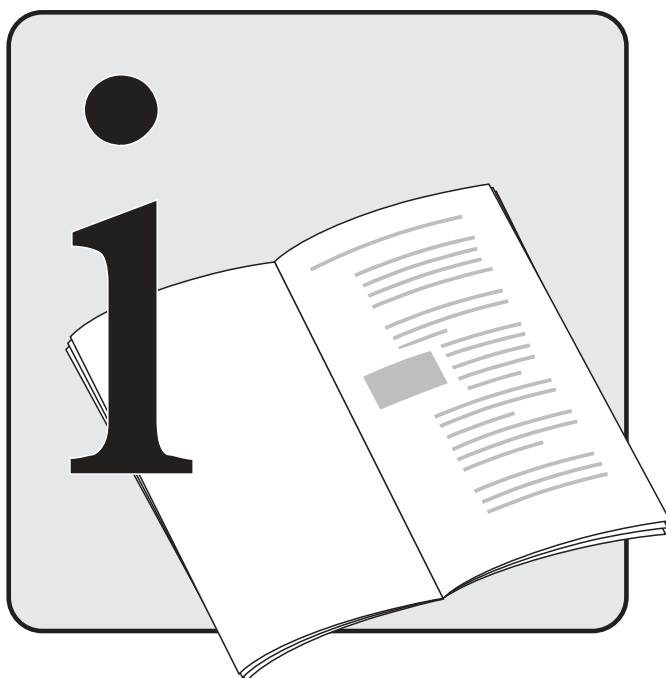




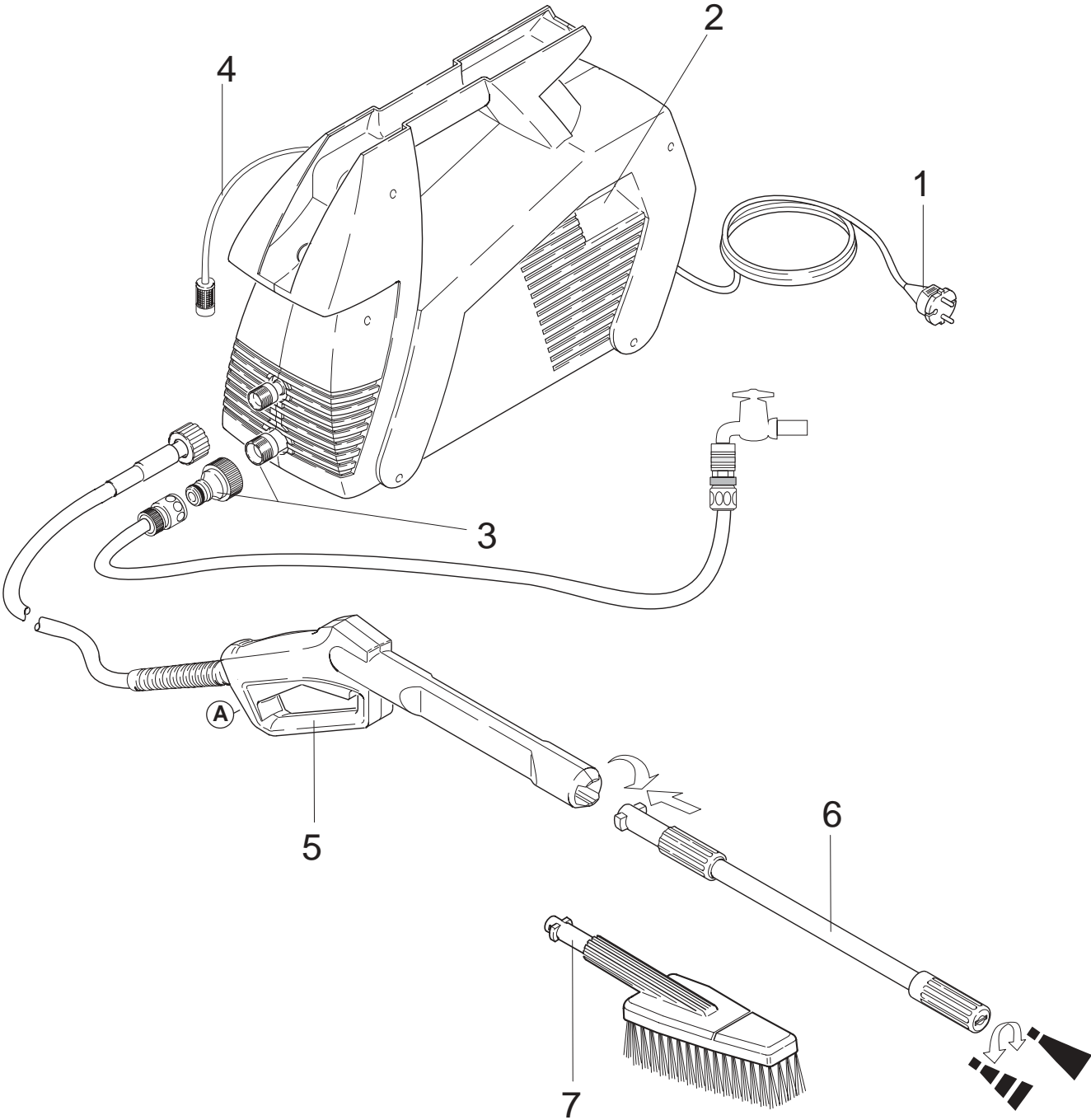
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Please read these operating instructions before starting and strictly observe the "Safety Instructions for High Pressure Cleaners".



1. Starting

- Please contact your dealer immediately if, on unpacking the appliance, you discover damage has been caused during transportation.
- Do not simply discard the packing materials with the house-hold waste. Take the packing materials to the appropriate collection areas for recycling.

① Electrical Connection

- See technical data of connected values.
- Check whether the voltage shown on the rating plate corresponds to that of the power source.

Note: *If you are using an extension cable, it should always be completely unwound from the cable drum and have a sufficient cross-sectional area: 10 m = 1.5 mm², 30m = 2.5 mm²*

② Power Switch

- With this switch you can switch the high-pressure pump ON and OFF.

③ Water Connection with coupling

- See technical data for connected values.
- Screw the coupling onto the water connection of the appliance.
- Connect a water supply hose (not supplied) to the appliance and the water pipe.

Suction

Observe the following if you are drawing water from an open container:

1. Unscrew the coupling from the water connection of the appliance, and attach a suction hose with filter (order no. 4.440-238) directly to the appliance.
2. Allow the pump to operate without the high-pressure hose until water appears at the high-pressure outlet without any more bubbles.
3. Then re-attach the high-pressure hose.

Note: *Dirt in the feed water could lead to the appliance being damaged. To avoid this risk, we recommend fitting a filter. A suitable filter with 3/4" connection is available under Order No. 6.414-389.*

④ Detergent Suction Hose with filter

⑤ Trigger Gun with safety ratchet (A) and high-pressure hose

- Connect the high-pressure hose to the high-pressure outlet.

Note: *The safety ratchet does not lock the lever of the gun during operation but only prevents it from opening unintentionally.*

⑥ Spray lance with double nozzle

- Push the spray lance against the spring into the bayonet connector of the gun, and then rotate it through 90° until it clicks into place.
- You can choose between 2 different types of spray by rotating the front protective device on the spray lance:



High-pressure flat spray
for large surface dirt.



Low-pressure flat spray
for cleaning with detergent


Note: *Only rotate the front protective device on the spray lance when the gun is closed.*

⑦ Washing brush


- Press the washing brush against the spring into the bayonet lock of the extension and then rotate the washing brush by 90° until it clicks into position.

2. Operation

Operation with high-pressure

- Set the double nozzle to “”.
- Release the gun trigger with the safety ratchet and pull the trigger.
- Switch on the pump.

Operation with Detergent

- Set the double nozzle to “”.
- Suspend the detergent hose in the detergent container (not included).
- We recommend that you use detergent sparingly for the sake of the environment.
- We offer you an individual cleaning and detergent range, thereby guaranteeing fault-free work. Please allow us to advise you or order our catalogue or the detergent information sheets.

Note:

Only those detergents which have been approved by the appliance manufacturer may be used. Unsuitable detergents can damage the appliance and the object being cleaned. Observe the recommended dosage on the detergent label.

We recommend the following cleaning methods:

Step 1: Loosening dirt

Spray on detergent sparingly and allow to react for a short time.

Step 2: Removing dirt

Spray off the loosened dirt with the high-pressure spray.

- The appliance should be rinsed clean after detergent has been used. To do this, suspend the detergent suction hose in a container of clean water, and run the pump for approx. 1 minute.

Interrupting Operation

- In the event of extended work breaks (more than 15 minutes), switch off the pump to avoid damage due to water overheating.

Switching Off the Appliance

- Switch off the pump and unplug the power cable from the mains.
- Close the water inlet and detach the appliance from the water connection.
- Pull the trigger until there is no more pressure in the appliance, and secure the trigger with the safety ratchet against unintentional opening.

Purpose

- Use the appliance to clean machines, vehicles, buildings, tools etc.
- Clean facades, terrasses, garden equipment etc. without detergent only with the high-pressure spray.
- Engines may only be cleaned at locations with appropriate oil separators (environmental protection).
- When the appliance is used at petrol stations and other dangerous areas, the appropriate safety regulations must be observed.
- We recommend the dirt blaster as a special attachment for stubborn dirt.

3. Care and Maintenance

Monthly or as Required

- Clean the filter on the detergent suction hose.
- Clean the double nozzle.
Remove dirt from the nozzle hole with a needle, and rinse with water from the front.
- Clean the strainer in the water connection. It can be easily removed with a flat-nosed pliers.

Frost Protection

- Frost will destroy an appliance which has not been completely emptied of water. Ideally, the appliance should be stored in a frost-free room.

4. Troubleshooting

Note:

Disconnect the appliance from the power mains before all repair work. Only authorized customer service personnel may inspect electrical components.

In this chapter, we would like to give you some hints on dealing with malfunctions yourself.

In all other cases or in the case of electrical faults, please contact the authorized customer service.

Appliance does not Work

- Check the mains voltage.
- Check the connector cable for damage.

Appliance does not reach Operational Pressure

- Adjust the double nozzle to high pressure or clean same.
- Bleed the air from the appliance. (→ Suction 2.)
- Clean the strainer in the water connection.
- Check the inlet water flow rate.
- Check all inlet pipes to the pump for leaks or blockage.

Strong Pressure Fluctuations

- Clean the double nozzle. Remove dirt from the nozzle hole with a needle, and rinse with water from the front.

Pump Leaks

- 3 drops per minute are permissible. In the case of more serious leakage, you should contact the authorized customer service.

No Detergent Suction

- Set the double nozzle to low pressure.
- Clean the detergent suction hose with filter, and check for leaks.

5. General Information

Safety Equipment

Safety Valve/Overflow valve

The safety valve is also an overflow valve. When the hand-held spray gun is closed, the valve opens and water flows back to the suction side of the pump.

Spare Parts

A selection of the most common spare parts numbers is listed at the end of these operating instructions.

Guarantee

The terms and conditions of guarantee issued by a national Kärcher Company are valid in the relevant country.

If the appliance malfunctions in any way, the fault will be rectified free of charge within the period of the guarantee provided the malfunction is due to faulty material or a manufacturing error and all the terms and conditions are met.

6. Technical Data

Power connection

Voltage	240 V
Type of current	1~50 Hz
Connected load	1,75 kW
Mains fuse (slow)	10 A

Water connection

Supply temperature (max.)	40 °C
Supply rate (min.)	600 l/h
Supply pressure (max.)	12 bar
Supply hose	
– length (min.)	7,5 m
– diameter (min.)	1/2 in
Suction height from open tank at a water temperature of 20°C	1 m

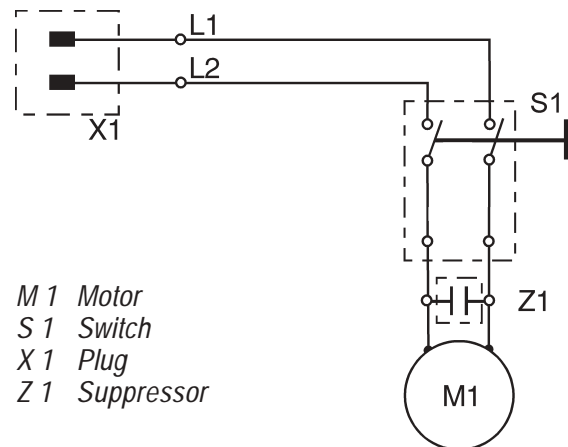
Performance data

Rated pressure	100 bar
Permissible pump pressure (max.)	110 bar
Flow rate	400 l/h
Detergent intake	30 l/h
Recoil force of hand-held spray gun at operating pressure (max.)	16 N
Sound pressure level (DIN 45635)	78 dB (A)

Dimensions

Length	432 mm
Width	170 mm
Height	300 mm
Weight with accessories	8 kg

Circuit Diagram



- M 1* Motor
- S 1* Switch
- X 1* Plug
- Z 1* Suppressor

7. Spare Parts

KÄRCHER 402

1.945-922 CDN
 1.945-926 GB
 1.945-928 AUS

KÄRCHER 411

1.945-930 GB

