

Operating Instructions

High Pressure Washer

HDR-K 66-20 BL

HDR-K 96-28 BL

HDR-K 72-22 BH



HDR-K 66-20 BL



HDR-K 72-22 BH



HDR-K 96-28 BL

HDR-K SERIES

Imprint

Product identification

High Pressure Washer	Item number
HDR-K-66-20-BL	7103662
HDR-K-72-22-BH	7103722
HDR-K-96-28-BL	7109628

Manufacturer

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Indications regarding the operating instructions

Operating instruction

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Subject to technical modifications and error.

Content

1 Introduction	3
1.1 Copyright	3
1.2 Customer service	3
1.3 Limitation of liability	3
2 Safety	3
2.1 Symbol explanation	3
2.2 Obligations of the operating company	4
2.3 Requirements to staff	4
2.4 Personal protective equipment	5
2.5 General safety regulations	5
2.6 Safety labels on the high pressure washer	6
2.7 Safety devices on the high pressure washer	7
3 Intended Use	7
3.1 Improper use	7
4 Transport, Packaging, Storage	7
4.1 Transport	7
4.2 Packaging	8
4.3 Storage	8
5 Technical Data	8
5.1 Tables	8
5.2 Type plate	9
6 Description of Device	9
7 Scope of Delivery	9
8 Assembly	10
9 Operation	11
9.1 Switch on, switch off, restart	11
9.2 Decommissioning	12
9.3 Adjustment of the working pressure	12
9.4 Filling fuel	12
9.5 Refilling and using detergent	13
10 Care, Maintenance and Repair	13
10.1 Care by cleaning	13
10.2 Maintenance and repair	14
11 Disposal, Recycling of used Devices	14
11.1 Decommissioning	14
11.2 Disposal of lubricants	14
12 Malfunctions, possible Causes, Solutions	14
13 Spare Parts	15
13.1 Ordering spare parts	15
13.2 Spare parts drawings	16
14 EC - Declaration of Conformity	21

1 Introduction

You have made a good choice by purchasing the CLEANCRAFT high pressure washer.

Read the operating manual thoroughly before commissioning the machine.

It gives you information about the proper commissioning, intended use and safe and efficient operation and maintenance of your high pressure washer.

The operating manual is part of the high pressure washer package. Always keep this operating manual in the location where your high pressure washer is being operated. All local accident prevention regulations and general safety instructions for the operating range of your high pressure washer must also be complied with.

1.1 Copyright

The contents of these instructions are copyright. They may be used in conjunction with the operation of the High Pressure Washer. Any application beyond those described is not permitted without the written approval of Stürmer Maschinen GmbH.

For the protection of our products, we shall register trademark, patent and design rights, as this is possible in individual cases. We strongly oppose any infringement of our intellectual property.

1.2 Customer service

Please contact your dealer if you have questions concerning your High Pressure Washer or if you need technical advice. They will help you with specialist information and expert advice.

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We are always interested in valuable experience and knowledge gained from using the application which then could be shared and be valuable to develop our products even further.

1.3 Limitation of liability

All information and notes in these operating instructions were summarised while taking applicable standards and rules, the state-of-the-art technology and our long-term knowledge and experiences into consideration.

In the following cases the manufacturer is not liable for damages:

- Non-observance of the operating instructions,
- Inappropriate use
- Use of untrained staff,
- Unauthorised modifications
- Technical changes,
- Use of not allowed spare parts.

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations at the time of the conclusion of the contract are applicable.

2 Safety

This section provides an overview of all important safety packages for the protection of operating personnel as well as for safe and fault-free operation. Other task-based safety notes are included in the paragraphs of the individual phases of life.

2.1 Symbol explanation

Safety instructions

The safety notes in these operating instructions are highlighted by symbols. The safety notes are introduced by signal words which express the concern of the risk.



WARNING!

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to death or severe injury if not avoided.



DANGER!

This combination of symbol and signal words indicates an imminently dangerous situation which may lead to death or severe injury if not avoided.



CAUTION!

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to slight or minor injury if not avoided.

**ATTENTION!**

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.

**NOTE!**

This combination of symbol and signal words indicates a potentially dangerous situation which may lead to material or environmental damage if not avoided.

Tips and recommendations**Tips and recommendations**

This symbol highlights useful tips and recommendations as well as information for an efficient and trouble-free operation.

It is necessary to observe the safety notes written in these operating instructions in order to reduce the risk of personal injuries and damages to property.

2.2 Obligations of the operating company

The operating company is the person who operates the High Pressure Washer for business or commercial reasons by herself, or leaves it to a third party for use or application, and who bears the legal product responsibility for the protection of the user, the staff or for third parties.

Obligations of the operating company

If the high pressure washer is used for commercial purposes, the operating company of the high pressure washer must comply with the legal working safety regulations.

Therefore, the safety notes in this operating manual, as well as the safety, accident prevention and environment protection regulations applying for the area of application of the high pressure washer must be met. The following applies in particular:

- The operating company must be informed about the applying industrial safety regulations and further analyse hazards resulting from the special working conditions at the place of use of the high pressure washer. She must implement these in form of operating manuals for the operation of the high pressure washer.
- During the entire lifetime the high pressure washer, the operating company must verify whether the operating manuals prepared by her correspond to the current status of the regulations, and must adapt these if necessary.

- The operating company must unambiguously regulate and determine the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operating company must ensure that all persons who work with the High Pressure Washer, have read and understood this manual. Furthermore she must instruct the staff in regular intervals and inform them about the hazards.
- The operator must provide the necessary protective equipment to the staff and order the use of the necessary protective equipment in a binding way.

Furthermore the operating company is responsible to keep the high pressure washer always in a technically flawless state. Thus, the following applies:

- The operator must ensure that the maintenance intervals described in this manual are kept.
- The operator must have all safety devices checked regularly for their good working order and their integrity.

2.3 Requirements to staff**Qualifications**

The different tasks described in this manual represent different requirements to the qualification of the persons entrusted with these tasks.

**WARNING!****Danger in case of insufficient qualification of the staff!**

Insufficiently qualified persons cannot estimate the risks while using the High Pressure Washer and expose themselves and others to the danger of severe or lethal injuries.

- Have all works only performed by qualified persons.
- Keep insufficiently qualified persons out of the working area.

Only persons reliable working procedures can be expected from, are allowed to perform all works. Persons the responsiveness of which is affected by e. g. drugs, alcohol or medication, are not allowed to work with the machine.

The qualifications of the personnel for the different tasks are mentioned below:

Operator

The operator is instructed by the operating company about the assigned tasks and possible risks in case of improper behaviour. Any tasks which need to be performed beyond the operation in the standard mode must only be performed by the operator if it is indicated in these instructions and if the operating company expressly commissioned the operator.

Electrically qualified person

Electrically qualified person is due to their professional training, knowledge and experience as well as knowledge of the relevant standards and regulations, in a position to carry out work on the electrical systems and to independently recognize and avoid possible dangers.

Qualified personnel

Due to their professional training, knowledge and experience as well as their knowledge of relevant regulations the specialist staff is able to perform the assigned tasks and to recognise and avoid any possible dangers themselves.

Manufacturer

Certain works may only be performed by specialist personnel of the manufacturer. Other personnel is not authorized to perform these works. Please contact our customer service for the execution of all arising work.

2.4 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working. The staff member has to wear personal protective equipment while performing different tasks on and with the machine which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:



Protective gloves

The protective gloves serve to protect the hands against sharp components as well as against friction, abrasions or deep injuries.



Safety boots

Safety boots protect the feet from being crushed, falling parts and slipping over on slippery ground.



Protective clothes

Protective clothes are made of a tightly fitted fabric without the protruding parts of low tear strength.

2.5 General safety regulations

Please note the following:

- Use the guards and secure them securely. Never work without guards and get them working.
- Keep the machine and your work environment clean at all times. Ensure sufficient illumination.
- The high pressure washer design must not be changed; the machine must not be used for work not intended by the manufacturer.
- Never work under the influence of illnesses that impair concentration, drugs, alcohol or medication.

- Keep children and persons unfamiliar with the high pressure washer away from their work environment.
- Do not use the mains cable to pull the plug out of the socket. Protect the cable against heat, oil and sharp edges.
- Immediately eliminate any defects that might impair the safety of the equipment. .
- DO NOT direct water jet at persons or animals.
- DO NOT pull the unit by the high pressure hose.
- DO NOT operate the device with flammable, toxic or liquids that could interfere with its proper operation. It is prohibited to operate the device in a flammable or explosive atmosphere.
- Before using the high pressure washer make sure that no parts are damaged. Replace damaged parts immediately to avoid sources of danger.
- Hold the pistol firmly when operating the lever! Pressure-related recoil!
- DO NOT direct the water jet at the device itself, electrical components or other electrical devices.
- DO NOT use the device when there are people within its operating range who are not wearing protective clothing.
- Do not expose the high pressure washer to rain.
- Do not overload the high pressure washer! Working within the stated performance limits is better and safer.
- Make sure that no vehicles drive over the high-pressure hose.
- Do not touch hot silencers, cylinders or cooling fins (danger of burns).
- Risk of injury due to unintentional start-up of the unit. Disconnect the cable before working on the unit.
- ONLY use cleaning agents that are compatible with the material of the sheathing of the high-pressure hose.
- Persons and animals must be kept at a safe distance of at least 15 metres.
- Before disconnecting the hose from the unit, always release the residual pressure.
- Do not bend or reach over the exhaust opening. Do not touch the boiler during burner operation. (Risk of burns).
- Avoid contact of the skin and especially the eyes with the cleaning agent! After eye contact, rinse immediately with plenty of water and seek medical attention immediately!
- **RISK OF EXPLOSION!** DO NOT use the device to spray flammable liquids!
- DO NOT change the original diameter of the nozzle.
- Only use original spare parts and accessories to avoid possible dangers and accident risks



ATTENTION!

The exhaust gas of the engine contains toxic carbon monoxide. Do not run in a closed area.



ATTENTION!

When directed towards tyres, tyre valves or other pressurised components, the high pressure jet is potentially dangerous. Do not use the rotating nozzle kit, and always keep the jet at a distance of at least 30 cm during cleaning.



ATTENTION!

COMPLY WITH the local water supply authority regulations.

Under IEC 60335-2-79, the appliance may only be connected to the mains drinking water supply if the supply hose is fitted with a backflow preventer valve with drain facility corresponding to EN 12729 type BA. The backflow preventer can be ordered from the manufacturer.



DANGER!

Water that has passed through backflow preventers is considered to be non-potable.



ATTENTION!

Only the fuel specified in the operating instructions may be used. If unsuitable fuels are used, there is a risk of explosion. When refuelling petrol-driven appliances, make sure that no fuel gets onto hot surfaces.



ATTENTION!

DO NOT tamper with or adjust the setting of the safety valve or the safety devices.



ATTENTION!

If the device is operated in rooms, sufficient ventilation and exhaust gas discharge must be provided (danger of toxication).

The exhaust opening must not be closed. It must be ensured that no exhaust emissions occur in the vicinity of air inlets.



WARNING!

Never leave the running machine unattended. Always unplug the machine when it is not in use and keep it out of the reach of children or irresponsible persons.



ATTENTION!

This device is designed for use with the detergent supplied or recommended by the manufacturer. The use of other detergents or chemicals may adversely affect the device's safety.

2.6 Safety labels on the high pressure washer

The following safety labels and instructions are attached to the High Pressure Washer (Fig. 1) and must be observed.



Fig. 1: Safety labels

If safety labels on the machine are damaged or missing, this can cause errors, personal injury and material damage. The safety symbols attached to the machine must not be removed. Damaged safety symbols must be replaced immediately.

As soon as the signs are not clearly visible and comprehensible at first glance, the machine must be stopped until new signs have been attached.

2.7 Safety devices on the high pressure washer



WARNING!

Do not tamper with or adjust the safety valve setting.

Safety valve:

The safety valve is also a pressure limiting valve. When the gun trigger is released, the valve opens and the water recirculates through the pump inlet or is discharged onto the ground.

Thermostat valve:

If the water temperature exceeds the temperature set by the manufacturer, the thermostat valve discharges the hot water and draws in an amount of cold water equal to the amount of water discharged, until the correct temperature is restored.

Safety catch: Prevents accidental spraying of water.

3 Intended Use

The high pressure washer has been designed for individual use for the cleaning of vehicles, machines, boats, masonry, etc., to remove stubborn dirt using clean water and biodegradable chemical detergents.

Vehicle motors may be washed only if the dirty water is disposed of as per regulations in force.

Proper use also includes compliance with all information in this manual.

For structural and technical changes to the high pressure washer the company Stürmer Maschinen GmbH assumes no liability. Claims of any kind due to damage due to improper use are excluded.



ATTENTION!

Any change on the high pressure washer is prohibited. The change may void the warranty, cause burns and personal injury, even fatal for the user.

The manufacturer will not be liable for any damage that the results from failure to follow these instructions or from the misuse of the equipment to objects or persons.

3.1 Improper use



WARNING!

Danger in case of misuse!

Misuse of the special High Pressure Washer can lead to dangerous situations.

- Only operate the special high pressure washer in the power range listed in the technical data.
- Never bypass or override the safety devices.
- Only operate the special high pressure washer in a technically perfect condition.

4 Transport, Packaging, Storage

4.1 Transport

Check the high pressure washer on delivery for any visible transportation damage. If you notice any damage to the device please report this immediately to the carrier or dealer.



CAUTION!

Injuries caused by parts falling over or off a forklift, pallet truck or transport vehicle.

Only use means of transport that can carry the total weight and are suitable for it.

Improper transport of individual devices, unsecured devices stacked on top of each other or next to each other in packed or already unpacked condition is accident-prone and can cause damage or malfunctions for which we do not grant any liability or guarantee.

Transport the scope of delivery secured against shifting or tilting with a sufficiently dimensioned industrial truck to the installation site.

General risks during internal transport



CAUTION: DANGER OF TIPPING!

The device may be lifted unsecured by a maximum of 2cm.

Employees must be outside the danger zone, the reach of loads. Warn employees and, if necessary, advise employees of the hazard.

Devices may only be transported by authorized and qualified persons. Act responsibly during transport and always consider the consequences. Refrain from daring and risky actions.

Gradients and descents (e.g. driveways, ramps and the like) are particularly dangerous. If such passages are unavoidable, special caution is required.

Before starting the transport check the transport route for possible danger points, unevenness and disturbances as well as for sufficient strength and load capacity.

Danger points, unevenness and disturbance points must be inspected before transport. The removal of danger spots, disturbances and unevenness at the time of transport by other employees leads to considerable dangers.

Careful planning of internal transport is therefore essential.

4.2 Packaging

All used packaging materials and packaging aids are recyclable and should be taken to a materials recycling depot to be disposed of.

The delivery packaging is made of cardboard, so please dispose carefully by having it chopped up and given to the recycling collection.

The film is made of polyethylene (PE) and the cushioned parts of polystyrene (PS). Deliver these substances to a collection point for recyclable materials or to the waste disposal company which looks after your region.

4.3 Storage

The high pressure washer should be stored in a dry, frost-free environment.

5 Technical Data

5.1 Tables

	HDR-K-66-20-BL
Length	520 mm
Width /Depth	690 mm
Height	565 mm
Weight	31,4 kg
Motor output	4,1 kW
Maximum pressure	200 bar
Working pressure	140 bar
Working flow rate	558 l/h
Maximum flow rate	660 l/h
Maximum supply temperature	50 °C
Motor speed	3400 +/-200 rpm
Cable length	8 m
Pump oil (SAE 15W-40)	0,154 kg
Sound pressure level	87,5 dB(A)
Vibration value	< 2,5 m/s ²
Degree of protection	IP X5
Motor type	Petrol
Fuel tank capacity	3,6 Liter

	HDR-K-72-22-BH
Length	520 mm
Width /Depth	690 mm
Height	565 mm
Weight	34,7 kg
Motor output	4,1 kW
Maximum pressure	220 bar
Working pressure	160 bar
Working flow rate	600 l/h
Maximum flow rate	720 l/h
Maximum supply temperature	60 °C
Motor speed	3400 +/-200 rpm
Cable length	10 m
Pump oil (SAE 15W-40)	0,154 kg
Sound pressure level	89,4 dB(A)
Vibration value	< 2,5 m/s ²
Degree of protection	IP X5
Motor type	Petrol
Fuel tank capacity	3,1 Liter

	HDR-K-96-28-BL
Length	830 mm
Width /Depth	595 mm
Height	640 mm
Weight	58,4 kg
Motor output	8,2 kW
Maximum pressure	270 bar
Working pressure	230 bar
Working flow rate	840 l/h
Maximum flow rate	960 l/h
Maximum supply temperature	60 °C
Motor speed	3400 +/-200 rpm
Cable length	10 m
Pump oil (SAE 15W-40)	0,154 kg
Sound pressure level	88,6 dB(A)
Vibration value	< 2,5 m/s ²
Degree of protection	IP X5
Motor type	Petrol
Fuel tank capacity	6,5 Liter

5.2 Type plate

Hochdruckreiniger / High pressure washer		CE
Typ / Type	HDR-K 66-20 BL	
Serien-Nr. / Serial no.		
Baujahr / Year of manufacture		
Artikel-Nr. / Item no.	7103662	
Leistung / Power	4,1 kW	
Druck / Pressure	140 bar (max. 200 bar)	
Durchflussmenge / Flowrate	9,3 l/min (max. 11 l/min)	
Eingang / Inlet	max. 50 °C / max. 10 bar	
Gewicht / Weight	31,4 kg	
Schutzart (IP) / Type of protection	X5	
		
Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26, 96103 Hallstadt, DE / Germany		

Fig. 2: Type plate HDR-K 66-20 BL

6 Description of Device

HDR-K 72-22 BH

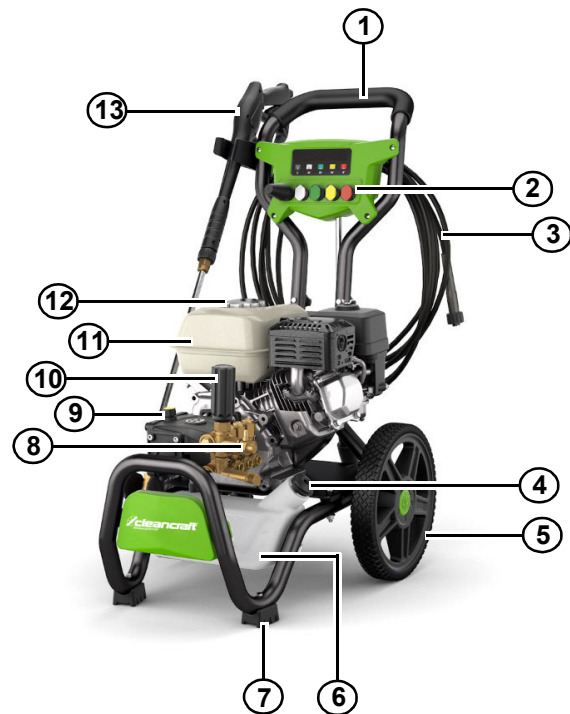


Fig. 3: Description HDR 72-22 BH

1. Push handle
2. Pluggable nozzle set
3. High pressure hose
4. Filler neck (Cleaning agent tank)
5. Wheel
6. Cleaning agent tank
7. Rubber foot
8. High pressure pump / water connection
9. Regulator
10. Working pressure regulator
11. Fuel tank
12. Tank cap
13. Manual spray gun

7 Scope of Delivery

The high pressure washer is delivered with:



Fig. 4: Scope of delivery

- Manual spray gun
- 8 Meter high pressure hose (HDR-K 66-20 BL)
- 10 Meter high pressure hose (HDR-K 72-22 BH and HDR-K 96-28 BL)
- Curved lance with adjustable nozzle
- 4-part quick-change nozzle set

8 Assembly



ATTENTION!

All installation and assembly operations must be performed with the appliance disconnected from the mains power supply.

Fitting the pressure release caps (on models with this feature)

To prevent oil leaks, the appliance is delivered with the oil intakes sealed with red caps which must be replaced with the pressure release caps supplied.

Fitting the rotating nozzle

The rotating nozzle kit delivers greater washing power. Use of the rotating nozzle may cause a reduction in pressure of 25% compared to the pressure obtained with the adjustable nozzle.

However, the rotating nozzle kit delivers greater washing power due to the rotation of the water jet.

Motor



ATTENTION!

The high pressure washers are delivered with oil in the pump.

It is essential to check the oil level before putting the pump into operation for the first time! Top up oil if necessary!



ATTENTION!

Only the fuel specified in the operating instructions may be used. If unsuitable fuels are used, there is a risk of explosion. When refuelling devices with petrol engines, make sure that no fuel gets onto hot surfaces.

Read the operating instructions of the engine manufacturer before start-up and follow the safety instructions carefully.

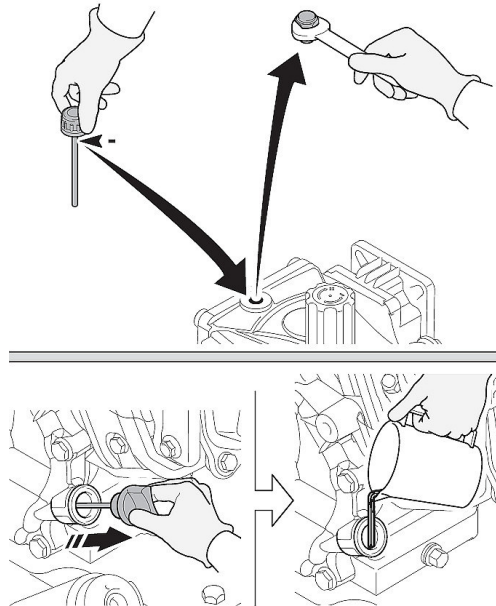


Fig. 5: Checking / filling in oil

Fill the fuel tank with unleaded petrol. Do not use 2-speed mixture.

Water supply connection



ATTENTION!

Only clean or filtered water should be supplied to the appliance. The flow rate of the water inlet tap should be equal to the pump flow rate.

Place the appliance as close to the water supply system as possible.

Direct connection to the drinking water line is only permitted if the inlet hose is equipped with a backflow preventer in accordance with the applicable regulations. Ensure that the hose is at least Ø 13 mm, is reinforced and is not longer than 25 m.

Suction of water from open containers

Step 1: Screw the inlet hose with filter to the water INLET and insert it down to the bottom of the container.

Step 2: Vent the air from the appliance:

- Unscrew the lance.
- Start the appliance and keep the gun open until there are no air bubbles in the water flowing out.

Step 3: Switch the appliance off and screw the lance back on. The maximum suction height is 0.5 m. The suction hose should be filled before use.

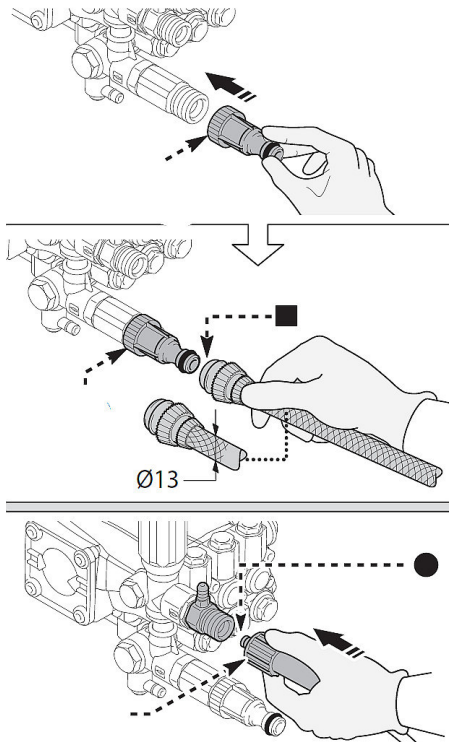


Fig. 6: Water supply

Hand spray gun, lance and nozzle

- Step 1: Connect the nozzle to the hand spray gun and tighten.
- Step 2: Connect the high pressure hose to the hand spray gun and the water tank.
- Step 3: Screw the selected nozzle onto the nozzle connector of the hand spray gun.

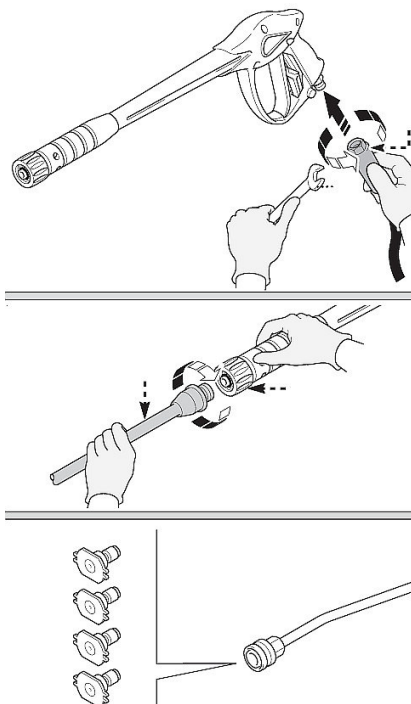


Fig. 7: Assembling the hand spray gun

9 Operation



ATTENTION!

Check oil level. If necessary, fill up with oil!



ATTENTION!

For operation, the device must be installed on a safe and solid surface.

When mounted on the trolley, the trolley must be in the upright position!



ATTENTION!

The device must be mounted correctly before use. It must also be checked that the filter elements are correctly mounted and efficient.

The device should only be operated, mounted, repaired and transported on a stable, safe and not reclined surface.



WARNING!

Before starting up the appliance check that it is receiving water correctly; use of the appliance without water will damage it. Do not cover the ventilation grilles when the appliance is in use.

To prevent damage to the appliance, do not allow it to operate dry and check that it is properly supplied with water.



WARNING!

Toxic carbon monoxide is contained in the motor exhaust gas. Never run in a closed area.

9.1 Switch on, switch off, restart

Switch on

Step 1: Turn on the water supply tap fully.

Step 2: When mounted on the trolley, the trolley must be in the upright position (Fig.8).



Fig. 8: Working position

Step 3: Release the safety catch (Pos. D, Fig. 9).

Step 4: Depress the gun trigger for a few seconds.

Step 5: Start the motor according to the operating instructions of the motor manufacturer.

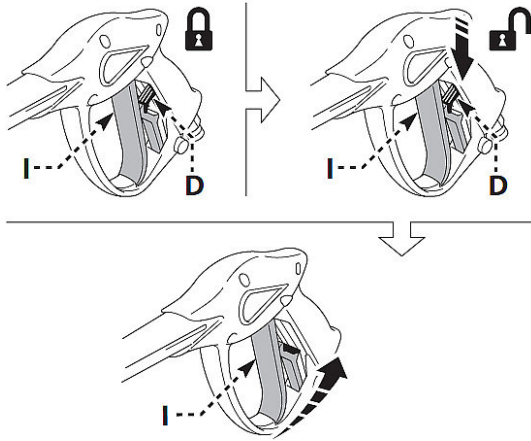


Fig. 9: Unlocking the spray gun

Switch off

Step 1: Press the regulator lever at the engine to "STOP" till the engine comes to a halt and turn off the fuel tap.

Step 2: Depress the gun trigger and discharge the residual pressure inside the pipes.

Step 3: Engage the safety catch (Pos. D, Fig. 9).

Restart

Step 1: Release the safety catch (Pos. D, Fig. 9).

Step 2: Depress the gun trigger and discharge the residual air inside the pipes.

Step 3: Start the motor according to the operating instructions of the motor manufacturer.

9.2 Decommissioning

Step 1: Close the water supply tap.

Step 2: Release the residual pressure from the gun until all the water has escaped from the machine.

Step 3: Press the control lever on the motor to "STOP" until the motor stops and close the fuel tap.

Step 4: Disconnect the spark plug connector.

Step 5: Empty and wash the detergent tank after work. Use clean water instead of detergent to wash the tank.

Step 6: Actuate the gun lock.

9.3 Adjustment of the working pressure

Regulate the working pressure with the regulator (Pos. G, Fig. 10). The pressure is indicated on the pressure gauge (if provided).

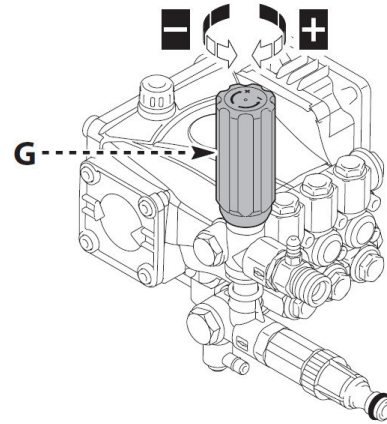


Fig. 10: Adjustment of the working pressure

9.4 Filling fuel

- Never refuel the unit in closed rooms with the engine running or hot.
- Do not smoke when refuelling.
- Do not refuel near naked flames or sparks.
- Wipe off spilled fuel.
- Close canister and tank properly after refuelling.
- Do not spill fuel - use a funnel.
- Fill the fuel tank with unleaded petrol.
- Do not use a 2-stroke mixture.



ATTENTION!

Petrol is extremely flammable and explosive. Switch off the motor and let it cool down before filling up the tank.



WARNING!

The exhaust gas of the motor contains toxic carbon monoxide. Do not switch on and run the high pressure washer in a closed area.

9.5 Refilling and using detergent

To ensure that the detergent is dispensed at the correct pressure, position the nozzle (if provided) or mount the detergent kit (if provided) as shown in Figure 11. Use of a high pressure hose longer than the one originally supplied with the appliance, or the use of an additional hose extension, may reduce or completely halt the suction of detergent.

Fill the tank with highly biodegradable detergent.

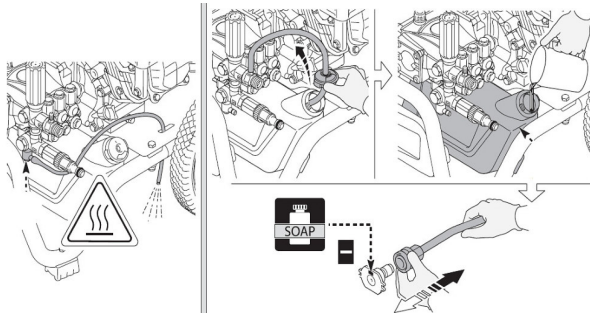


Fig. 11: Use of the detergent



Tips and recommendations

To remove coarse dirt, spray on cleaning agent sparingly and leave to work for 1 to 5 minutes, but do not allow to dry.



NOTE!

1. Dissolve dirt by applying the detergent mixed with water to the surface while still dry.
 2. When dealing with vertical surfaces work from the bottom upwards.
- Leave the detergent to act for 1-2 minute but do not allow the surface to dry. Starting from the bottom, use the high pressure jet at a minimum distance of 30 cm. Do not allow the rinse water to run onto unwashed surfaces.
3. In some cases, scrubbing with brushes is needed to remove dirt.
 4. High pressure is not always the best solution for good cleaning results, since it may damage some surfaces. The finest adjustable nozzle jet setting or the rotating nozzle should not be used on delicate or painted parts, or on pressurised components (e.g. tyres, inflation valves, etc..).
 5. Effective cleaning depends on both the pressure and volume of the water used, to the same degree.

10 Care, Maintenance and Repair



DANGER!

Risk of injury if the machine is left running in an unattended state!

- Before working on the device, set motor switch to "0/OFF" and remove the spark plug connector prior to performing any work on the device.
- Risk of burns!
- Do not touch hot mufflers, cylinders or radiator ribs.

10.1 Care by cleaning

The high pressure washer should always be kept in a clean condition.



Wear protective gloves!

Suitable protective gloves must be worn for cleaning in order to protect against injuries caused.

The motor ventilation slots must be kept clean to ensure adequate cooling.

Cleaning the nozzle

Step 1: Disconnect the lance from the nozzle.

Step 2: Remove any dirt deposits from the nozzle hole using the tool.

Cleaning the filter

Inspect the inlet filter and detergent filter (if fitted) before each use. Clean this in accordance with the instructions if necessary.

Remove a motor blockade (if fitted)

In case of lengthy stoppages, limescale sediments may cause the motor blocking. To unjam the motor, turn the drive shaft with a tool.

Refilling the oil

Add oil through the intake hole to restore the correct level.

For oil characteristics, refer to the "Technical data" table (SAE 15W-40).

The oil should be changed every 500 hours of use.



ATTENTION!

After use, clean all parts of the high pressure washer; empty the containers, knock out the filters and wipe. Wipe the machine with a cloth.

Cleaning should not be performed by children 8 years of age or older unless supervised by an adult. Maintenance and repairs must always be carried out by qualified personnel; any damaged parts must only be replaced with original spare parts..

10.2 Maintenance and repair



ATTENTION!

Maintenance and repairs must always be carried out by qualified personnel; Any damaged parts can only be replaced by original spare parts.

If the high pressure washer does not work properly, contact a dealer or our customer service. The contact details can be found in chapter 1.2 Customer Service.

All protection and safety equipment must be reinstalled immediately after completion of repair and maintenance work.

11 Disposal, Recycling of used Devices

Please take care in your own interest and in the interest of the environment that all component parts of the machine are only disposed of in the intended and permitted way.

11.1 Decommissioning

Immediately decommission disused machines in order to avoid later misuse and endangering of the environment or personal safety.

- Eliminate all environmentally hazardous operating materials from the used device.
- If required, disassemble the machine into easy-to-handle and usable components and parts.
- Dispose of machine components and operating materials by the disposal channels provided.

11.2 Disposal of lubricants

Please pay attention to an environmentally friendly disposal of the used coolants and lubricants. Observe the disposal instructions of your municipal disposal companies.

Disposal notes for used lubricants are available from the manufacturer of the lubricants. If necessary, request the product-specific data sheets.

12 Malfunctions, possible Causes and Solutions



ATTENTION!

If one of the following errors occurs, immediately stop working with the High Pressure Washer.

Before you begin troubleshooting, turn off the High Pressure Washer and unplug the power cord. Otherwise it could lead to serious injuries.

All repairs or replacement work may only be carried out by qualified and trained specialist personnel.



NOTE!

If you can not solve the problems with your high pressure washer yourself, then please contact your nearest CLEANCRAFT dealer. Please write down the following information from the High Pressure Washer or the operating instructions in advance to help you with your problem in the best possible way.

- Model name of the device
- Serial number of the device
- Construction year
- Exact error description

Malfunctions	Possible causes	Solutions
Pump does not reach working pressure	<ol style="list-style-type: none"> 1. Nozzle worn 2. Water filter fouled 3. Water supply pressure low 4. Air being sucked into system 5. Air in pump 6. Adjustable nozzle when it is not positioned correctly 7. Thermostatic valve tripped 8. Water being sucked from an open container from a height more than 0.5 m. 	<ol style="list-style-type: none"> 1. Replace nozzle 2. Clean filter 3. Turn on water supply tap fully 4. Check tightness of hose fittings 5. Switch off the appliance and keep depressing and releasing the gun trigger until the water comes out in a steady flow. Switch the appliance back on again 6. Adjust the nozzle correctly 7. Wait for correct water temperature 8. Reduce the suction height.
Pump pressure drops during suddenly use	<ol style="list-style-type: none"> 1. Water being sucked from an external tank 2. Inlet water too hot 3. Nozzle clogged 4. Inlet filter is fouled 	<ol style="list-style-type: none"> 1. Connect appliance to the mains water supply 2. Reduce temperature 3. Clean nozzle 4. Clean or replace the filter

Malfunctions	Possible causes	Solutions
Water leakages	<ol style="list-style-type: none"> 1. Seals worn 2. Safety valve tripped and discharging 	<ol style="list-style-type: none"> 1. Have the seals replaced at your nearest Authorised Service Centre 2. Contact an Authorised Service Centre
Appliance noisy	Water too hot	Reduce temperature
Oil leakage	Seals worn	Contact an Authorized Service Centre
No detergent sucked in	<ol style="list-style-type: none"> 1. Adjustable nozzle on high pressure setting 2. Detergent too dense 3. High pressure hose extension being used 4. Deposits or restriction in detergent circuit 	<ol style="list-style-type: none"> 1. Set nozzle „on“ 2. Dilute with water 3. Fit original hose 4. Flush with clean water and eliminate any restrictions. If the problem persists, contact an Service Centre
Water escapes from thermostat valve	Water temperature inside pump head has exceeded max. rated value stated on type plate	With appliance in operation, do not stop the water jet for more than 5 minutes at a time

13 Spare Parts



DANGER!

Danger of injury by the use of wrong spare parts!

Dangers may result for the user and damages as well as malfunctions may be caused by using wrong or damaged spare parts

- Only use original spare parts of the manufacturer or spare parts admitted by the manufacturer.
- Always contact the manufacturer in case of uncertainties.



NOTE!

The manufacturer's warranty will become null and void if non-permissible spare parts are used.

13.1 Ordering spare parts

Spare parts are available from authorised retailers or directly from the manufacturer.

Contact details:

Fax: 0049 (0) 951 96555-119

email: ersatzteile@stuermer-maschinen.de

Always quote the following key data with your spare parts orders:

- Device type
- Article number
- Position number
- Year of manufacture
- Quantity
- Desired shipping type (post, freight, sea, air, express)
- Shipping address

Spare parts orders without the aforementioned data cannot be taken into account. The supplier shall determine the shipping type if no relevant data was provided.

Information about the device type, item number and year of manufacture can be found on the type plate. The type plate is mounted on the device. On the type plate fixed to the high pressure washer.

Example

The engine for the high pressure washer HDR-K 66-20 BL must be ordered. The engine has the number 36 in the spare parts drawing 1.

By ordering spare parts, send a copy of the spare parts drawing (1) with the marked part (engine) and marked position number (36) to the dealer or spare parts department and provide the following information:

Type of device:	High Pressure Washer HDR-K 66-20 BL
Item number:	7103662
Drawing number:	1
Position number:	36

The item number of your device:

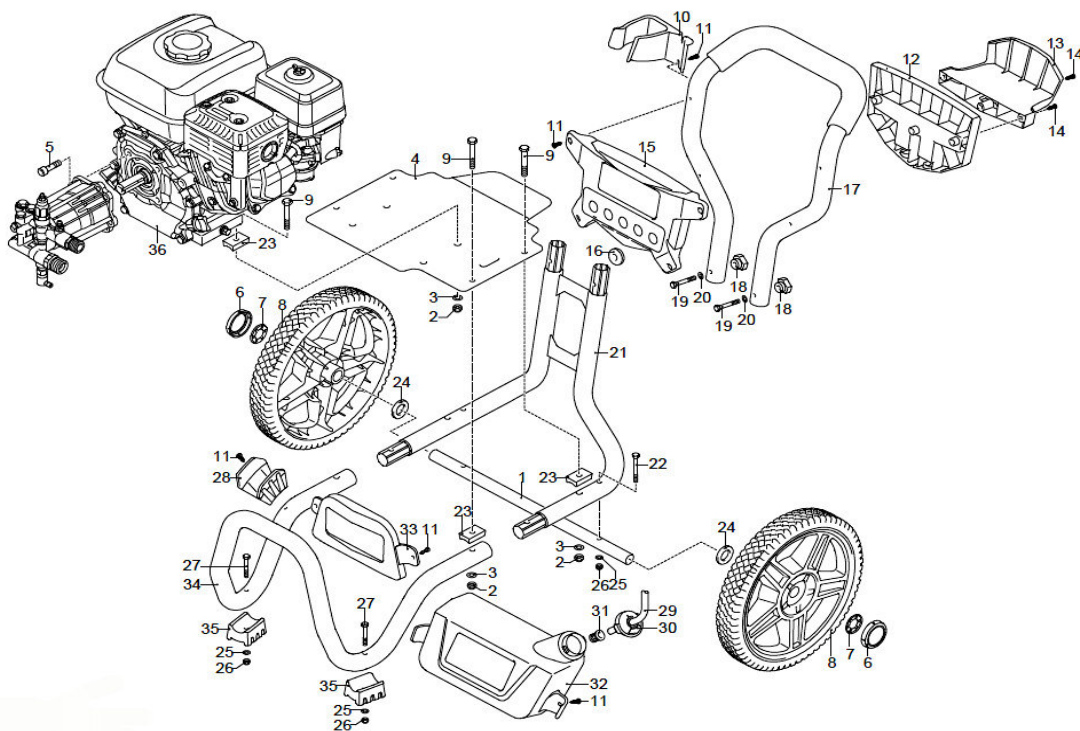
High Pressure Washer	Item number
HDR-K-66-20-BL	7103662
HDR-K-72-22-BH	7103722
HDR-K-96-28-BL	7109628

13.2 Spare parts drawings

In case of service, the following drawings shall help to identify the necessary spare parts. If necessary, send a copy of the parts drawing with the marked components to your authorised dealer

13.2.1 Spare parts drawings HDR-K 66-20 BL

Spare parts drawing 1



Spare parts drawing 2

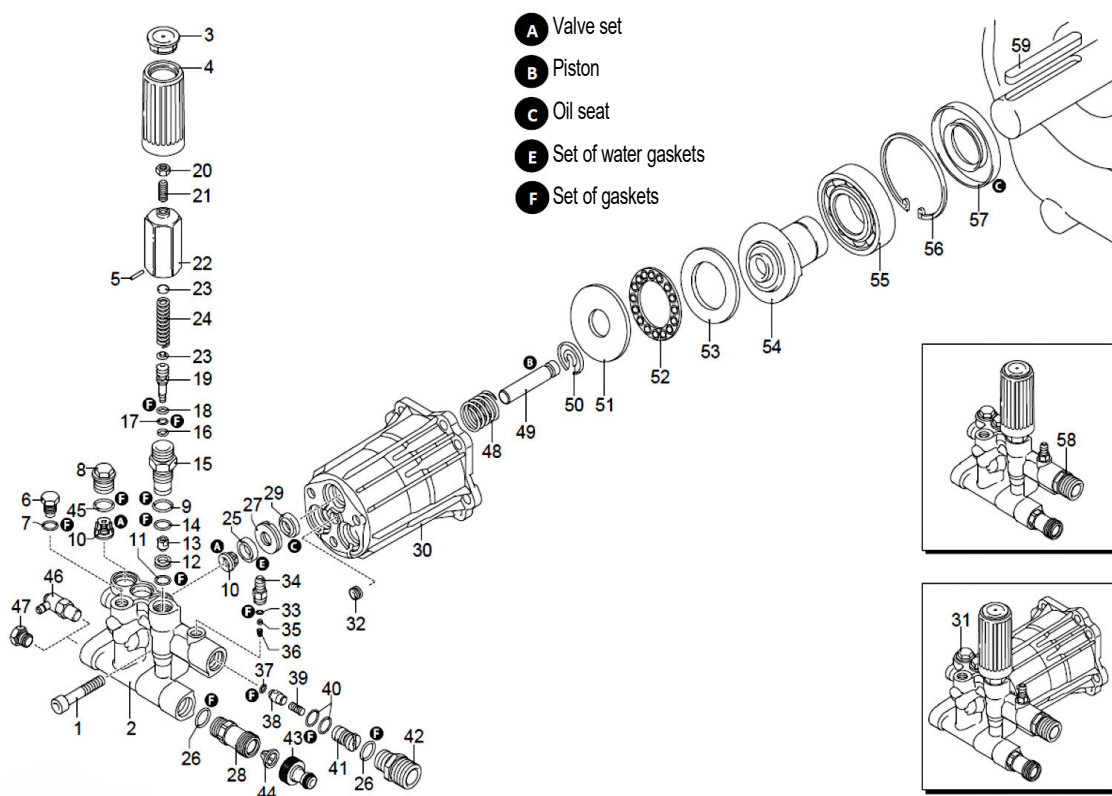
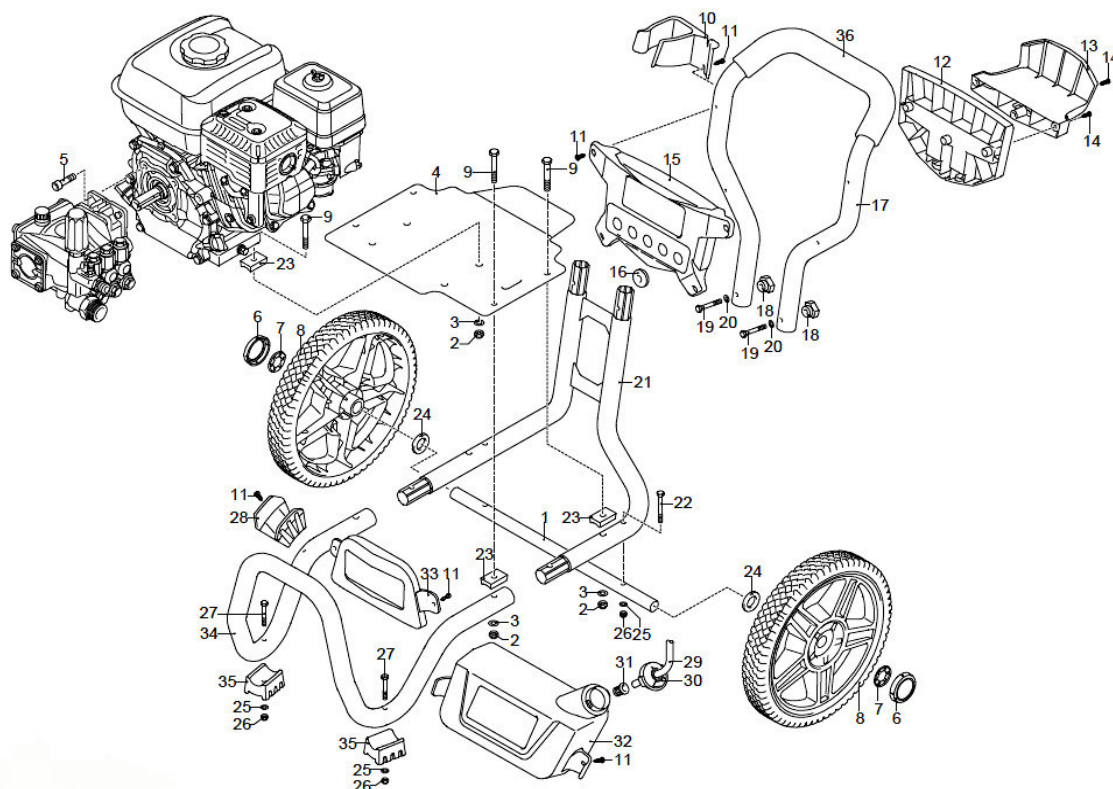


Fig. 12: Spare parts drawing 1 and spare parts drawing 2 HDR-K 66-20 BL

13.2.2 Spare parts drawings HDR-K 72-22 BH

Spare parts drawing 3



Spare parts drawing 4

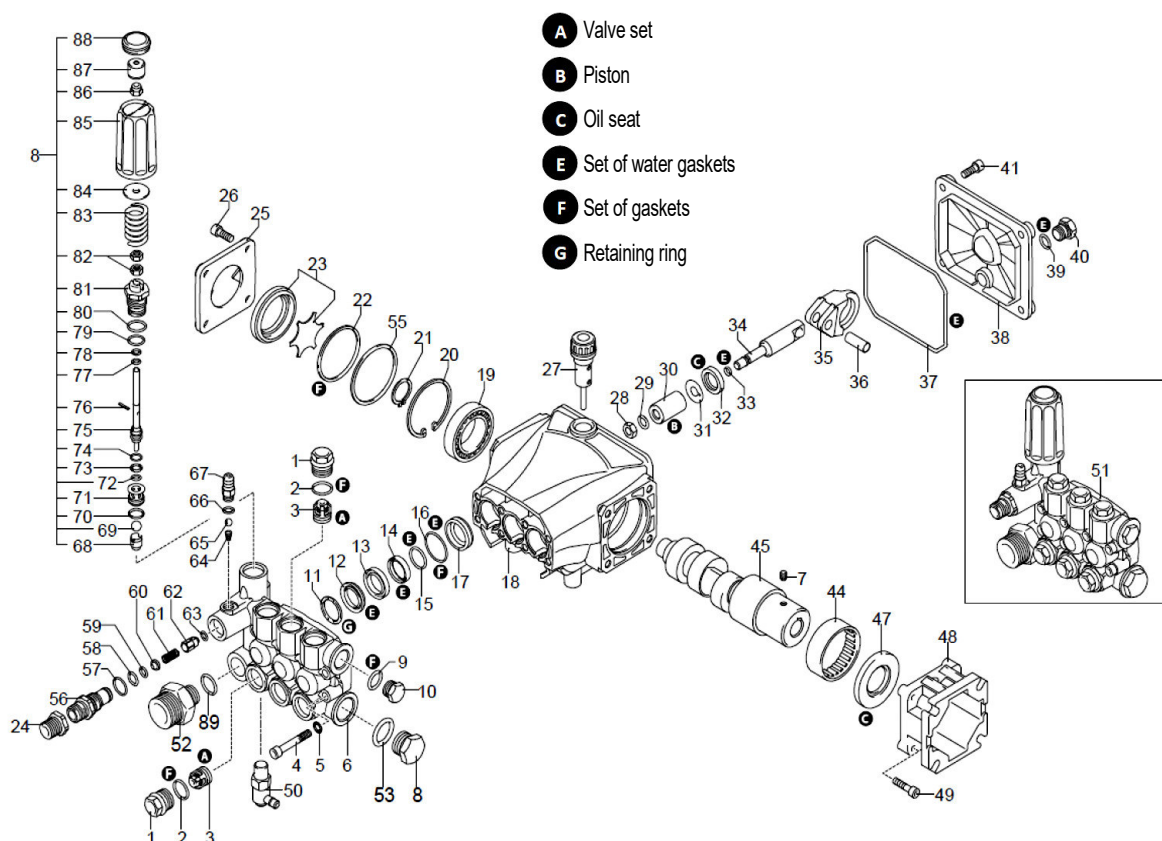


Fig. 13: Spare parts drawing 3 and spare parts drawing 4 HDR-K 72-22 BH

Spare parts drawing 5

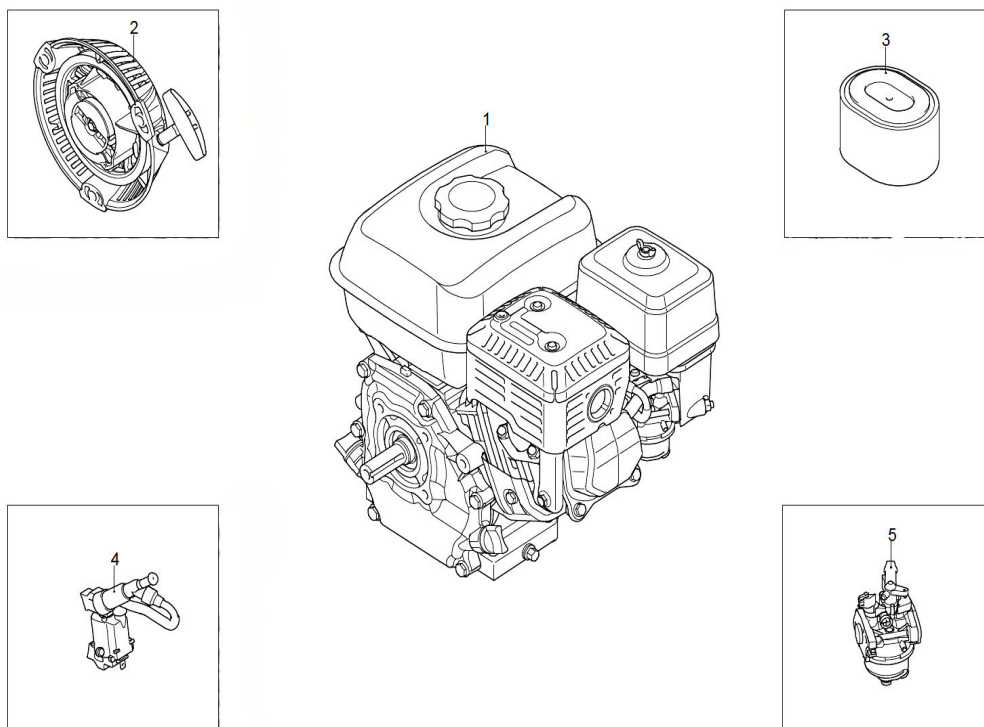


Fig. 14: Spare parts drawing 5 HDR-K 72-22 BH

13.2.3 Spare parts drawings HDR-K 96-28 BL

Spare parts drawing 6

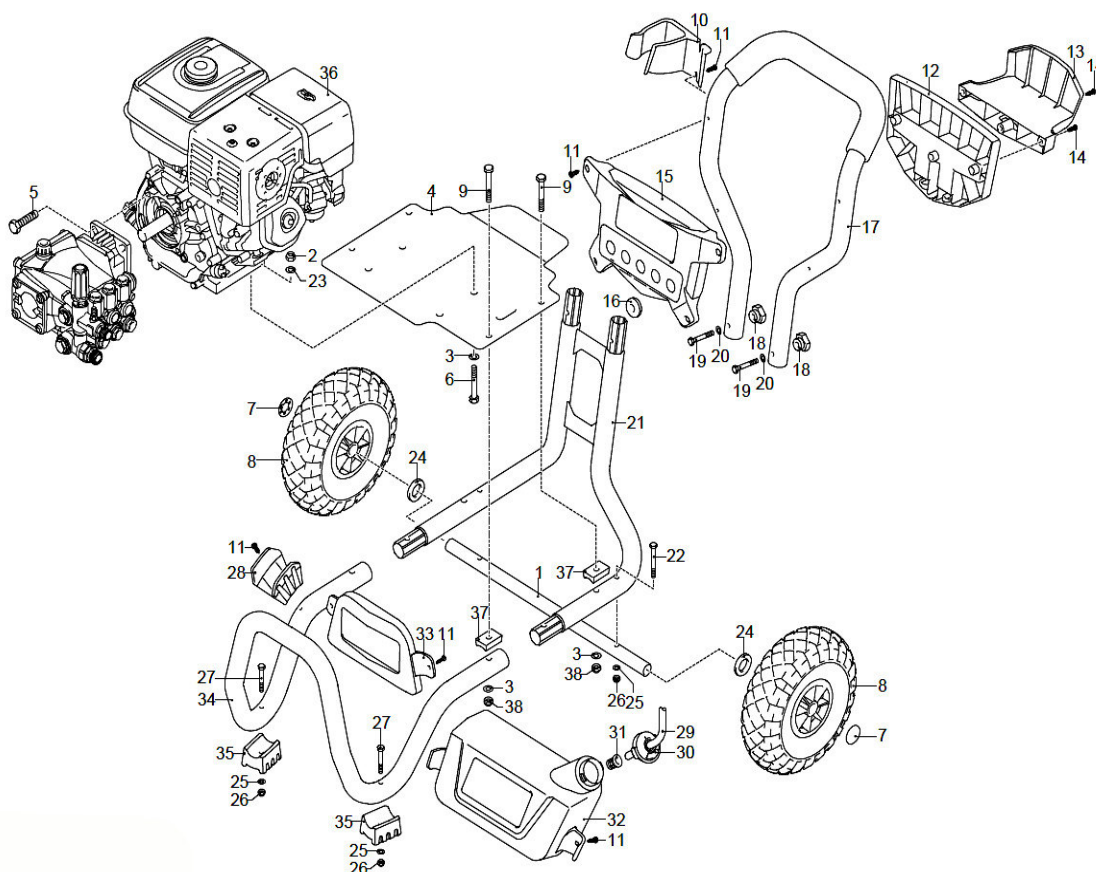


Fig. 15: Spare parts drawing 6 HDR-K 96-28 BL

Spare parts drawing 7

A Valve set

B Piston

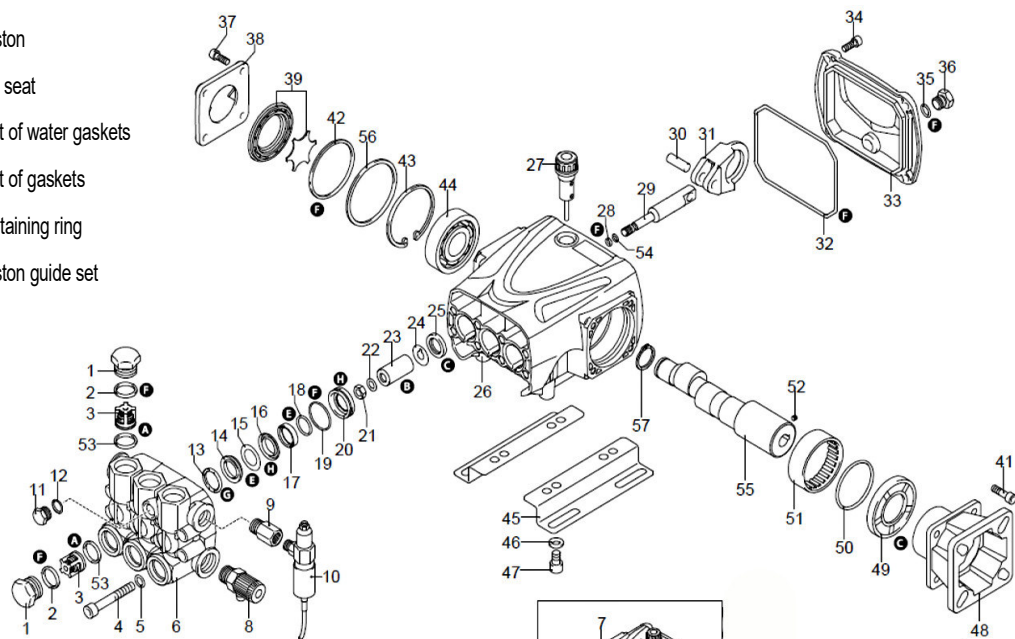
C Oil seat

E Set of water gaskets

F Set of gaskets

G Retaining ring

H Piston guide set



Spare parts drawing 8

F Set of gaskets

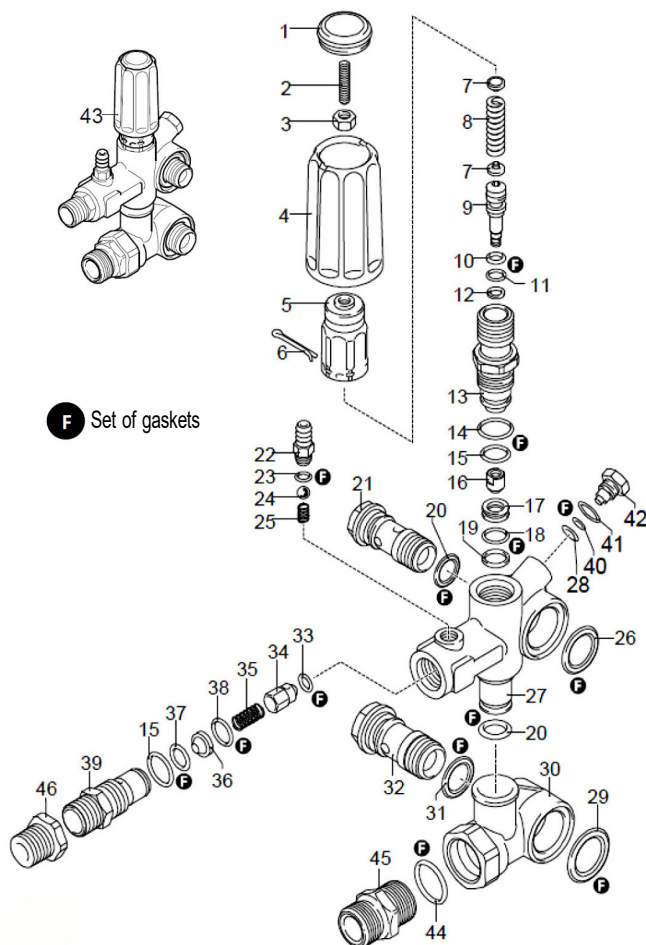


Fig. 16: Spare parts drawing 7 and spare parts drawing 8 HDR-K 96-28 BL

13.2.4 Spare parts drawing 9: Nozzle for HDR-K 66-20 BL, HDR-K 72-22 BH and HDR-K 96-28 BL

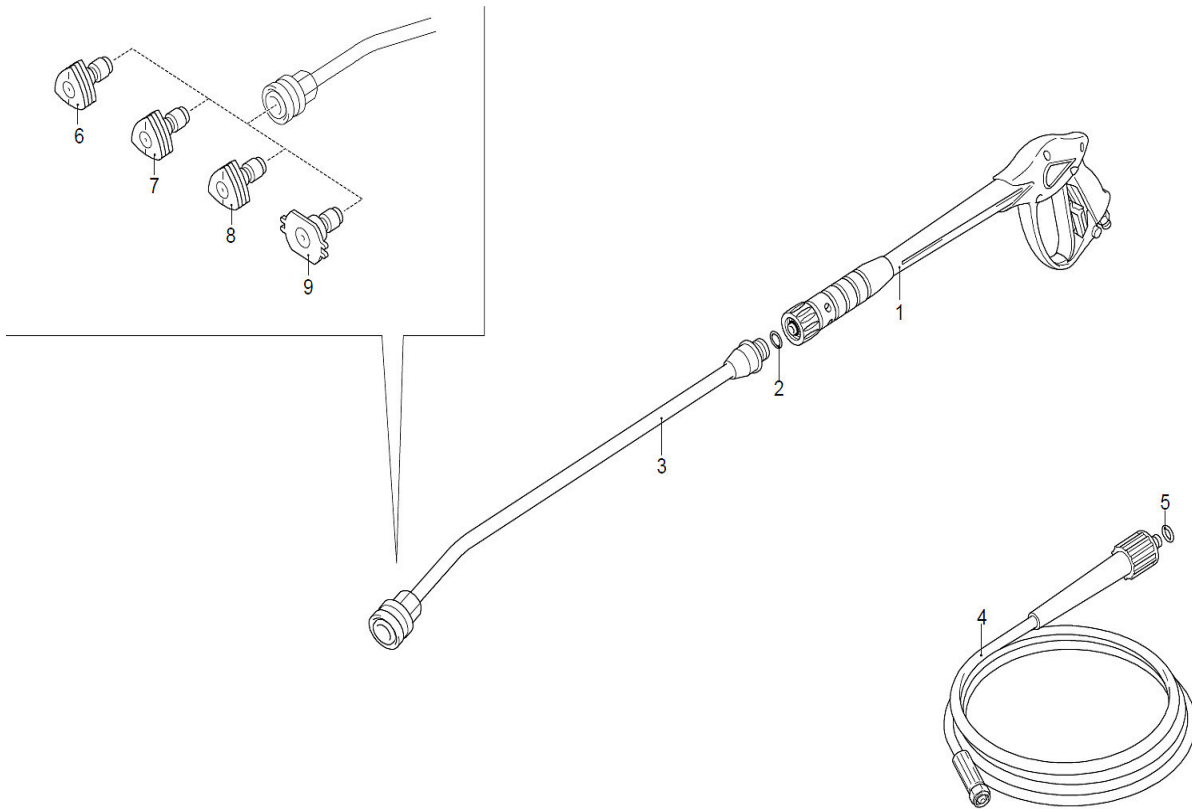


Fig. 17: Spare parts drawing 9 - Nozzle for HDR-K 66-20 BL, HDR-K 72-22 BH and HDR-K 96-28 BL

14 EC - Declaration of Conformity

According to Machinery Directive 2006/42/EC, Annex II 1.A

Manufacturer / distributor: Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

hereby declares that the following product

Product group: CLEANCRAFT® High-Pressure-Washer

Machine type: Petrol-operated High Pressure Washer

Designation of the machine:*

<input type="checkbox"/> HDR-K 66-20 BL	Item number:*	<input type="checkbox"/> 7103662
<input type="checkbox"/> HDR-K 72-22 BH		<input type="checkbox"/> 7103722
<input type="checkbox"/> HDR-K 96-28 BL		<input type="checkbox"/> 7109628

Serial number:* _____

Year of manufacture:* 20_____

* please fill in according to the information on the type plate

complies with all relevant provisions of the above mentioned directive as well as the other applied directives (below) - including their applicable modifications at the time of the declaration.

Relevant EU Directives:

2011/65/EU	RoHS Directive
2000/14/EG	Outdoor Directive
2014/30/EU	EMC Directive

The following harmonised standards have been applied:

DIN EN 60335-1	Household and similar electrical appliances - Safety - Part 1: General requirements
DIN EN 60335-2-79	Household and similar electrical appliances - Safety - Part 2-79: Particular requirements for high pressure cleaners and steam cleaners
DIN EN 12100	Safety of machinery - General principles for design - Risk assessment and risk reduction
DIN EN 14982	Agricultural and forestry machines - Electromagnetic compatibility - Test methods and acceptance criteria

Responsible for documentation: Kilian Stürmer, Stürmer Maschinen GmbH,
Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 16.03.2018



Kilian Stürmer
Managing Director



