

397 M plus



5.960-588
10.02 F2002500



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**

2. SAFETY INSTRUCTIONS

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).**
-
- The mains voltage and supply indicated on the Rating Plate of the machine corresponds with that of the power source
 - The insulation of the supply cable is not damaged
 - Only earthed sockets should be used
 - If you are using an extension cable it must be completely unwound from the cable drum and be the correct diameter:

**10 meter length of cable should have a cross section of 1.5 mm²
30 meter length of cable should have a cross section of 2.5 mm²**

Safety Assurance

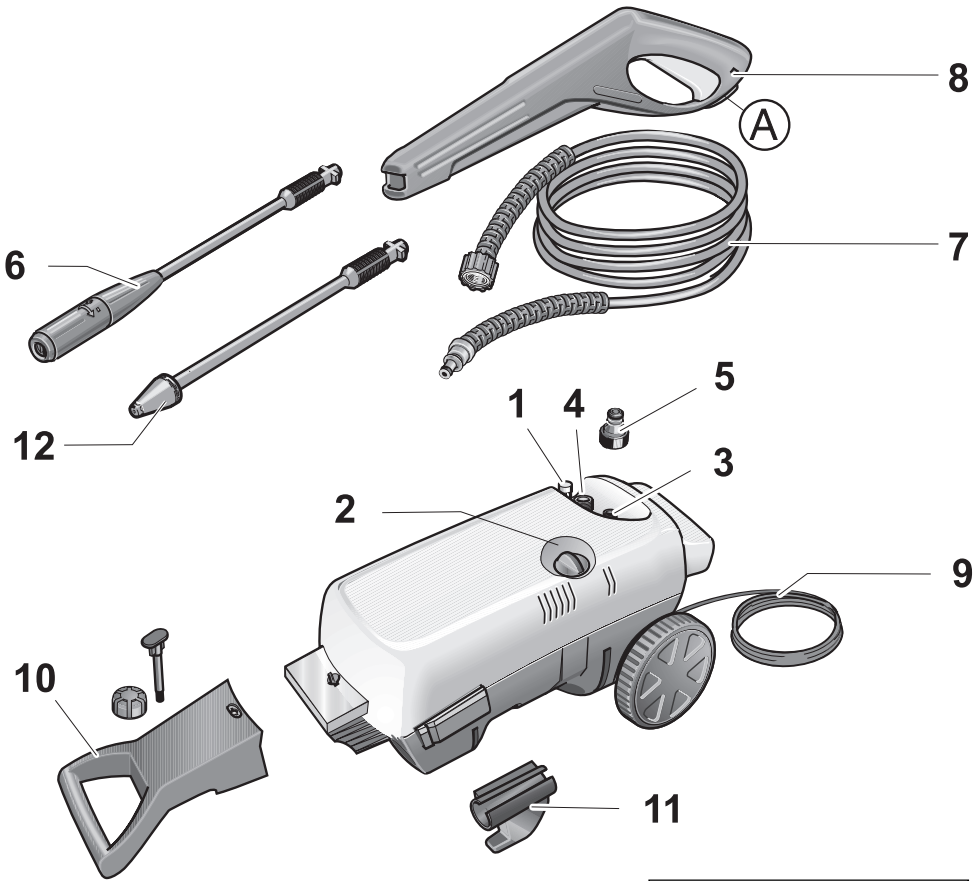
As an added precaution, your pressure washer is fitted with a safety locking device on the Spray Gun.

AFTER USE, ALWAYS REMOVE THE PLUG FROM THE SOCKET BEFORE CLEANING YOUR PRESSURE WASHER.

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 on 01295 752200.



Assembly see Page 19

- | | | |
|--------------------------------------|---------------------------------------|----------------------------------|
| 1 Detergent suction hose with filter | 5 Coupling | 9 Connection lead |
| 2 Power switch (ON/OFF) | 6 Spray lance with vario power nozzle | 10 Transport bracket |
| 3 High-pressure outlet | 7 High-pressure hose | 11 Accessory compartment |
| 4 Water connection with filter | 8 Spray gun with safety ratchet (A) | 12 Spray lance with dirt blaster |

Please follow these instructions carefully for troublefree cleaning

Use the diagram on Page 6 for reference purposes

3.2 Water Connection

- 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 avoid backpressure and any associated potential damage to your machine.
- Attach your supply hosepipe with its connector to the coupling on the machine (No. 5) and the other end should be connected to a suitable water supply

3.3 Electrical Connection

- Ensure the Power Switch (No. 2) is in the "OFF" position before connecting the factory fitted Plug attached to the Mains Electric Lead (No. 9) into an earthed socket.

If you are using an extension cable, it should always be completely unwound from the cable drum and have a sufficient cross-sectional area.

Cable length max.	10 m	30 m
Cross-sectional area	3 x 1,5 mm ²	3 x 2,5 mm ²

3.4 Detergent

Only cleaning agents recommended by Karcher (UK) Ltd. should be used. Unsuitable detergents could damage your Pressure Washer and the object being cleaned.

Recommended Detergents

1. The following cleaning agent may be used undiluted:

Universal Cleaner Profi RM 555 ASF

2. 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

3. Detergent tablets are also available from some stores

Karcher Clean Tabs (10 tablets per box)

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

DETAILS OF THE FULL RANGE OF DETERGENTS AND CHEMICALS ARE AVAILABLE BY CALLING THE KARCHER CUSTOMER HELPLINE ON 01295 752200

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. 8) until the water flows freely and removes all air locks from the hoses
- You may now attach the Spray Lance (No. 6) 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. 3)

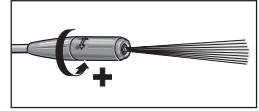
WHEN USING YOUR KARCHER PRESSURE WASHER ON THE HIGH PRESSURE SETTING, THE RECOMMENDED WORKING DISTANCE BETWEEN THE NOZZLE AND THE OBJECT OR SURFACE TO BE CLEANED IS 30 CM.

IT CAN BE CLOSER IF REQUIRED FOR PATIOS OR MASONERY

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

4.1 High Pressure Operation

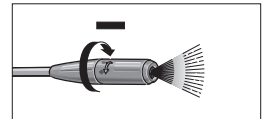
- Ensure the Spray Lance with Vario Power Nozzle (No. 6) or the Spray Lance with Dirt Blaster (No. 12) are attached securely to the Spray Gun (No. 8).
- Set vario power nozzle to high pressure mode "+".
- Aim the lance towards the object to be cleaned making sure the recommended working distance is used for reference (See Page 9). Release the safety ratchet on the Spray Gun and squeeze the trigger.
- Switch on the pressure washer (No. 2)



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

- Dilute the detergent in a suitable container to the required concentration before using. (The correct dilution is dependent on the degree of soiling of surface and is best determined by experience).
 - Hang the Detergent Suction Tube (No. 1) in the Detergent Container.
 - Set Vario Power Nozzle to low pressure mode "-".
- Note:** No detergent in high pressure mode



Note: the Dirt Blaster (No. 12) is not for use in low pressure operation.

- Aim the Spray Gun towards the object to be cleaned, release the Safety Ratchet on the Spray Gun and squeeze the trigger to apply the detergent to the working area.
- Switch on the pressure washer (No. 2)

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 End Of Operation

ALWAYS REMEMBER TO RINSE YOUR PRESSURE WASHER AFTER USING DETERGENT BY HANGING THE DETERGENT SUCTION TUBE IN A CONTAINER WITH CLEAN WATER AND RUN THE PUMP FOR APPROXIMATELY ONE MINUTE IN LOW PRESSURE SETTING.

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. 2) and unplug the Mains Electric Lead (No. 9) from the socket
- Close the water inlet (tap) and disconnect the hosepipe
- **Release the trigger to remove all pressure from the machine and then secure the trigger with the Safety Ratchet to prevent accidental opening.**

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 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 trigger gun 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.

IMPORTANT

REMEMBER FROST WILL DAMAGE YOUR KARCHER PRESSURE WASHER IF IT HAS 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

2.638-817 Underbody Lance

Extended lance with angled end and upward firing jet for cleaning under cars, gutters etc.

6.903-276 Car Wash Brush

Simple bayonet fitting attaches the brush to the hand gun, used in conjunction with RM555.

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.

4.760-272 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

9.300-051 25 Kg Grit

6.291-080 RM 555 (5 litre)

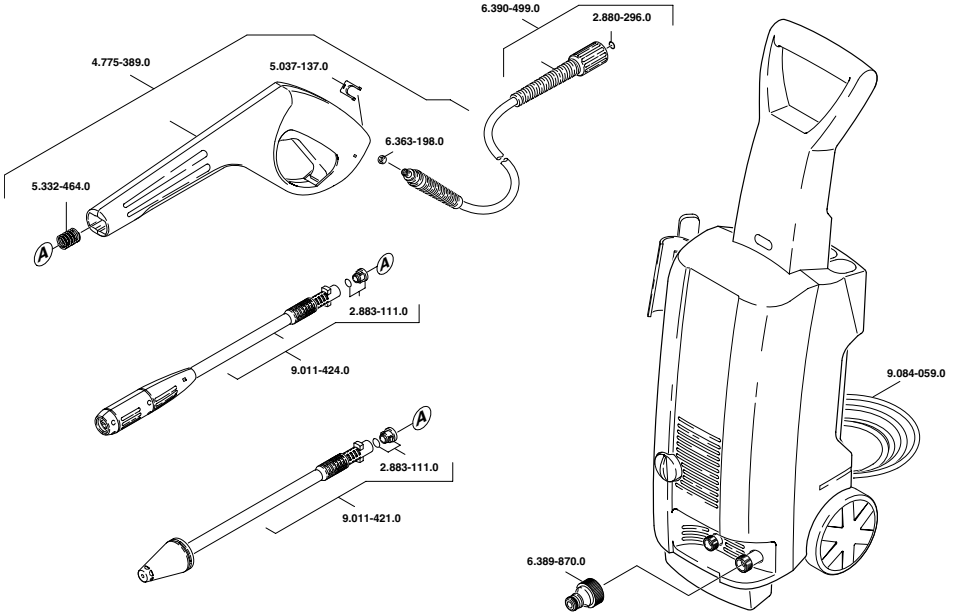
6.291-079 RM 555 (6 x 1 litre)

*Most accessories will be available from your local store selling **Karcher** Pressure Washers. If they are not stocked, most stores will raise a special order for you. If you have difficulty obtaining accessories please contact the **Karcher Spares Desk on 01295 752101***

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. Then telephone **0906 6800632** for assistance.

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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 machin
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	Clean dirt from nozzle hole with needle and rinse from the front
Machine does not reach operating pressure	Nozzle blocked/worn out Inadequate mains water Inlet hose squeezed Water filter clogged (3.1 item 4) 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 Detergent Filter	Remove Spray Lance Unblock Filter

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

Karcher (UK) Limited operate a help-line allowing customers to discuss any problems experienced with our products.

The help-line 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 help-line number is 0906 6800632.

It helps us if you have the model number and data plate details to hand before making your call as there are very many different models of Karcher Pressure Washers in use.

Alternatively you may write or e-mail to the address below:

Karcher (UK) Limited
Karcher House
Beaumont Road
Banbury
Oxon, OX16 1TB

E-mail: retail_inquiries@karcheruk.co.uk

9. TECHNICAL DATA

Power Connection

Voltage	230-240	V -AC
Current	1~50	Hz
Connected/Load	1.7	KW
Mains Fuse	13	AMP
Safety class	1	

Water Connection

Supply Temperature (Max)	40	°C
Supply Rate (Min)	600	litres per Hour
Supply Pressure (Max)	12	bar
Supply Hose Length	7.5	metres
Diameter	1/2	inch

Performance Data

Pump Pressure (Max)	110	bar
Operating Pressure	120	bar
Flow Rate	380	litres per hour
Detergent Intake	20	litres per hour
Recoil Force of Hand Held Spray Gun at Operating Pressure (Max)	10	N
Unit vibrations	0.8	m/s ²

Sound level

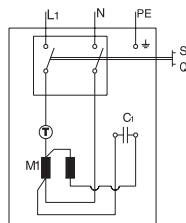
LPA (EN 60704-1)	74.5	dB(A)
LWA (2000/14/EEC)	87	dB(A)
Optimum Working Distance on High Pressure ..	30	cm

Dimensions

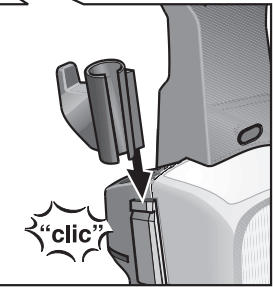
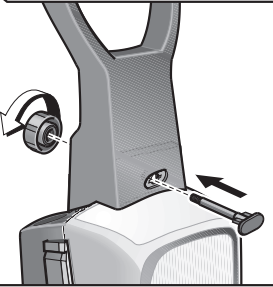
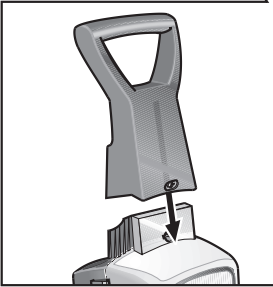
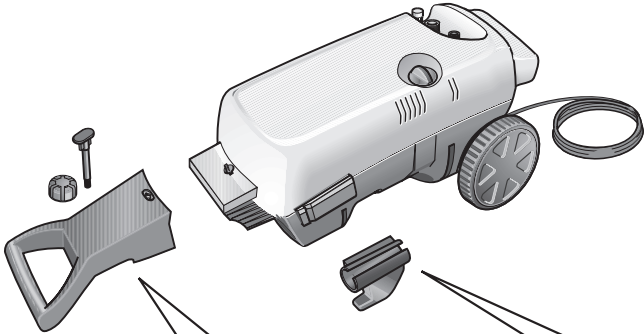
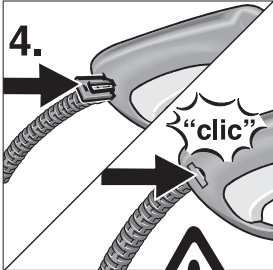
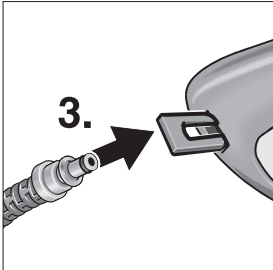
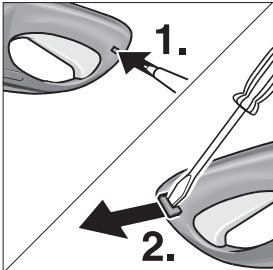
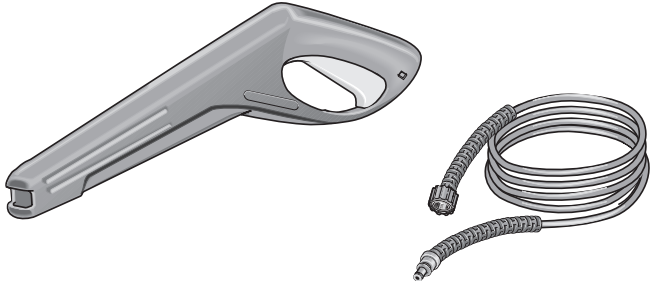
Length	290	mm
Width	340	mm
Height	805	mm
Weight	12.2	Kg

Circuit Diagram

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



10. ASSEMBLY



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: 1.423-xxx

Relevant EU Directives:

98/37/EEC

73/23/EEC (+93/68/EEC)

89/336/EEC (+91/263/EEC, 92/31/EEC, 93/68/EEC)

2000/14/EEC

Harmonised standards applied:

DIN EN 60 335 – 1

DIN EN 60 335 – 2 – 29

DIN EN 55 014 – 1 : 2000 + A1: 2001

DIN EN 55 014 – 2 : 1997

DIN EN 61 000 – 3 – 2 : 2000

DIN EN 61 000 – 3 – 3 : 1995 + A1: 2001

Conformity assessment procedure followed: Annex V

Measured sound power level: 85 dB(A)

Guaranteed sound power level: 87 dB(A)

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.

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KÄRCHER

<http://www.karcher.com>