

 **KÄRCHER**
K 2.50 M

5.960-643
05/03_2004246

Operating Instructions

PRESSURE WASHER



**Before first use of the unit read these operating instructions
and act in accordance with them**



Safety Notes



Use of the unit as authorized

Use this unit exclusively for non-industrial purposes

- for cleaning machines, vehicles, buildings, tools, facades, terraces, garden implements, etc., with high-pressure water jet (if necessary with the addition of cleaning agents).
- for cleaning vehicle engines only in locations equipped with an appropriate oil separator.
- with accessories, replacement parts and cleaning agents authorized by Kärcher. Please comply with instructions supplied with the cleaning agents.

General safety notes

The appliance is not intended for use by young children or infirm persons without supervision.

Young children should be supervised to ensure that they do not play with the appliance.

Never leave the unit unattended whilst the master switch is switched on.

Never operate the unit in potentially explosive spaces.

Do not spray any objects which contain health-endangering substances (e.g. asbestos).

Warning signs on the unit

Never direct the high-pressure jet at human beings, animals, the unit itself or at electrical parts.

Safety devices

Safety devices serve to protect against injuries and must not be changed or circumvented.

Relief valve with pressure switch

When the lever on the handgun is released the pressure switch switches off the pump and the high-pressure jet ceases. When the lever is pulled the pressure switch switches on the pump again.

Moreover, the relief valve prevents the permissible operating pressure from being exceeded.

Safety ratchet

The safety ratchet on the handgun prevents inadvertent switching on of the unit.

Environmental protection

Please arrange for the proper disposal of the packaging



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

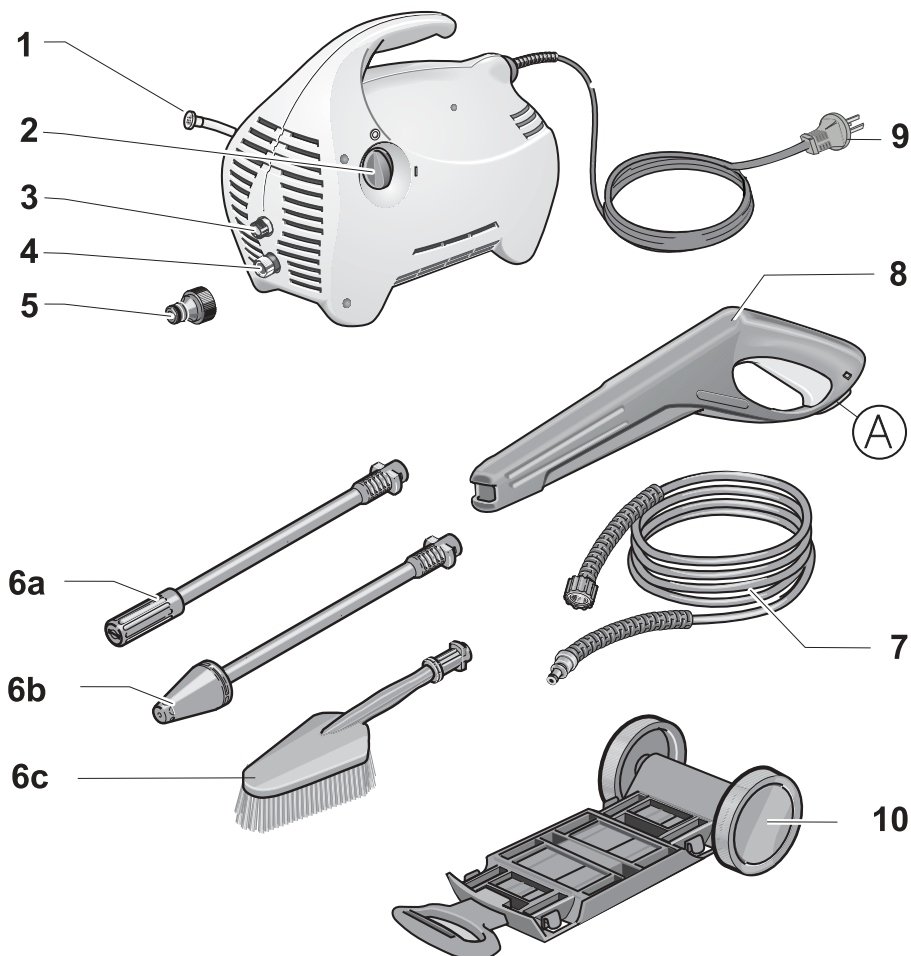
Please arrange for the proper disposal of the old appliance



Old appliances contain valuable materials that can be recycled. Please arrange for the proper recycling of old appliances. Batteries, oil, and similar substances must not enter the environment. Please dispose of your old appliances using appropriate collection systems.

Contents

Before first use of the unit read these operating instructions and act in accordance with them. Keep these operating instructions in a safe place for later use or for a subsequent owner.



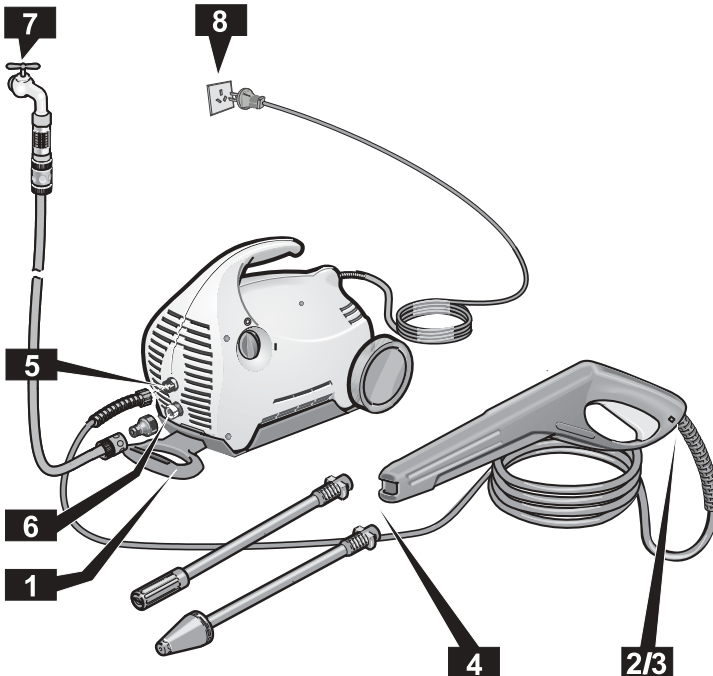
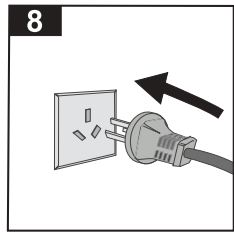
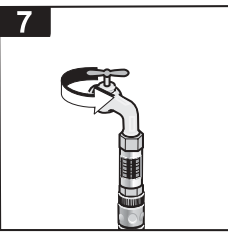
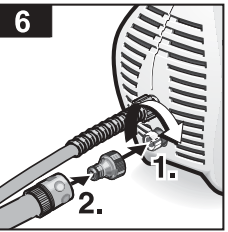
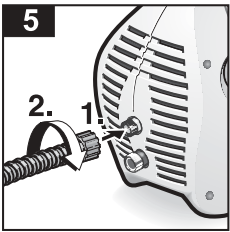
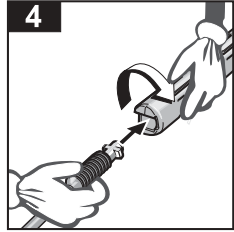
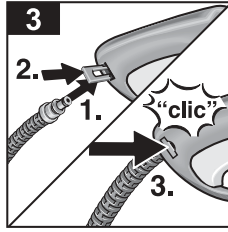
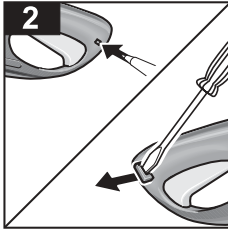
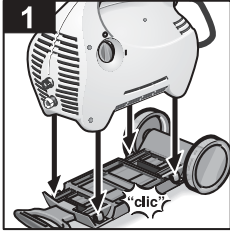
- 1** Detergent suction hose
- 2** Appliance switch (ON/OFF)
- 3** High-pressure outlet
- 4** Water connection with filter
- 5** Coupling
- 6a** Spray lance with double nozzle

- 6b** Spray lance with dirt blaster
- 6c** Wash brush
- 7** High-pressure hose
- 8** Spray gun with safety ratchet (A)
- 9** Power plug
- 10** Transport cart

Preparation

- 1** Transport cart assembly
- 2 3** Spray gun assembly
- 4** Attach spray lance
- 5** Screw on high-pressure hose

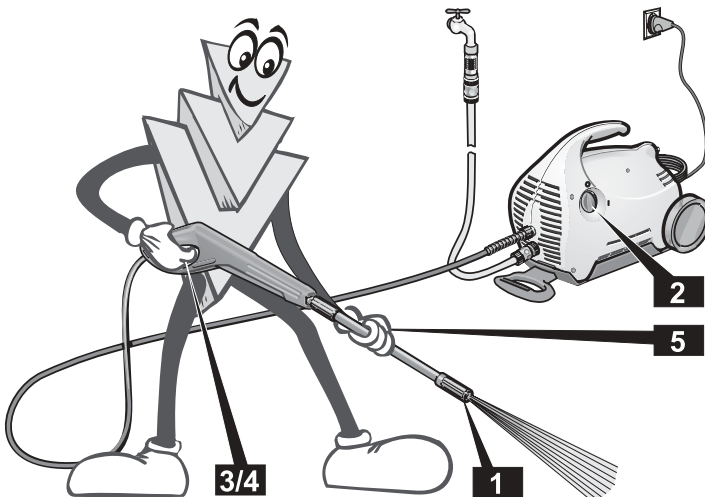
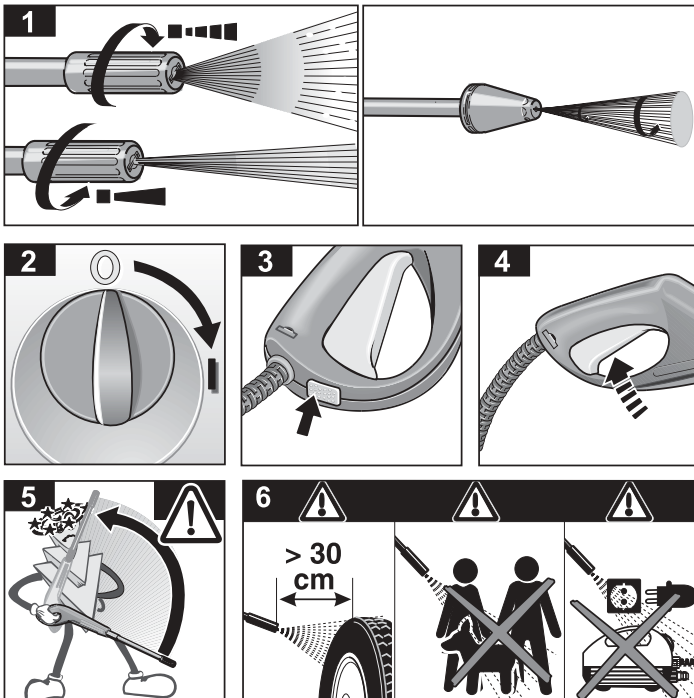
- 6** Connect to water inlet
- 7** Open water tap fully
- 8** Plug in power plug



For additional
information
see page 8
and following

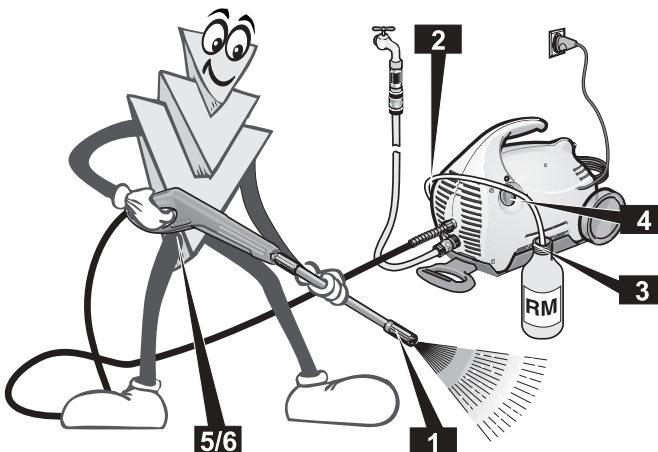
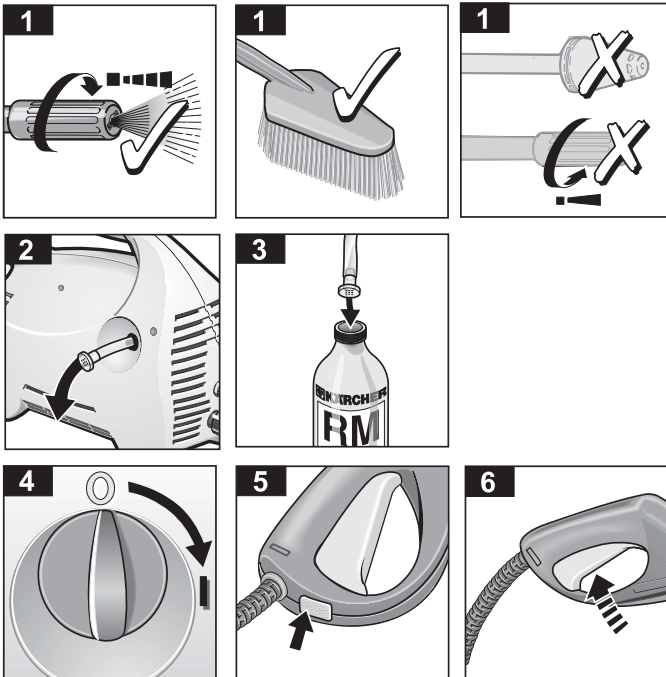
Operation with high pressure

- 1 Choose spray lance
- 2 Unit switch on "1"
- 3 Release safety ratchet on handgun
- 4 Press lever
- 5 **Caution:** recoil
- 6 Safety instructions



Operation with Detergent

- 1** Adjust to low-pressure jet
No detergent in high-pressure mode
- 2** Suspend detergent suction hose...
- 3** in detergent reservoir
- 4** Switch on high-pressure cleaner
- 5** Release safety ratchet on handgun
- 6** Press lever

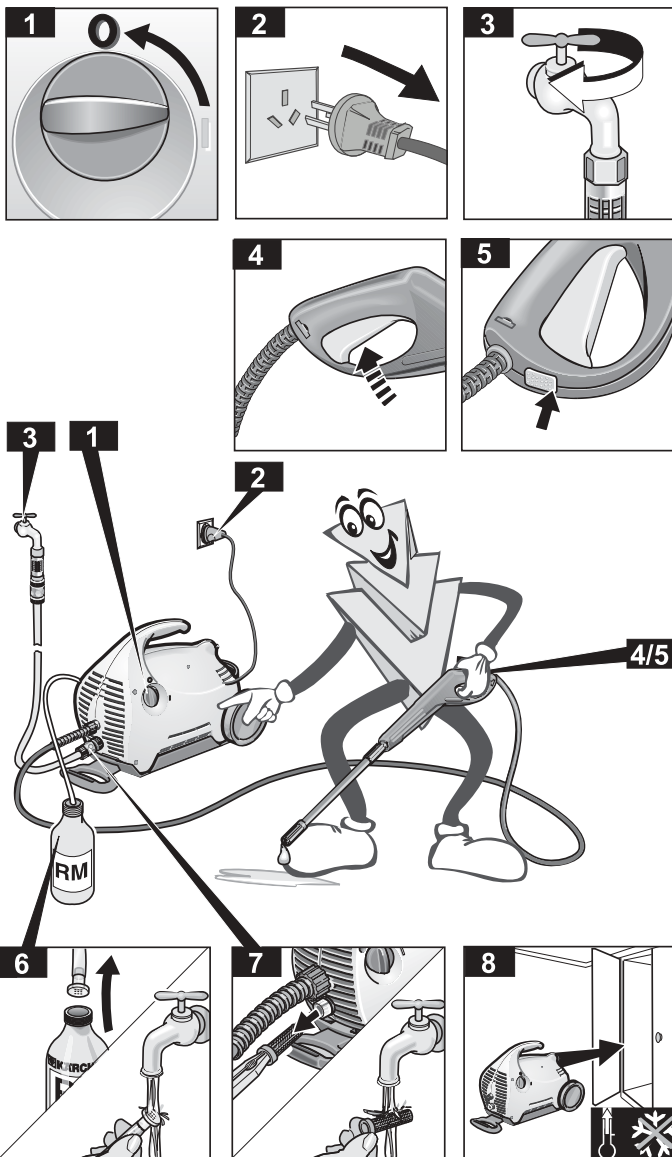


Finishing the operation

- 1** Unit switch to "0"
- 2** Unplug power plug
- 3** Turn off water tap
- 4** Press lever (to de-pressurise)
- 5** Engage safety catch on handgun

Care, storage

- 6** Clean detergent filter
- 7** Clean water filter
- 8** Frost protection



Before first use

Assembly (page 4)

When unpacking check the contents. Inform your dealer of any damage in transportation.

Connection requirements

Electrical connection

The voltage shown on the rating plate must match the supply voltage. The current source must be properly earthed.

Only use splash-protected extension cable with a sufficient conductor cross-section (10 m: 3 x 1.5 mm², 30 m: 3 x 2.5 mm²) and unwind completely from the cable drum.

Connection to water line

Comply with the stipulations of the water supply company.

Only use supply hoses (not supplied) with the following dimensions: length at least 7.5 m, diameter at least ½".

See rating plate or Technical Data for connected values.

Operation

Serious danger!

Vehicle tyres and tyre valves can be damaged by the high-pressure jet and become perforated. The first sign of this is a discoloration of the tyre. When cleaning them maintain a distance of at least 30 cm.

Never grasp the power plug with wet hands. Before each use check the power cord and power plug for damage. Have a damaged power cord replaced immediately by an authorized Kärcher service point or an electrical specialist.

Before each use check the high-pressure hose for damage. Replace a damaged high-pressure hose immediately.

Danger of injury!

Owing to the water jet emerging from the high-pressure nozzle a recoil force operates on the handgun. Ensure you have a secure footing and hold the handgun and spray lance firmly.

If necessary wear protective clothing for protection against return spray.

Water supply

Caution! Impurities in the intake water damage the pump. To prevent this we expressly urge you to use the Kärcher water filter (not included, order no. 4.730-097).

The operation of the high-pressure cleaner with a closed water supply line causes damage to the pump. **Please never operate the high-pressure cleaner with a closed water supply tap.**

The unit can either be supplied from the water main or from water in an open container.

Water supply from the water main

- Connect a supply hose (not included) to the water inlet of the unit and to the water supply (e.g. water tap).
- Open the water supply.

Water supply from an open container

- Unscrew the coupling part for the water inlet.
- Screw the suction hose with filter (not included, order-no. 4.440-238) onto the water connection of the unit.
- Hang the filter in the container.
- Vent the unit before operation.
 - Unscrew the high-pressure line at the high-pressure outlet of the unit.
 - Switch on the unit and let it run until water free of bubbles emerges at the high-pressure outlet.
 - Switch off the unit and screw on the high-pressure hose again.

Preparation

- Insert power plug.
- Turn master switch to "I".

Switching on

- Press safety ratchet on the handgun and pull the lever.

Switching off

- Release the lever.

During breaks in work and when leaving the unit secure it against inadvertent switching on by pressing the safety ratchet.

Regulate operating pressure

High operating pressure:

twist spray lance in direction “◄”.

Low operating pressure:

twist spray lance in direction “►”.

Adding the cleaning agent

- Draw the cleaning agent suction hose out of the housing to the required length.
- Hang the cleaning agent suction hose in the cleaning agent container.
- Twist spray lance to low operating pressure “►”.

No detergent in high-pressure mode

If cleaning agent has been added:

- Hang the cleaning agent suction hose in a container of clear water, switch on the unit for about one minute and flush through.

Recommended cleaning method

1. Spray the cleaning agent on the dry surface sparingly and let it react (but not dry out).
2. Wash off the loosened dirt with the high-pressure jet.

Connect accessories

The following accessories are included in the scope of delivery.

Wash brush

for large, smooth surfaces – e.g. on the automobile, caravan or boat. *Cleaning agent can be added.*

Rotary nozzle

for stubborn accumulations of grime – e.g. moss-covered promenade tiles or facades.

Work without cleaning agent and with the highest operating pressure.

Finishing operations

- Master switch to “0”.
- Draw out power plug.

Water supplied from the water main

- Close the water supply tap.
- Separate the unit from the water connection.

Water supplied from an open container

- Unscrew the suction hose with filter at the water inlet of the unit.
- Pull the lever on the handgun until the unit is without pressure.
- Press in the safety ratchet to protect the unit against inadvertent switching on.

Safekeeping

Caution! Frost can destroy an incompletely emptied unit. In the winter keep the unit in a frost-free room.

- Separate the spray lance from the handgun.
- Wind up the power cord and, for example, hang it around the handgun.

Transportation

- Switch off the unit before transporting it.
- To transport it over stairs or obstacles lift the unit at the transportation handle.
- To transport the unit over even surfaces draw it by the drawing bar.

Cleaning agents

For trouble-free operation and for matching to the relevant cleaning task we recommend our Kärcher cleaning agents and care range. Please let us advise you or ask for information about them. Here is a small selection:

Universal cleaner

- Profi RM 555 ULTRA

Automobile cleaner

- Profi RM 565 ULTRA

House and garden cleaner

- Profi RM 570 ULTRA

Boat cleaner

- Profi RM 575 ULTRA

Care and Maintenance

Cleaning

Before long periods of storage, e.g. in winter:

- Pull out the strainer in the water inlet with flat-nose pliers and clean it under running water.

Maintenance

The unit is maintenance-free.

Help with faults

Faults often have simple causes which you can rectify yourself with the aid of the following summary. In case of doubt or of faults or remedies not mentioned here apply to the authorized customer service.

⚠ Danger of electric shock!

Repair work on the unit can only be carried out by the authorized customer service.

Appliance does not work

- Please check whether the voltage specified on the typeplate corresponds to that of the power source.
- Check the power cord for damages.

Appliance does not achieve the operational pressure

- Deaerate the appliance: allow the pump to operate without the high-pressure hose until bubble-free water emerges from the high-pressure outlet. Then reconnect the high-pressure hose.
- Clean the sieve in the water connection (it can be easily removed using flat pliers).
- Check the inlet water flow rate.
- Check all supply lines to the pump for leaks or clogging-up.

Strong pressure variations

- Clean the high-pressure nozzle. Remove dirt from the nozzle boring using a needle, and then rinse the nozzle with water.

Pump leakage

- A slight leakage of the pump is normal. If you detect an excessive leakage, please contact the authorized customer service.

Detergent is not taken in

- Clean filter of detergent suction hose
- Set to low-pressure jet

No detergent in high-pressure mode

Replacement parts

Use exclusively Kärcher original replacement parts. You will find a replacement parts summary at the end of these operating instructions.

Technical Data

Power supply

Voltage (at 1~50 Hz)	230 - 240 V
Connected load	1,3 kW
Supply fuses (time-lag)	10 A
Safety class	1

Water connection

Supply temperature, max.	40 °C
Supply volume, min.	(500 l/h) 8 l/min
Supply pressure, max.	(12 bar) 1,2 MPa

Performance data

Operating pressure	(85 bar) 8,5 MPa
Max. permissible pump pressure	(100 bar) 10 MPa
Flow volume	(300 l/h) 5 l/min
Cleaning agent metering	0,3 l/min
Recoil force of the handgun	10 N
Unit vibrations	0.8 m/s ²

Sound level

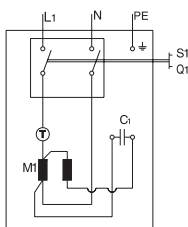
L _{PA} (EN 60704-1)	74 dB(A)
L _{WA} (EN 4871)	87 dB(A)

Dimensions

Length/Width/Height	555/260/310 mm
Weight	11 kg

Circuit Diagram

- C1 Capacitor
 M1 Motor
 Q1 Switch
 T Temperature limiter
 S1 Pressure switch



Service

Guarantee

In each country the guarantee conditions issued by our responsible sales company are applicable. We clear any faults occurring in the unit free of charge during the period of guarantee providing the cause is a fault in a material or in the manufacture.

In the case of a claim under the guarantee please contact your dealer or the nearest authorized customer service point, accompanying your claim with accessories and purchase voucher.

Customer Service

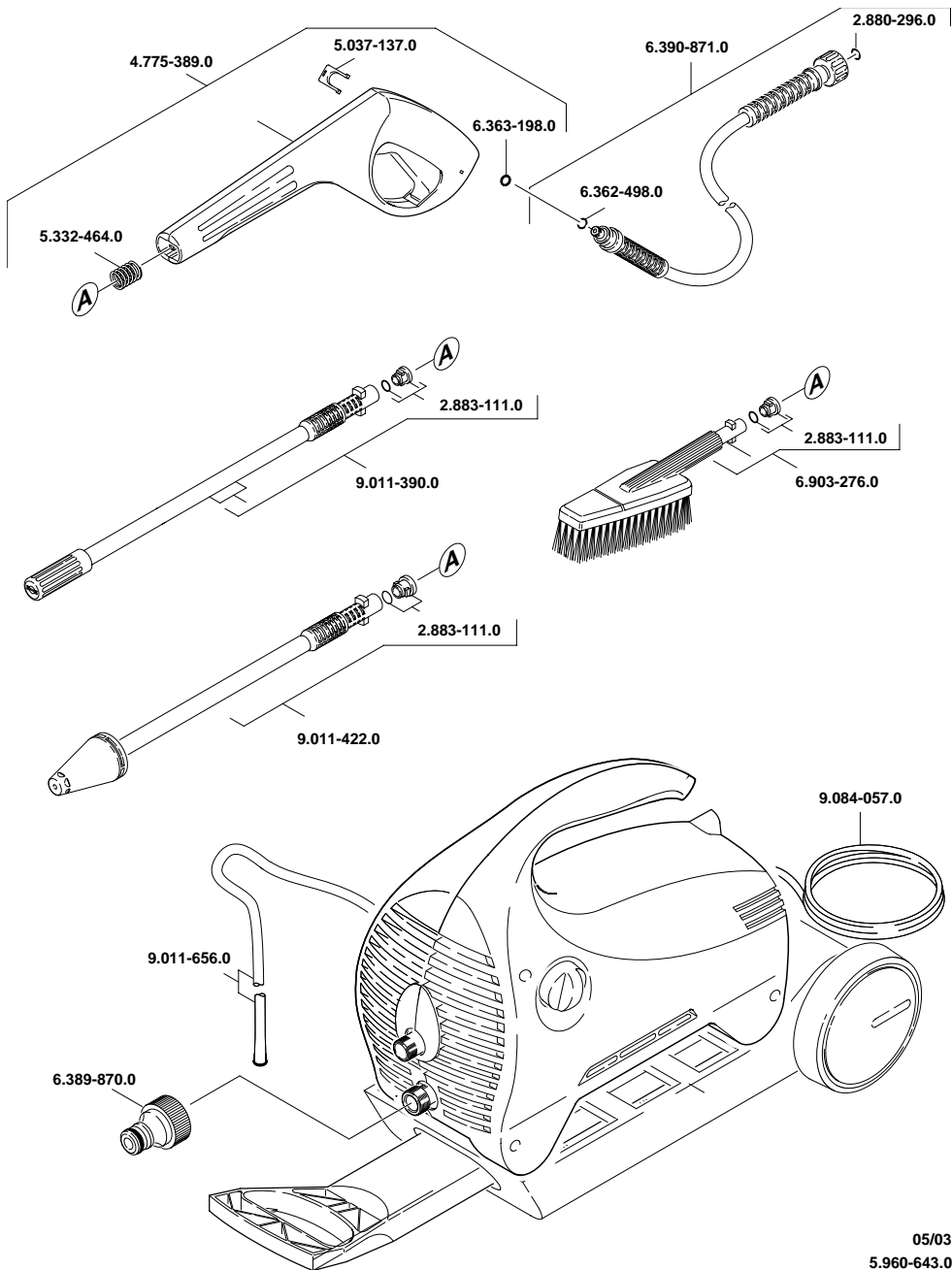
In the case of questions or faults our Kärcher branches will be pleased to assist you further.

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www.karcher.com



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