



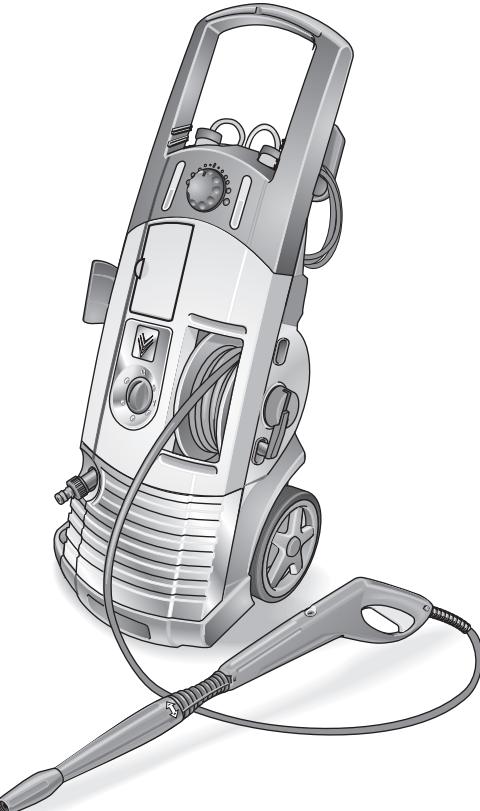
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KÄRCHER

K 7.85 M

Operating Instructions **PRESSURE WASHER**



**PLEASE READ THIS LEAFLET CAREFULLY
BEFORE OPERATING YOUR MACHINE**

**THANK YOU FOR PURCHASING A *KARCHER*
PRESSURE WASHER**

**PLEASE READ THIS LEAFLET CAREFULLY
BEFORE OPERATING YOUR MACHINE.**

WHAT IS A PRESSURE WASHER?

A Pressure Washer is essentially a powerful electric motor driving a set of pistons that force water through a small nozzle, thus creating a pressurised jet of water. This provides the cleaning power behind the **Karcher** Pressure Washer.

A **Karcher** Pressure Washer can be used for an endless list of applications around the home and garden. It provides an efficient, economical and labour saving way of cleaning with excellent results.

All **Karcher** domestic pressure washers are designed to run from a suitable cold water supply although some models will accept a water inlet temperature of between 40 °C and 60 °C.

Environmental Comment - Save water with high pressure.

The **Karcher** Pressure Washer is environmentally friendly enabling you to reduce your water consumption compared to a normal garden hose. A definite advantage with a metered water supply

OR

with the added benefit of suction mode, water can be drawn from an open container such as a water butt.

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1. APPLICATIONS

*The main applications for this product are **DOMESTIC** cleaning tasks:*

- Cars, motorbikes, caravans, boats and bicycles
- Patio's, fences, garden walls, pathways, driveways and house facades – particularly useful for cleaning block driveways
- Removal of algae and moss from roofs, brickwork and guttering
- Garden tools and machinery, furniture and barbecues
- Hygienic cleaning of animal pens and their surroundings

*With the addition of **Karcher** accessories, the list continues*

- Clearing blocked drains and pipes
- Removal of old paint and rust from garden furniture and gates
- Spraying insecticide onto trees, plants and lawns

High pressure hose

The high pressure hose is specially constructed with reinforced walls to handle water pressure up to 16 MPa (2400 psi) - it is 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.

BEFORE STARTING UP YOUR PRESSURE WASHER PLEASE CHECK YOU HAVE THE FOLLOWING:

We recommend you purchase these items from a reputable store.

- RCD plug and socket that will interrupt electrical supply in an emergency.
- A typical garden hose (minimum length 7.5 metres) with suitable hose connection (Hoselock/Gardena type) to match the coupling on the machine (hose and connector not supplied).

2. SAFETY INSTRUCTIONS

Electrical Connection

- ⚠ Never use defect connection or extension lines! If the connection line is damaged, it must be replaced with a special connection line that is available from the manufacturer or his customer service.
- ⚠ Please make sure that the connection or extension lines are not damaged by being ran over, pulled or dragged. Protect the connection lines from heat, oil, and sharp edges.
- ⚠ Never touch the mains plug and the socket with wet hands.
- ⚠ The connection between connection line and extension line must not lie in the water.
- ⚠ All current-carrying components within the working area must be jet-proof.
- ⚠ The appliance may only be connected to an electrical connection that was performed by an electrician according to IEC 60364.
- ⚠ Only connect the appliance to alternating current. The voltage must comply with the voltage specified on the typeplate.
- ⚠ To avoid electric accidents, we recommend to use sockets with a series connected residual current operated device (rated breaking current max. 30 mA).
- ⚠ **Warning:** Inappropriate extension lines may be dangerous. If you work outside, only use extension lines that are approved and specifically labelled and provide of a sufficient conductor cross section:
1 to 10 m: 1.5 mm² 10 to 30 m: 2.5 mm²
- ⚠ The plug and the coupling of an extension line must be waterproof.
- ⚠ Always unwind the extension line completely from the cable drum.
- ⚠ The maximum tolerable mains impedance at the electrical contact point (see Technical Data) must not be exceeded.

Safety Instructions

- ⚠ The operation of the device in hazardous locations is not admissible.
- ⚠ Please comply with the corresponding safety instructions if you use the appliance in danger areas (e.g. filling stations).
- ⚠ Do not turn on the appliance if the power supply line or important components of the appliance, such as safety components, high-pressure hoses, spray jet, are damaged.
- ⚠ **Warning:** High-pressure hoses, fittings, and couplings are of importance for the appliance safety. Only use high-pressure hoses, fittings, and couplings recommended by the manufacturer.
- ⚠ 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.
- ⚠ The operator must use the appliance properly. He must take the local conditions into consideration and must pay attention to third persons, in particular children, while working with the appliance.
- ⚠ **Warning:** Do not use the appliance if third persons are within the reach of the appliance unless such persons wear protective clothes.
- ⚠ **Warning:** High-pressure jets may be dangerous if they are used improperly.
The jet must not be directed at people, animals, active electrical equipment, or the appliance itself.
- ⚠ Never direct the jet at yourself or third persons to clean clothes or shoes.
- ⚠ Never use the appliance to spray objects containing hazardous substances (e.g. asbestos).
- ⚠ **Warning:** Vehicle tyres/tyre valves may be damaged and burst by the high-pressure jet. A first sign is the discolouration of the tyre.
Damaged vehicle tyres/tyre valves are hazardous. Always perform the cleaning with a minimum distance of 30 cm.

- ⚠ Cleaning operations during which oil saturated waste water is generated, such as engine cleaning and underbody cleaning, may only be performed in cleaning locations that are equipped with an oil separator.
- ⚠ If you clean varnished surfaces, please respect a minimum distance of 30 cm to avoid damages.
- ⚠ Never take in solvent-containing liquids or undiluted acids and solvents! These include, for example, benzene, paint thinner, or heating oil. The spray is highly inflammable, explosive, and toxic. Do not use acetone, undiluted acids, and solvents as they affect the materials used on the appliance.
- ⚠ If required, wear appropriate protective clothes and glasses to protect yourself from return spray.
- ⚠ Never leave the appliance unattended as long as it turned on.
- ⚠ **Warning:** This appliance has been developed for the use of detergents that are supplied or recommended by the manufacturer. The use of other detergents or chemicals may affect the safety of the appliance.

Environmental protection

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.



Disposal of the old appliance

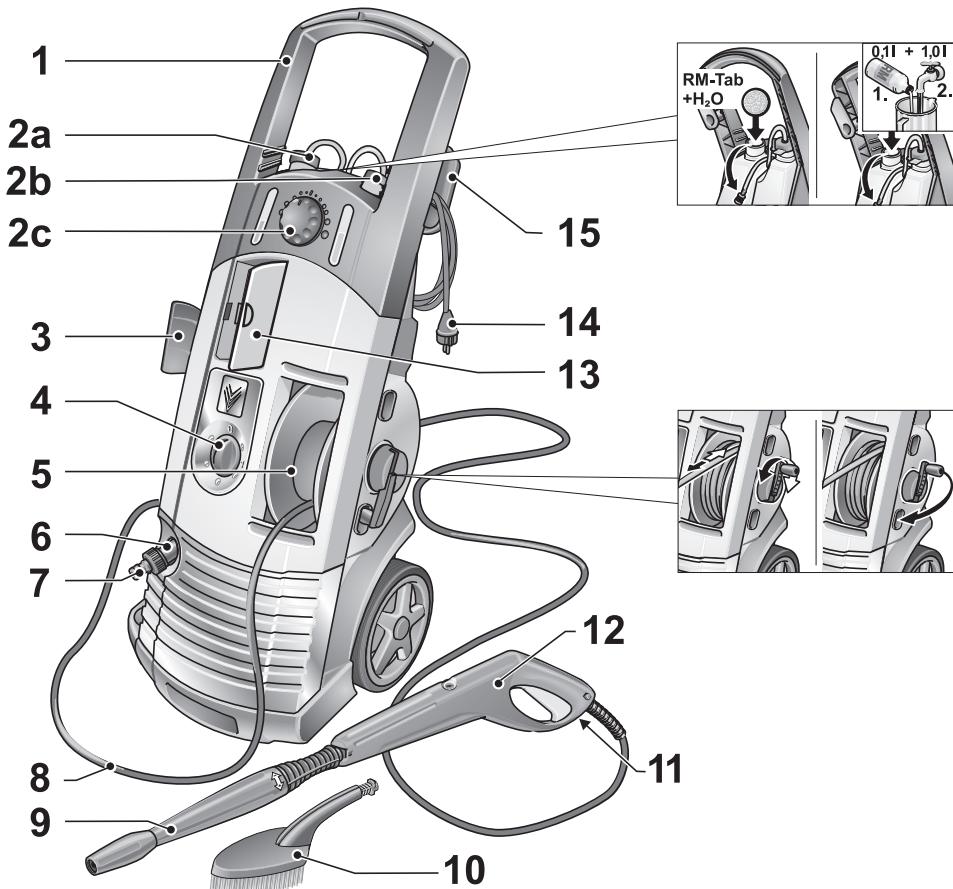
Old appliances contain valuable materials that can be recycled. Please arrange for the proper recycling of old appliances. Batteries, oil, and similar substances must not enter the environment. Please dispose of your old appliances using appropriate collection systems.



3. GETTING STARTED

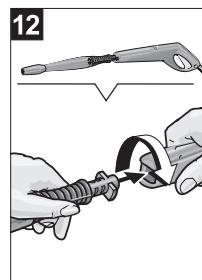
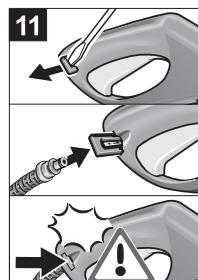
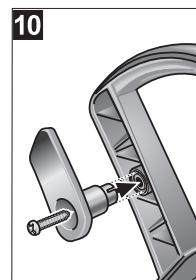
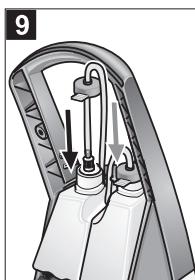
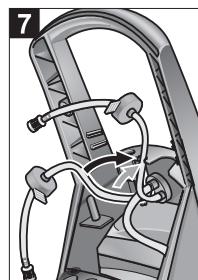
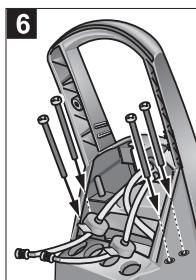
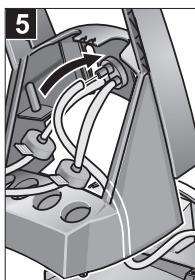
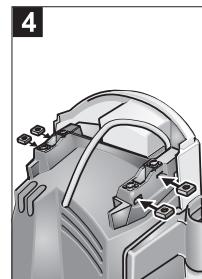
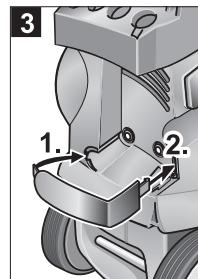
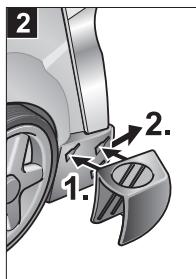
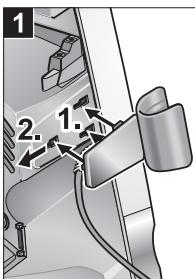
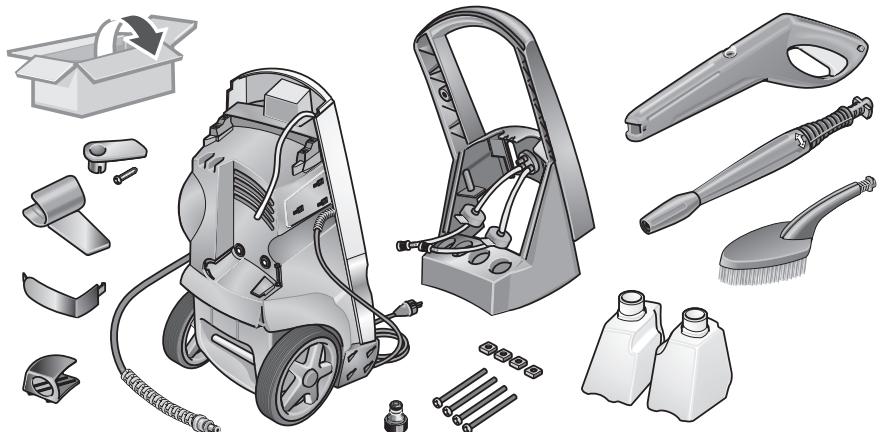
3.1 Contents

Upon opening the carton, if you do not have all the items as detailed please contact the Customer Helpline.



- 1 Drawing bar
- 2a Detergent Tank 1
- 2b Detergent Tank 2
- 2c Detergent Dosing Valve
- 3 Spray gun storage clip
- 4 Power Switch (On/Off)
- 5 High Pressure Hose Reel
- 6 Inlet Water Connection
- 7 Hosepipe Connector
- 8 High Pressure Hose
- 9 Spray Lance with Pressure Regulator (Vario Power)
- 10 Wash Brush
- 11 Safety Lock Device
- 12 Spray Gun
- 13 Accessory compartment
- 14 Mains Electric Lead with Plug
- 15 Mains Lead Storage

3.2 Assembly



**Please follow these instructions carefully
for troublefree cleaning.**

Use the diagram on Page 6 for reference purposes.

3.2 Water Connection



- According to the applicable regulations, the appliance must never be used on the drinking water net 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.
- The minimum length of supply hosepipe advised for maximum user convenience is 7.5 metres with a diameter of 12.5 mm (1/2") to allow free flow of inlet water to the machine so avoiding backpressure and any associated potential damage to your machine.
- Attach your supply hosepipe with its connector to the coupling on the machine (No.7) and the other end should be connected to a suitable water supply.

3.3 Electrical Connection

- Ensure the Power Switch (No.4) is in the “OFF” position before connecting the factory fitted Plug attached to the Mains Electric Lead (No.14) into an earthed socket. (it is recommended that an RCD plug socket is used.)

If using an Extension Cable make sure it is completely unwound from the cable drum and is the correct diameter.

3.4 Suction Mode - an added benefit of the Karcher Pressure Washer

- If you are drawing water from a static water supply such as a water butt disconnect the water connection/hosepipe with coupling (No.7) from the machine and replace with a suction hose and filter (Part No. 4.440.238) that can be purchased as an accessory.
- Disconnect the Spray Lance from the Spray Gun.

- Allow the pressure washer to operate without the Spray Lance fitted until water flows from the Spray Gun **without bubbles**.
- Re-connect the Spray Lance to the Spray Gun.

**Dirt in the drawn water could damage your Pressure Washer !
To avoid this risk please use a suitable filter - Part No. 4.730-059.**

3.6 Detergent

It is recommended that only cleaning agents formulated by and manufactured for Karcher should be used. Unsuitable detergents could damage your Pressure Washer and the object being cleaned.

Recommended Detergents

1. Detergent tablets

Karcher Clean Tabs (10 tablets per box):

10 Tablets dissolved in clean water provide 5 litres of cleaning detergent.

2. The following cleaning agent may be used undiluted:

(But further dilution is practical but trial before application)
Universal Cleaner Profi RM 555 ASF

3. The following cleaning agents are available as concentrate and must be diluted with 9 parts of water (1 : 9) before use:

Universal Cleaner Profi RM 555 ULTRA

Automotive Cleaner Profi RM 565 ULTRA

House & Garden Cleaner Profi RM 570 ULTRA

Boat Cleaner Profi RM 575 ULTRA

NOTE:

In all instances, detergent concentration is set on the machine. It is recommended that you start cleaning at maximum dilution, increasing the concentration only if considered necessary for the cleaning task.

- Enclosed to your high pressure cleaner you find a information-card, which shows all available Kärcher detergents. Next to the detergent tanks you will find insert-cases in which you could place your detachable product card to identify the detergents in use.

4. OPERATING YOUR PRESSURE WASHER

If you have followed all the instructions so far, you are now ready to have fun cleaning the KARCHER way!!!

- Turn on the supply water and press the Spray Gun lever (No.12) until the water flows freely and removes all air locks from the hoses.
- You may now attach the bayonet fit Spray Lance (No.9) or required accessory to the Spray Gun.

All accessories are bayonet fit, simply push in and twist until they click into position !

- Once water is flowing through the machine, you may now switch on your Karcher Pressure Washer using the Power Switch (No.4)
- You can regulate the working pressure on the spray by turning the nozzle end of the Spray Lance (No.9) between "Mix" and "Max" position.

WHEN USING YOUR KARCHER PRESSURE WASHER ON THE HIGH PRESSURE SETTING, THE RECOMMENDED WORKING DISTANCE BETWEEN THE NOZZLE AND THE OBJECT OR SURFACE TO BE CLEANED IS 30 CM. IT CAN BE CLOSER IF REQUIRED FOR PATIOS OR MASONERY.

When cleaning painted surfaces, ensure that the paint is sound and there are no signs or rusting or blistering.

It is your responsibility to check the suitability of the surface to be cleaned. **Karcher (UK) Ltd.** cannot be held responsible for any damage caused.

4.1 High Pressure Operation

- Switch on the pressure washer (No.4)
- Ensure the Spray Lance with the Pressure Regulator (No.9) is attached securely to the Spray Gun (No.12) and the nozzle is set to the required high pressure setting ("Min" – "Max").
- Aim the lance towards the object to be cleaned making sure the recommended working distance is used (for reference see Page 10). Release the Safety Lock Device (No.11) on the Spray Gun and squeeze the lever.

The pressurised water jet alone is capable of fulfilling most cleaning tasks around the garden or on building work but detergent and wash brush are advantageous when cleaning vehicles or other paint finishes.

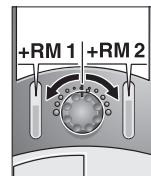
4.2 Low Pressure Operation without Brush

- Fill the Detergent Tanks (No.2a, No.2b) with the selected detergent, ensuring it is the correct concentration (See Page 11 or read recommended dosage on label)

or

Dilute the detergent to the required concentration before filling the Detergent Tank. (The correct dilution is dependent on the degree of soiling of surface and is best determined by experience).

- Set the nozzle to the low pressure setting („Mix“).
- Adjusting the detergent dosing valve to the desired dosage.
 - Turn to the left: Meter detergent from container 1.
 - Turn to the right: Meter detergent from container 2.
- Switch on the pressure washer (No.4)
- Aim the nozzle towards the object to be cleaned, release the Safety Locking Device on the Spray Gun and squeeze the lever to apply the detergent to the working area.
- To rinse the detergent away increase the nozzle setting towards "Max" setting. (No detergent will be drawn in with high working pressure). Spray with the required jet spray setting until no trace of detergent can be found.



We recommend the following cleaning method:

Step 1:

Remove loose dirt by washing over the surface to be cleaned with the high pressure jet.

Step 2:

Spray on the detergent and leave for 1-4 minutes, so assisting the easy removal of fine dirt and associated greasy adhesions.

Step 3:

Finally, spray off the loosened dirt with the high pressure spray.

4.3 Low Pressure Operation with Brush

When cleaning surfaces with a grease contamination - typically car paintwork that always has a greasy traffic film covering adopt the following procedure:

- Washing loose dirt away with the clean water high pressure spray.
- Apply the detergent in low pressure mode by setting the bayonet fit spray lance (No.9) to the low pressure setting („Mix“).
- Leave for 2-4 minutes for the detergent to have maximum effect.
- **Remove the bayonet fit spray lance and fit the Wash Brush (No.10) to the Spray Gun (No.12).** The Wash Brush is suitable for use with a water inlet temperature into the Pressure Washer of maximum 40 °C.
- With or without the pressure washer switched on, brush down the surface being cleaned, this physical agitation removes all trace of traffic film.
- Finally revert to the high pressure operation with the Spray Lance and complete the wash down.

4.4 End Of Operation

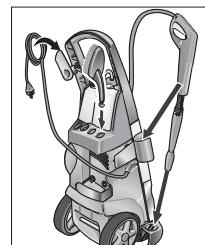
**ALWAYS REMEMBER TO RINSE YOUR PRESSURE WASHER
AFTER USING DETERGENT BY FILLING THE DETERGENT
CONTAINER WITH CLEAN WATER AND RUN THE PUMP FOR
APPROXIMATELY ONE MINUTE**

In the event of a break of 5 minutes in the operation of your Karcher Pressure Washer, always switch off the pump to avoid damage due to overheating.

- Switch off the pressure washer by the Power Switch (No.4) and unplug the Mains Electric Lead (No.14) from the socket.
- Close the water inlet (tap) and disconnect the hosepipe.
- Squeeze the lever to remove all pressure from the machine. Release the lever and then secure the trigger with the Safety Locking Device to prevent accidental opening.

4.5 STORAGE

- The Spray Gun (No.12), the Spray Lance (No.9) and the Wash Brush (10) can be stored with the Pressure Washer.
- The Mains Electric Lead (No.14) can be wound up over the Mains Lead Storage (No.15).



5. IMPORTANT – CARE AND MAINTENANCE

To ensure prolonged life and trouble-free use of your Karcher Pressure Washer we strongly recommend that you always adopt the following procedures:

Water

- Before use, always check the water inlet filter for dirt or debris.
- Visually check to see if the nozzle is blocked by dirt or grit, if so, remove the dirt from the nozzle hole with a needle and rinse with water from the front.

Failure to do this will seriously damage your machine and invalidate the warranty.

- Connect the water supply hose and, without the lance attached, squeeze the Spray Gun lever to run water through your pressure washer until the water flow is constant. Then plug in to the electric supply.
- Unless drawing water from an open water source such as a water butt, always have a minimum of 10 metres (25 feet) of uncoiled hose between the water tap and your machine. The internal diameter of the feed water hose should be 12 mm (1/2").
- Water Regulations require the use of a back-flow preventer valve at the tap end of the supply hose.

Only use a full flow connector to connect the hose to the machine.

Electricity

- If using an electrical extension lead it must be rated at a minimum of 13 amps.
- Always fully uncoil any extension lead when used.

Chemicals

Use of chemicals other than those recommended by Karcher could cause significant damage which may not be covered by your warranty.

- After using chemicals, always run fresh water through your machine.

- The high pressure hose of your Karcher Pressure Washer should not be mistreated. It is designed to withstand high pressure operation so vehicles should NOT run over it, nor should it be pulled across sharp or abrasive edges. These actions may weaken the hose and cause ballooning.

High pressure hose

The high pressure hose is specially constructed with reinforced walls to handle water pressure up to 16 MPa (2700 psi) - it is 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.

IMPORTANT

REMEMBER FROST WILL DAMAGE YOUR KARCHER PRESSURE WASHER AND ACCESSORY IF IT IS NOT BEEN COMPLETELY EMPTIED OF WATER AFTER USE. ALWAYS STORE IN A FROST FREE AREA.

6. ACCESSORIES

A wide range of popular accessories are available from your local store selling Karcher Pressure Washers.

4.763-228 Dirt Blaster/Rotary Jet

A rapidly rotating pencil jet used to remove loose paint, stubborn algae and moss from hard surfaces.

4.760-269 Triple Nozzle Lance

An integral fan jet, pencil jet and low pressure chemical jet in one unit allows optimal nozzle selection.

4.762-065 Rotary Wash Brush

Ideal for car bodywork and windows as the water forces the brush to rotate enhancing cleaning power.

4.760-262 Extension Lance

To add length to the standard lance.

2.637-729 Drain Kit (7.5 m Hose)

2.637-767 Drain Kit (15 m Hose)

A flexible hose with backwards firing high pressure jet to create turbulence and dislodge blockages.

4.760-265 Flexi Lance

A lance which can be angled to any degree to clean hard to reach areas such as wheel arches etc.

4.440-238 Suction Hose and Filter

Used to provide a water supply to the unit where a mains water supply is not available by placing the kit into a water butt.

2.637-214 Water Pump Kit

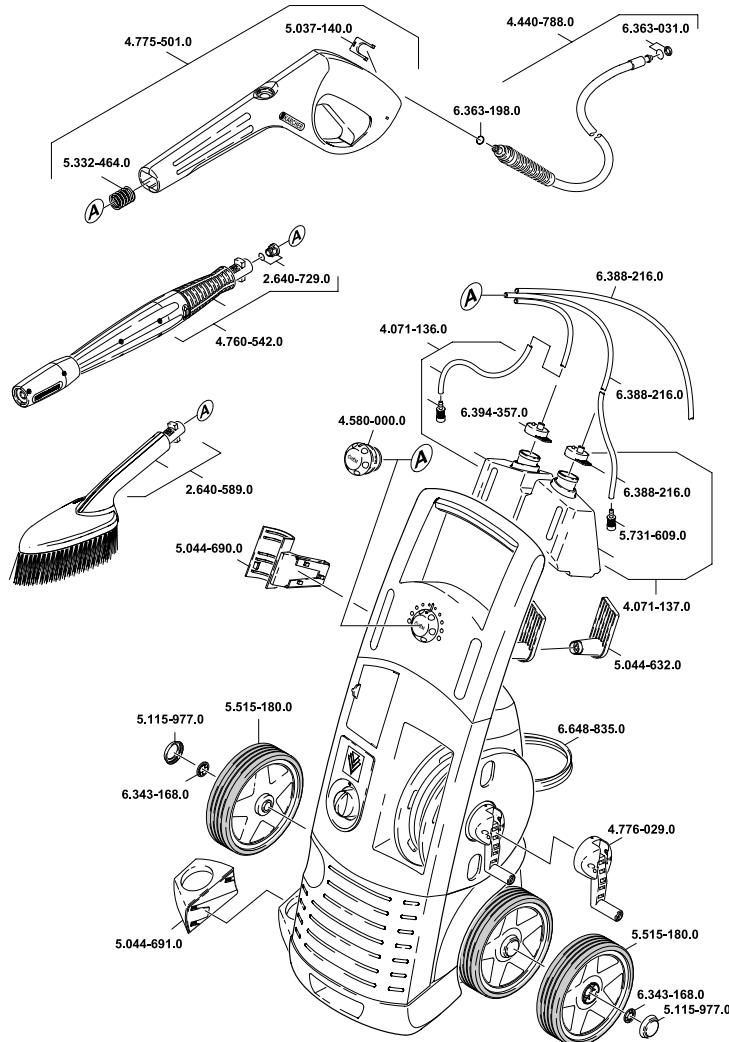
6.291-080 RM 555 (5 litre)

6.291-079 RM 555 (6 x 1 litre)

6. Spare Parts

In the event that your Karcher Pressure Washer requires replacement parts – please refer to the diagram below AND identify the particular model of your machine by reference to the data plate on the underside.

Please write, email or fax Karcher (see page 20) with any parts order you wish to place. A premium rate **Help-line** Number is available for telephone enquiries of any type.



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5.962-164.0

7. PROBLEM CHECKLIST

The machine you have chosen is of the highest quality. Correctly stored away from frost it should operate without problems. If a problem does arise, please check the following chart as a solution may be at hand.

PROBLEM	POSSIBLE CAUSE	CORRECTION
Machine refuses to start	Plug not connected Defective socket Fuse blown Defective extension cable Wrong mains voltage	Connect plug Try another socket Change the fuse Try without extension cable Check mains voltage corresponds to specifications of machine
Pump stops	Fuse blown Overheating due to poor water Supply	Change fuse and check size of extension cable Check inlet water flow rate - hose should fill a 10 litre bucket in one minute
Strong pressure fluctuations	Nozzle partly blocked Inadequate mains water	Clean dirt from nozzle hole with needle and rinse from the front Check inlet water flow rate
Machine does not reach operating pressure	Nozzle blocked/worn out Inadequate mains water Inlet hose squeezed Water filter clogged (3.1 item15) Inlet hose blocked	Clean/replace nozzle Check inlet water flow rate Straighten out hose Clean filter Check hose for leaks or blockages
No detergent suction	Wrong pressure Blocked filter in detergent tank	Set Spray Lance to low pressure setting („Mix“) Unblock filter Clean ventilation hole in cover of Detergent Tank

In the unlikely event that you need to return your machine to your supplier, **please ensure that this is returned, complete with hose, gun and all accessories.**

8. HELP - LINE

Kärcher UK Limited operate a helpline allowing customers to discuss any problems experienced with our products.

The helpline operates during normal business hours. If you have difficulty getting through, please understand that there are peak periods during the day when our consultants are unable to take all calls coming in. In these circumstances we would ask that you try to contact us again later in the day.

The helpline number is 01295 752200, open from 8.30am to 5.00pm 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

9. TECHNICAL DATA

Power Connection

Voltage	230-240 V (AC)
Current	1~50 Hz
Connected/Load	2.8 KW
Impedance (max. permitted)	(0.346 + j0.216) Ω
Mains Fuse	13 AMP

Water Connection

Supply Temperature (Max)	60 °C
Supply Rate (Min)	10 litres per minute
Supply Pressure (Max)	(6 bar) 0.6 MPa
Supply Hose Length	7.5 metres
Diameter.....	1/2 inch
Suction Height from open tank at Water Temperature 20 °C	1 metre

Performance Data

Pump Pressure (Max)	(160 bar) 16 MPa (at bypass)
Operating Pressure	(150 bar) 15 MPa
Flow Rate	(450 l/h) 7,5 litres per minute
Detergent Intake	0,2 litres per minute
Recoil Force of Spray Gun at Operating Pressure	25 N
Optimum Working Distance on High Pressure	30 cm
Unit vibrations (ISO 5349).....	0.8 m/s ²
Sound pressure level L _{PA} (EN 60704-1)	73 dB(A)
Guaranteed Sound power level L _{WA} (2000/14/EC)	93 dB(A)

Dimensions

Length	400 mm
Width	390 mm
Height	960 mm
Weight	23 Kg

EU Declaration of Conformity

We hereby declare that the equipment described below conforms to the relevant fundamental safety and health requirements of the appropriate EU Directives, both in its basic design and construction as well as in the version marketed by us. This declaration will cease to be valid if any modifications are made to the machine without our express approval.

Product: High-pressure cleaner
Model: 1.398-xxx

Relevant EU Directives:

98/37/EC
2006/95/EC
89/336/EEC (+91/263/EEC, 92/31/EEC, 93/68/EEC)
2000/14/EC

Harmonised standards applied:

EN 55014 – 1: 2000 + A1: 2001+ A2: 2002
EN 55014 – 2: 1997 + A1: 2001
EN 60335 – 1
EN 60335 – 2 – 79
EN 61000 – 3 – 2: 2000 + A2: 2005
EN 61000 – 3 – 11: 2000

Appropriate internal measures have been taken to ensure that series-production units conform at all times to the requirements of current EU Directives and relevant standards. The signatories are empowered to represent and act on behalf of the company management.

Conformity assessment procedure followed:

Annex V

Sound power level

Measured: 91 dB(A)
Guaranteed: 93 dB(A)

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H. Jenner


S. Reiser



KÄRCHER

www.karcher.co.uk