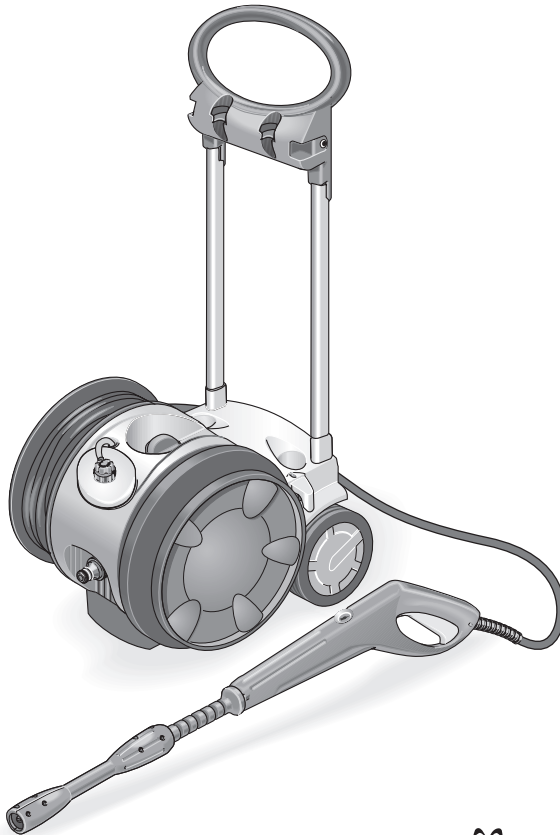




KÄRCHER

650 MB



5.959-909 04/01

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

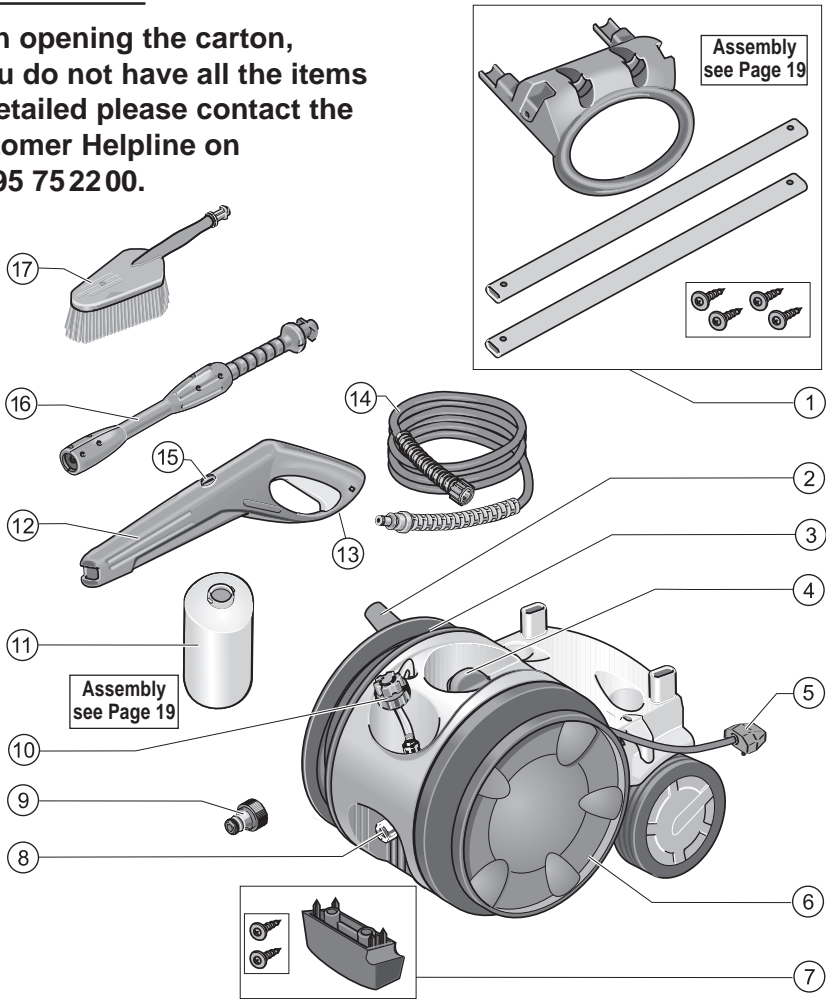
As an added precaution, your pressure washer is fitted with a safety locking device on the Spray Gun.

**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.



- | | |
|--|--|
| 1 Transport Bracket | 10 Detergent Dosing Valve and Suction Tube with Filter |
| 2 High Pressure Hose Reel | 11 Detergent Tank |
| 3 High Pressure Outlet | 12 Spray Gun |
| 4 Power Switch (On/Off) | 13 Safety Lock Device |
| 5 Mains Electric Lead with Plug | 14 High Pressure Hose |
| 6 Mains Lead Storage | 15 Pressure Gauge |
| 7 Support Leg | 16 Spray Lance with Pressure Regulator |
| 8 Inlet Water Connection (with Strainer) | 17 Wash Brush |
| 9 Hosepipe Connector | |

***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 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.9) 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.5) 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.9) 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. 6.414.389.***

3.5 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:

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.

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.12) until the water flows freely and removes all air locks from the hoses.
- You may now attach the bayonet fit Spray Lance (No.16) 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.17) in a “+” or “-” direction.
- The working pressure can be read from the pressure gauge (No.15) on the Spray Gun.

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 of 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.16) is attached securely to the Spray Gun (No.12) and the nozzle is set to the required setting (+).
- 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 Lock Device (No.13) 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 Tank (No.11) with the selected detergent, ensuring it is the correct concentration (See Page 8 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 lowest working pressure setting (-).
- Set the Detergent Dosing Valve (No.10) to the desired dosage.
- 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 “+” 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.16) to its lowest (-) setting.
- Leave for 2-4 minutes for the detergent to have maximum effect.
- **Remove the bayonet fit spray lance and fit the Wash Brush (No.17) 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

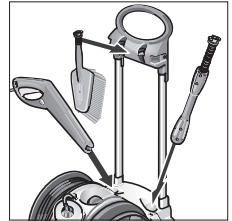
In the event of a break of 5 minutes in the operation of your Karcher Pressure Washer, always switch off the pump to avoid damage due to overheating.

- Switch off the pressure washer by the Power Switch (No.4) and unplug the Mains Electric Lead (No.5) 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 Wash Brush (No.17) and the Spray Lance (No.16) can be stored with the Pressure Washer.

The Mains Electric Lead (No.5) can be wound up over the Mains Lead Storage (No.6).



5. CARE AND MAINTENANCE

To ensure the prolonged life and troublefree use of your Karcher Pressure Washer we strongly recommend routine maintenance of the following:

Spray lance with Pressure Regulator (No.16)

Visually check to see if the nozzle has any dirt or grit, if so, remove the dirt from the nozzle hole with a needle and rinse with water from the front.

Water Connection (No.8)

After every 50 or so periods of operation, remove the filter fitted to the inlet of the Pressure Washer with flat nosed pliers and check that there are no obstructions - if any are present rinse clean.

Detergent Suction Tube (No.10)

Clean the filter.

IMPORTANT

1. 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.

FROST DAMAGE IS NOT COVERED BY WARRANTY.

2. The high pressure hose of your Karcher Pressure Washer should not be mistreated. It is designed to withstand high pressure operation but if the wall of the hose is damaged it may balloon and burst during use, especially if vehicles are run over it or it is pulled across sharp or abrasive edges.

IT IS THE SECOND MOST EXPENSIVE ELEMENT OF YOUR PRESSURE WASHER - PLEASE TAKE CARE OF IT.

6. ACCESSORIES

*A wide range of accessories are available for your **Karcher** Pressure Washer making it an even more useful tool around the house, garden or garage.*

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.

4.760-212 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.

2.637-728 Sandblaster

Used to remove paint, rust and cement from metallic and stone surfaces by using a combination of high pressure water and sand.

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.

2.637-755 Floor Cleaning Lance

An extended lance fitted with three shrouded high pressure nozzles to provide a wide area of cleaning power without any splash back.

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.

6.541-040 Trolley

Eliminates the need to carry the pressure washer when the unit has no built in mobility.

6.964-006 Foam Nozzle

A bayonet fit accessory that generates a low pressure detergent foam. This allows longer detergent contact time on the surface to be cleaned.

2.637-214 Water Pump Kit

9.300-051 25 Kg Grit

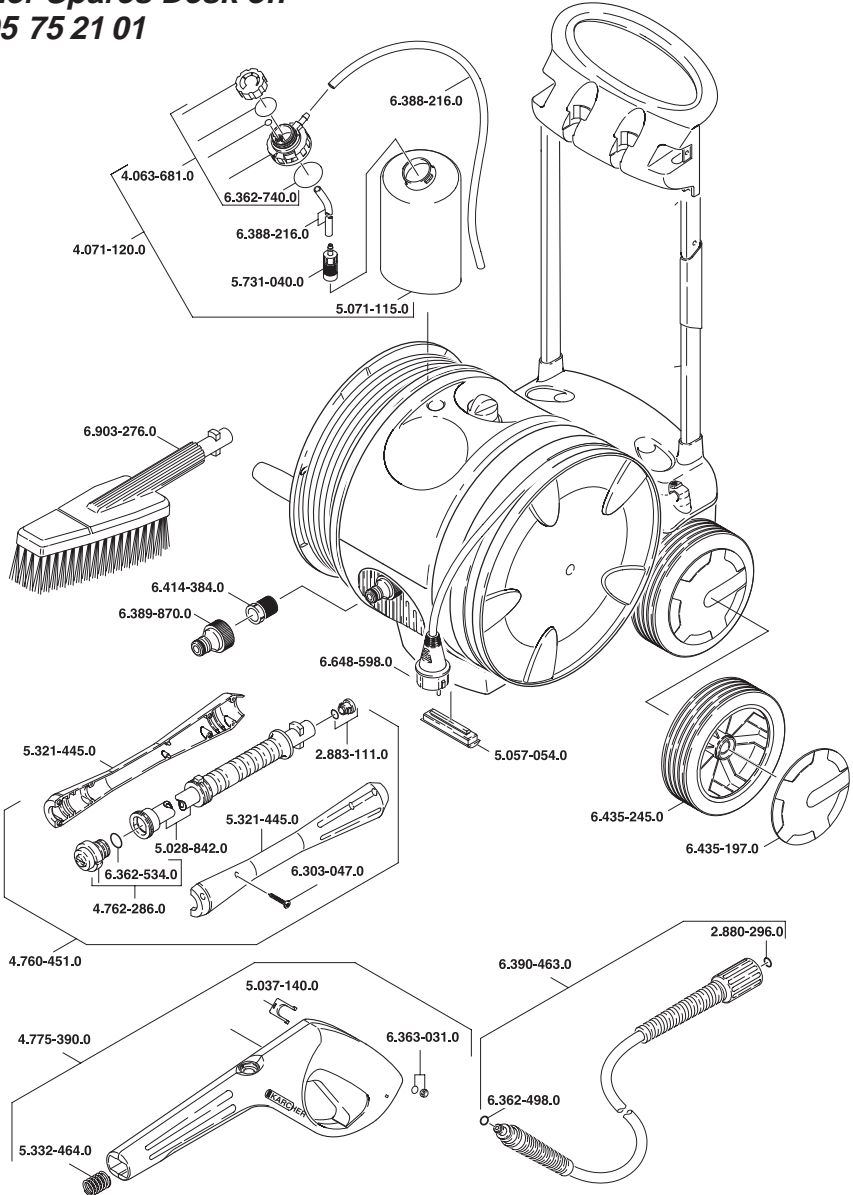
6.291-080 RM 555 (5 litre)

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 a replacement part, please refer to the diagram below and order your spares by contacting the **Karcher Spares Desk on 0 12 95 75 21 01**



7. PROBLEM CHECKLIST

*The machine you have chosen is of the highest quality. If you experience a problem, please check the following chart before contacting the **Karcher Customer Helpline on 0 12 95 75 22 00***

PROBLEM	POSSIBLE CAUSE	CORRECTION
Machine refuses to start	Plug not connected	Connect plug
	Defective socket	Try another socket
	Fuse blown	Change the fuse
	Defective extension cable	Try without extension cable
	Wrong mains voltage	Check mains voltage corresponds to specifications of machine
Pump stops	Fuse blown	Change fuse and check size of extension cable
	Overheating due to poor water Supply	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
	Inadequate mains water	Check inlet water flow rate
Machine does not reach operating pressure	Nozzle blocked/worn out	Clean/replace nozzle
	Inadequate mains water	Check inlet water flow rate
	Inlet hose squeezed	Straighten out hose
	Water filter clogged (3.1 item15)	Clean filter
No detergent suction	Inlet hose blocked	Check hose for leaks or blockages
	Wrong pressure	Set Spray Lance at the minimum working pressure
	Blocked filter in detergent tank	Unblock filter Clean ventilation hole in cover of Detergent Tank

Note: Inrush currents cause short-time voltage drops. Under unfavourable power supply conditions other equipment may be affected. If the system impedance of the power supply is < 0,15 Ohms, disturbances are unlikely to occur.

8. AFTER SALES SERVICE

If your machine does not appear to be working correctly please refer to the **PROBLEM CHECKLIST**. If this fails to resolve the problem, or in the event of a breakdown please ring the **Karcher Customer Helpline on 01295 752200** during office hours.

Please have ready the model number and date of purchase of your machine along with clear and concise details of the fault.

9. TECHNICAL DATA

Power Connection

Voltage	230-240	V (AC)
Current	1~50	Hz
Connected/Load	2.5	KW
Mains Fuse	13	AMP

Water Connection

Supply Temperature (Max)	60	°C
Supply Rate (Min)	600	Litres per Hour
Supply Pressure (Max)	6	bar
Supply Hose Length	7.5	metres
Diameter	1/2	inch
Suction Height from open tank at Water Temperature 20 °C	1	metre

Performance Data

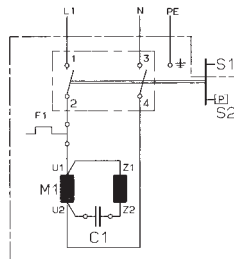
Pump Pressure (Max)	140	bar (at bypass)
Operating Pressure	20-130	bar
Flow Rate	530	litres per hour
Detergent Intake	0-25	litres per hour
Recoil Force of Spray Gun at Operating Pressure (Max)	19	N
Noise	75	dB (A)
Optimum Working Distance on High Pressure ..	30	cm

Dimensions

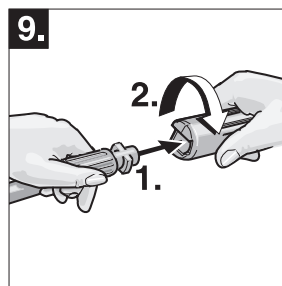
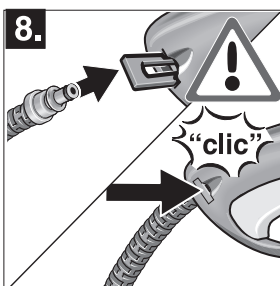
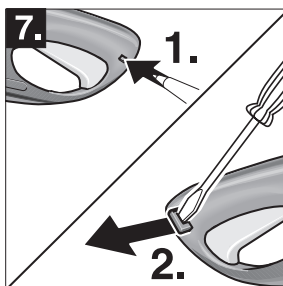
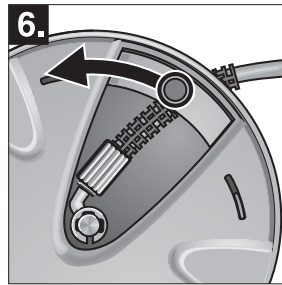
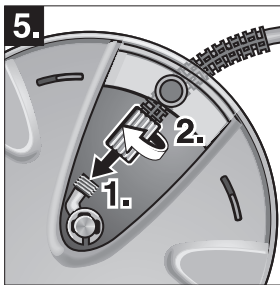
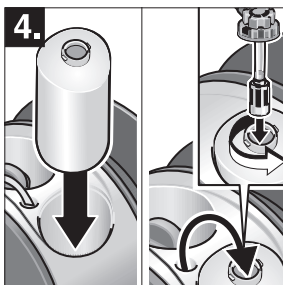
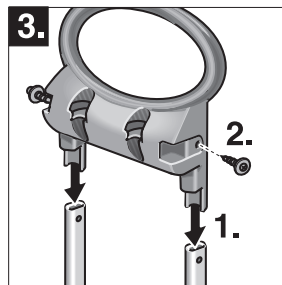
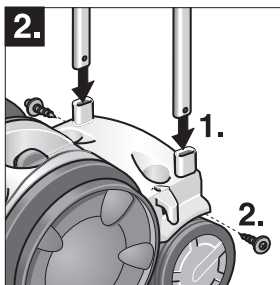
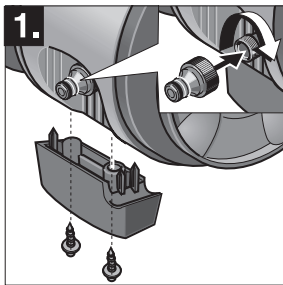
Length	497	mm
Width	360	mm
Height	925	mm
Weight	21	Kg

Circuit Diagramm

- C1 Running capacitor
- F1 Temperature fuse
- M1 Motor
- S1 Appliance switch
- S2 Pressure-operated 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: **1.138-xxx**

Relevant EU Directives:

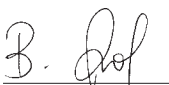
EU Low-Voltage Equipment Directive (73/23/EEC) amended by 93/68/EEC.
EU Machinery Directive (98/37/EEC)
EU Directive on Electromagnetic Compatibility (89/336/EEC)
amended by 91/263/EEC, 92/31/EEC, 93/68/EEC.

Harmonised standards applied:

DIN EN 55014-1:1999	DIN EN 60335-1	DIN EN 61000-3-2:1995
DIN EN 55014-2:1997	DIN EN 60335-2-79	DIN EN 61000-3-3:1995

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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Dr. B. Graf


S. Reiser


H. Jenner

Alfred Kärcher Kommanditgesellschaft. Sitz Winnenden. Registergericht: Waiblingen, HRA 169.
Persönlich haftende Gesellschafterin: Kärcher Reinigungstechnik GmbH. Sitz Winnenden, 2404 Registergericht Waiblingen, HRB
Geschäftsführer: Dr. Bernhard Graf, Roland Kamm, Herbert Konhäusner, stellv.: Hartmut Jenner, Thomas Schöbinger

05/00

 **KÄRCHER**

<http://www.karcher.com>