damage.*

- The stability of the appliance is warranted when it is placed onto an even surface.

## Description of the Appliance

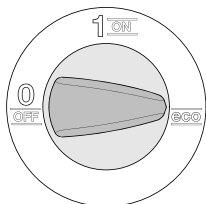
- |   |  |
|---|--|
| 1 Coupling element for water connection                                 | 14 Plug 'n' Clean detergent bottle with locking lid          |
| 2 Suction hose  | 15 Storage hook for mains connection cable                   |
| 3 Water connection with integrated sieve                                | 16 Mains cable with mains plug                               |
| 4 Storage for trigger gun - bottom holder                               | 17 Wheels  |
| 5 Appliance switch (0/OFF – 1/ON eco).                                  | 18 Trigger gun   |
| 6 High pressure hose  | 19 Lock trigger gun  |
| 7 Dosage regulator for detergent  | 20 Key to detach the high pressure hose from the trigger gun |
| 8 Storage for trigger gun - top holder                                  | 21 Spray lance with pressure regulation (Vario Power)        |
| 9 High-pressure hose drum   | 22 Spray lance with Dirtblaster                              |
| 10 Transport handle   | <b>Optional</b>  |
| 11 Hand crank for hose drum   | 23 Water filter (order no. 4.730-059)                        |
| 12 Storage of Plug 'n' Clean detergent bottle with detergent connection |  |
| 13 Storage for accessories  |  |



Assembly see page 13/14

## Operation

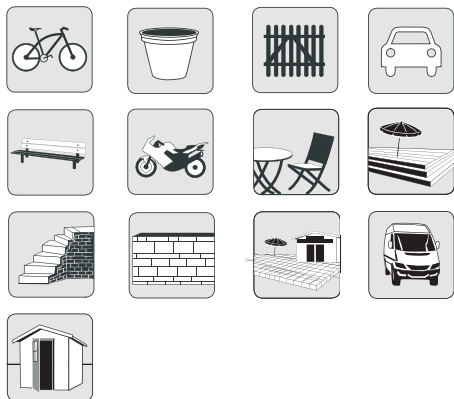
### Switch position "eco"



There are the switch positions "1/ON" and "eco" to switch the appliance on.

**Note:** The switch position "eco" allows the control of pressure and leads to water and energy savings of approx. 20% by using the spray lance.

### Recommended application ranges for switch position "eco"



### Before Startup

Mount loose parts delivered with appliance prior to start-up.

#### Illustrations on Page 13-14

### Install the storage for trigger gun

Illustration **A**

- ➔ Place the bottom holder into the recesses and push forward until it audibly locks in.

Illustration **B**

- ➔ Insert the top holder and push down all the way.

### Install the storage hook for the mains connection cable

#### Option

Illustration **C**

- ➔ Install the top storage hook.

### Install the dosage regulator for detergent

You will need the 2 included screws as well as a Phillips screwdriver PH 2.

Illustration **D**

- ➔ Insert both detergent hoses onto the hose fittings.
- ➔ Install the dosage regulator and connect using 2 screws.

### Install the transport handle

Illustration **E**

- ➔ Wind up the high-pressure hose on the hose drum.

Illustration **F**

- ➔ Slide the free end of the coiled high pressure hose through the recesses on the dosage regulator.

Illustration **G**

- ➔ Attach the transport handle, insert the bolts into the bores and screw them in.

Illustration **H**

- ➔ Press the connecting fitting from the short high pressure hose into the brass intake until it locks into place audibly. Check the secure connection by pulling on the high pressure hose.

### Connect the high pressure hose to the trigger gun

Illustration **I**

- ➔ Push the high pressure hose into the trigger gun until it locks audibly.  
**Note:** Make sure the connection nipple is aligned correctly. Check the secure connection by pulling on the high pressure hose.

## Water supply

### **Warning**

According to the applicable regulations, the appliance must never be used on the drinking water supply without a system separator. Use a suitable system separator manufactured by KÄRCHER; or, as an alternative, a system separator as per EN 12729 Type BA. Water flowing through a system separator is considered non-drinkable.



### **Caution**

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

### **Water supply from mains**

Observe regulations of water supplier.

For connection values, see type plate/technical data.

### **Caution**

*Hose couplings made of metal with aquastop can damage the pump! Please use plastic couplings or KÄRCHER brass couplings.*

- Use a fibre-reinforced water hose (not included) with a standard coupling. (Minimum diameter 1/2 inch (13 mm), minimum length 7.5 m).

#### → Illustration

Screw the coupling element to the water connection on the appliance.

- Push the water supply hose onto the coupling unit.
- Connect the water supply hose to the water supply.
- Completely open the water tap.

### **Drawing in water from open reservoirs**

**Note:** Impurities in the water can damage the high-pressure pump and accessories. For protection, the use of the KÄRCHER water filter (optional accessory, order no. 4.730-059) is recommended.

**Note:** The max. suction height is 0.5 m.

- Fill the suction hose with water.


#### → Illustration

Screw the suction hose into the water connection of the appliance and insert it into the water source (e.g. rainwater drum).

## Start up

### **Caution**

Dry runs lasting longer than two minutes lead to damages to the high pressure pump. If the appliance does not build up pressure within two minutes, switch it off and proceed as instructed in the Chapter "Troubleshooting".

- Completely uncoil the mains cable.
- Insert the mains plug into the socket.
- Set the appliance switch to "1/ON".
- Illustration 

Unwind the high pressure hose completely from the hose drum. Hold on to the transport handle during this procedure.

**Note:** If the hand crank is in its secured position, fold it up first.

- Unlock the lever on the trigger gun.
- Pull on the lever of the trigger gun; the device will switch on.  
Switch the appliance on for a (max. of 2 minutes) and wait until the water exits at the hand spray gun without bubbles.
- Release the lever on the trigger gun.
- Set the appliance switch to "0/OFF".

## Operation

### **Caution**

*Prior to cleaning, make sure that the high pressure is placed safely on level ground. Wear protective goggles and protective clothing during the cleaning process.*

#### → Illustration

Push the spray lance into the trigger gun and fasten it by turning it through 90°.

- Set the appliance switch to "1/ON".

### **Danger**

*The trigger gun is subjected to a recoil force when the water jet is discharged. Make sure that you have a firm footing and are also holding the trigger gun and spray lance firmly.*

- Pull on the lever of the trigger gun; the device will switch on.

**Note:** Release the lever of the trigger gun; the device will switch off again. High pressure remains in the system.

### **Spray lance with pressure regulation**

Carrying out the most common cleaning tasks. The work pressure can be infinitely regulated between "Min" and "Max".

- ➔ Release the lever on the trigger gun.
- ➔ Turn the spray lance to the desired position.
- Suitable for working in switch position "eco".

**Note:** Suitable for working with detergent; for this, turn the spray lance to the "Mix" position.

### **Spray lance with Dirtblaster**

For particularly dirty items or areas.

#### **Caution**


*Car tyres, paint or sensitive surfaces such as wood should not be cleaned with the dirt blaster, as there is a risk of damage.*

- Not suitable for use with detergents.
- The Dirtblaster reaches its maximum cleaning performance in standard mode.

### **Working with detergent**

Please use exclusively KÄRCHER detergents and care products to carry out the respective cleaning task, as these were specifically developed for your appliance. The use of other detergents and care products may lead to premature wear and can invalidate your warranty claims. Please obtain information at your local dealer or request information directly from KÄRCHER.

**Notes regarding the detergent:** The most commonly used KÄRCHER detergents can be purchased ready to use in their Plug 'n' Clean detergent bottles with locking lids. This will make the pesky refilling and filling processes redundant.

Illustration 

- ➔ Remove the lid from the Plug 'n' Clean detergent bottle and press the detergent bottle into the detergent connection with the opening facing down.

Illustration 

- ➔ Adjust the suction volume of the detergent solution by means of the dosage regulator for detergents.
  - ➔ Use spray lance with pressure regulation (Vario Power).
  - ➔ Turn the spray lance to "Mix" position.
- Note:** This will mix the detergent with the water stream.

### **Recommended cleaning method**

- ➔ Spray the detergent sparingly on the dry surface and allow it to react, but not to dry.
- ➔ Spray off loosened dirt with the high pressure jet.

### **Interrupting operation**

- ➔ Release the lever on the trigger gun.
- ➔ Lock the lever on the trigger gun.
- ➔ During longer breaks (more than 5 minutes), also turn the appliance off using the "0/OFF" switch.

### **Finish operation**

#### **Caution**

*Only separate the high-pressure hose from the trigger gun or the appliance while there is no pressure in the system.*

- ➔ Remove the Plug 'n' Clean detergent bottle from the intake and close it with the lid. To store, place into the intake rotated by 180°.
- ➔ Release the lever on the trigger gun.
- ➔ Turn off the appliance "0/OFF".
- ➔ Turn off tap.
- ➔ Press the lever on the trigger gun to release any remaining pressure in the system.
- ➔ Detach the appliance from the water supply.

#### **Warning**

*When disconnecting the supply or high pressure hose, hot water may leak from the connections after operation.*

- ➔ Lock the lever on the trigger gun.
- ➔ Pull out the mains plug.



## Transport

### Caution

*In order to prevent accidents or injuries, keep in mind the weight of the appliance during transport (see Specifications).*

### When transporting by hand

- Pull the appliance by its transport handle.

### When transporting in vehicles

- Prior to horizontal transport: Remove the Plug 'n' Clean detergent bottle from the intake and close it with the lid.
- Secure the appliance against shifting and tipping over.


## Storage

### Caution

*In order to prevent accidents or injuries, keep in mind the weight of the appliance when selecting a storage location for it (see Specifications).*

### Storing the Appliance

- Park the machine on an even surface.
- Wind the entire high pressure hose onto the hose drum by rotating the hand crank counter-clockwise.
- Insert the trigger gun with the spray lance into the holder for the trigger gun.

Illustration 

- Stow away the mains cable, the high-pressure hose and accessory on the appliance.

Prior to extended storage periods, as during the winter, also observe the instructions in the Care section.

### Frost protection

### Caution

*Protect the appliance and its accessories against frost.*

The appliance and its accessories can get destroyed through frost if there is any water residues in them. To avoid damage to them:

- Completely drain all water from the appliance:
  - Detach spray lance from the trigger gun.
  - Switch the appliance on ("I/ON"), press the trigger gun lever until no further water is discharged (approx. 1 min).
  - Turn off the appliance.
- Store the appliance and the entire accessories in a frost free room.

## Maintenance and care

### **Danger**

*Turn off the appliance and remove the mains plug prior to any care and maintenance work.*

### Care

Prior to longer periods of storage, e.g. in the winter:

Illustration 

- Pull out the sieve in the water connection using flat-nose pliers and clean under running water.

### Maintenance

The appliance is maintenance free.

### Spare parts

Use only original KÄRCHER spare parts. You will find a list of spare parts at the end of these operating instructions.

### Special accessories

Special accessories expand the possibilities of using your appliance. Please contact your KÄRCHER dealer for further information.

## Troubleshooting

You can rectify minor faults yourself with the help of the following overview. If in doubt, please consult the authorized customer service.

### **Danger**

*Turn off the appliance and remove the mains plug prior to any care and maintenance work.*

*Repair works may only be performed by the authorized customer service.*

### Appliance is not running

- Pull on the lever of the trigger gun; the device will switch on.
- Check whether the voltage indicated on the type plate corresponds to the voltage of the mains supply.
- Check the mains connection cable for damages.

### Pressure does not build up in the appliance

- Check setting at the spray lance.
- Appliance ventilation.  
Switch on the appliance without connection the high-pressure hose (max. 2 minutes) and run it until the water discharging from the high-pressure outlet is free of bubbles. Switch off appliance and reconnect high-pressure hose.
- Check the water supply.
- Pull out the sieve in the water connection using flat-nose pliers and clean under running water.

### Appliance does not start, motor hums

*Cause: Voltage reduction due to weak mains supply or when using an extension cable.*

- When switching on, first pull the lever of the hand spray gun and then switch the appliance switch to "I/ON" or "eco".

### Strong pressure fluctuations

- Clean high-pressure nozzle: Remove dirt and debris from the nozzle bore, using a needle and rinse through with water from the front.
- Check water flow quantity.

### Appliance is leaking

- Slight leakage from the appliance pump is normal. If the leakage increases contact the authorized customer service.

### No detergent infeed

- Use spray lance with pressure regulation (Vario Power).  
Turn the spray lance to "Mix" position.
- Check the settings at the dosage regulator for detergent.
- Check the detergent suction hose for kinks.

## Helpline

KÄRCHER UK Limited operates a helpline allowing customers to discuss any problems experienced with our products.

The helpline operates during normal business hours and may be busy at peak periods. If you have difficulty getting through we would ask that you try to contact us again later in the day.

**The helpline number is 01295 752200, open from 8.30 am to 5.00 pm Monday to Friday.**

It helps us if you have the model number and data plate details to hand before making your call so that we can assist you with your query more effectively.

**Alternatively you may write to us at the address below:**

KÄRCHER UK Ltd  
Kärcher House  
Beaumont Road  
Banbury  
Oxon, OX16 1TB

**or E-mail us:**

info@karcher.co.uk

## 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. (See address on the reverse)

## Technical specifications

### Electrical connection

Voltage	220-240 V 1~50 Hz
---------	----------------------

Connected load	2,8 kW
----------------	--------

Protection class	IP X5
------------------	-------

Protective class	I
------------------	---

Mains fuse (slow-blow)	13 A
------------------------	------

### Water connection

Max. feed pressure	0,6 MPa
--------------------	---------

Max. feed temperature	60 °C
-----------------------	-------

Min. feed volume	11 l/min
------------------	----------

Max. Suction height	0,5 m
---------------------	-------

### Performance data

Working pressure	15 MPa
------------------	--------

Max. permissible pressure	16 MPa
---------------------------	--------

Water flow rate	9,2 l/min
-----------------	-----------

Detergent flow rate	0,3 l/min
---------------------	-----------

Recoil force of trigger gun	25 N
-----------------------------	------

### Dimensions and weights

Length	404 mm
--------	--------

Width	461 mm
-------	--------

Height	968 mm
--------	--------

Weight, ready to operate with accessories	22,2 kg
---	---------

### Values determined as per EN 60335-2-79

Hand-arm vibration value	<2,5 m/s <sup>2</sup>
--------------------------	-----------------------

Uncertainty K	0,3 m/s <sup>2</sup>
---------------	----------------------

Sound pressure level L <sub>pA</sub>	80 dB(A)
--------------------------------------	----------

Uncertainty K <sub>pA</sub>	3 dB(A)
-----------------------------	---------

Sound power level L <sub>WA</sub> +	96 dB(A)
-------------------------------------	----------

Uncertainty K <sub>WA</sub>	
-----------------------------	--

***Subject to technical modifications!***

## EC 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:** 1.168-xxx

### **Relevant EU Directives**

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

2004/108/EC

2000/14/EC

2011/65/EC

### **Applied harmonized standards**

EN 50581

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

EN 55014-2: 1997+A1: 2001+A2: 2008

EN 60335-1

EN 60335-2-79

EN 61000-3-2: 2006+A1: 2009+A2: 2009

EN 61000-3-3: 2008

EN 62233: 2008

### **Applied conformity evaluation method**

2000/14/EC: Appendix V

### **Sound power level dB(A)**

Measured: 93

Guaranteed: 96

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



H. Jenner

CEO



S. Reiser

Head of Approbation

Authorised Documentation Representative  
S. Reiser

Alfred Kärcher GmbH Co. KG

Alfred-Kärcher-Str. 28 - 40

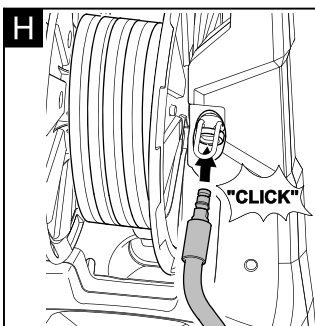
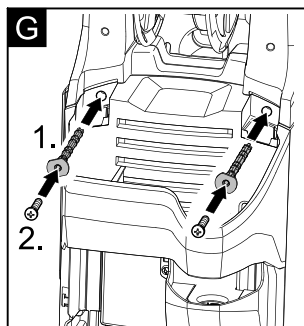
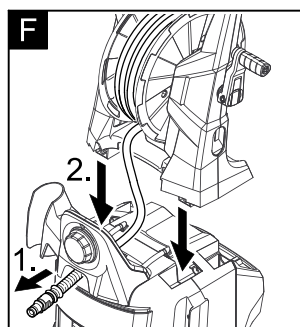
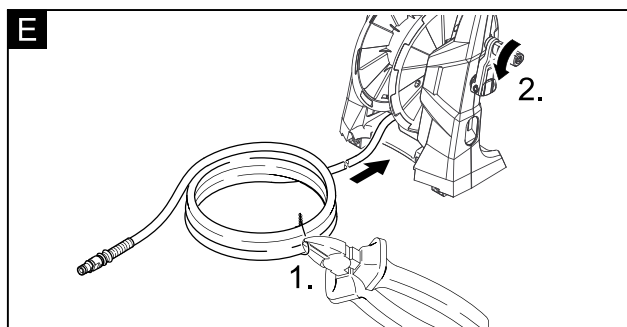
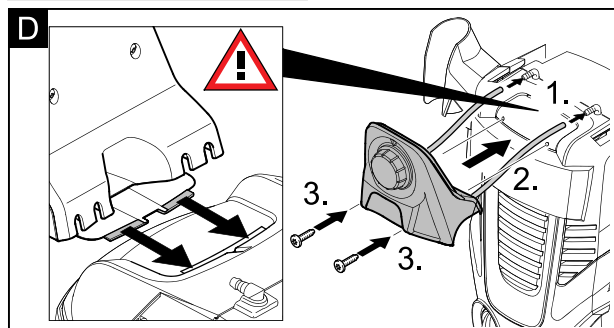
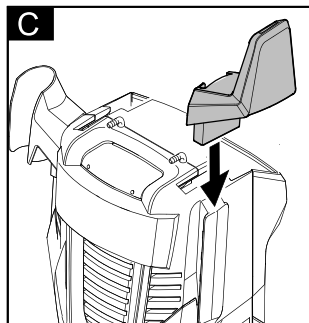
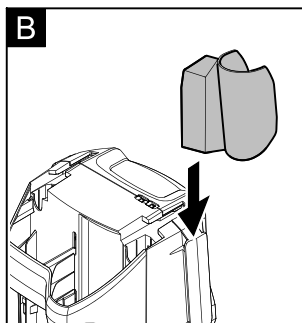
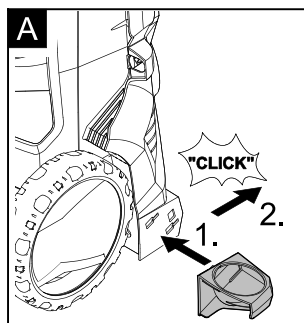
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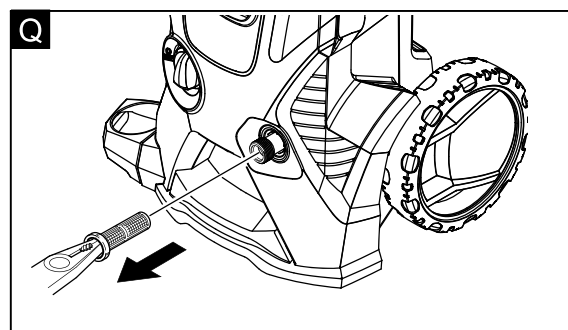
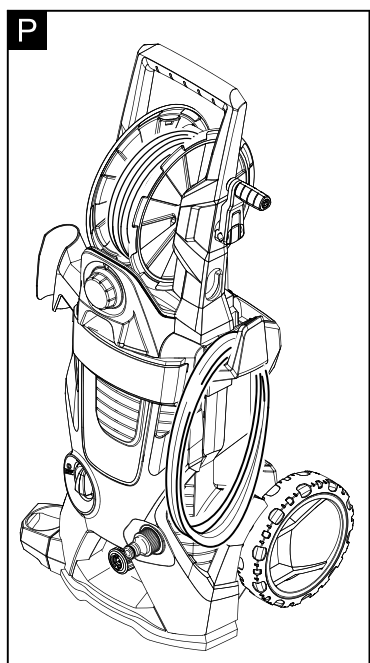
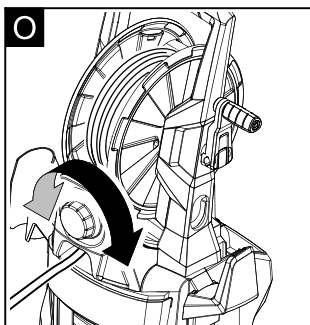
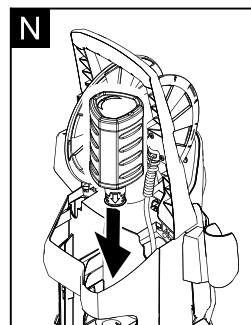
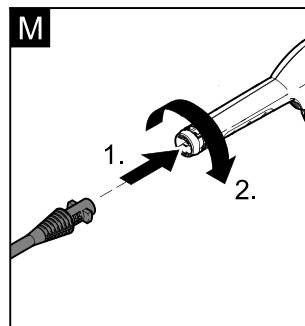
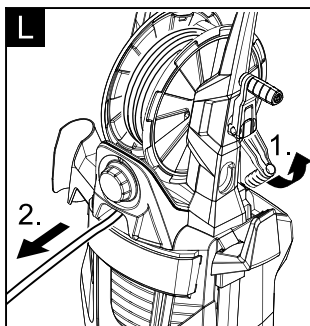
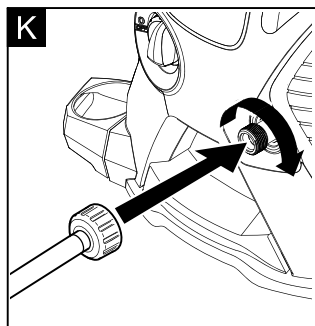
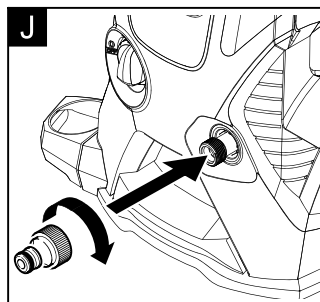
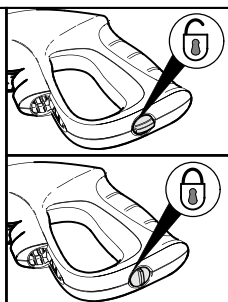
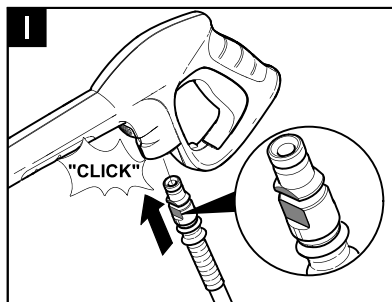
Phone: +49 7195 14-0

Fax: +49 7195 14-2212

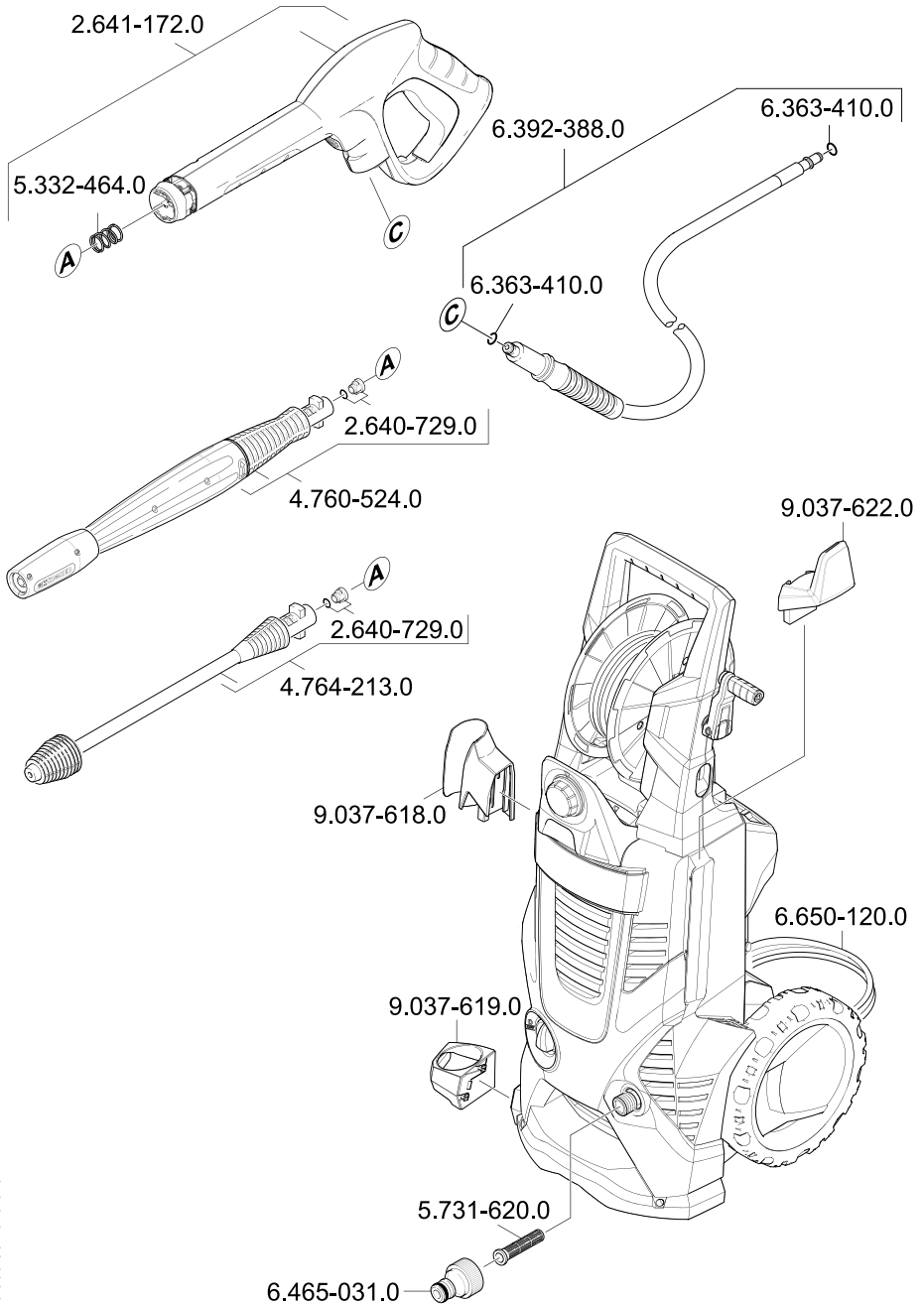
Winnenden, 2013/01/01

# Assembly





# Spare Parts





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