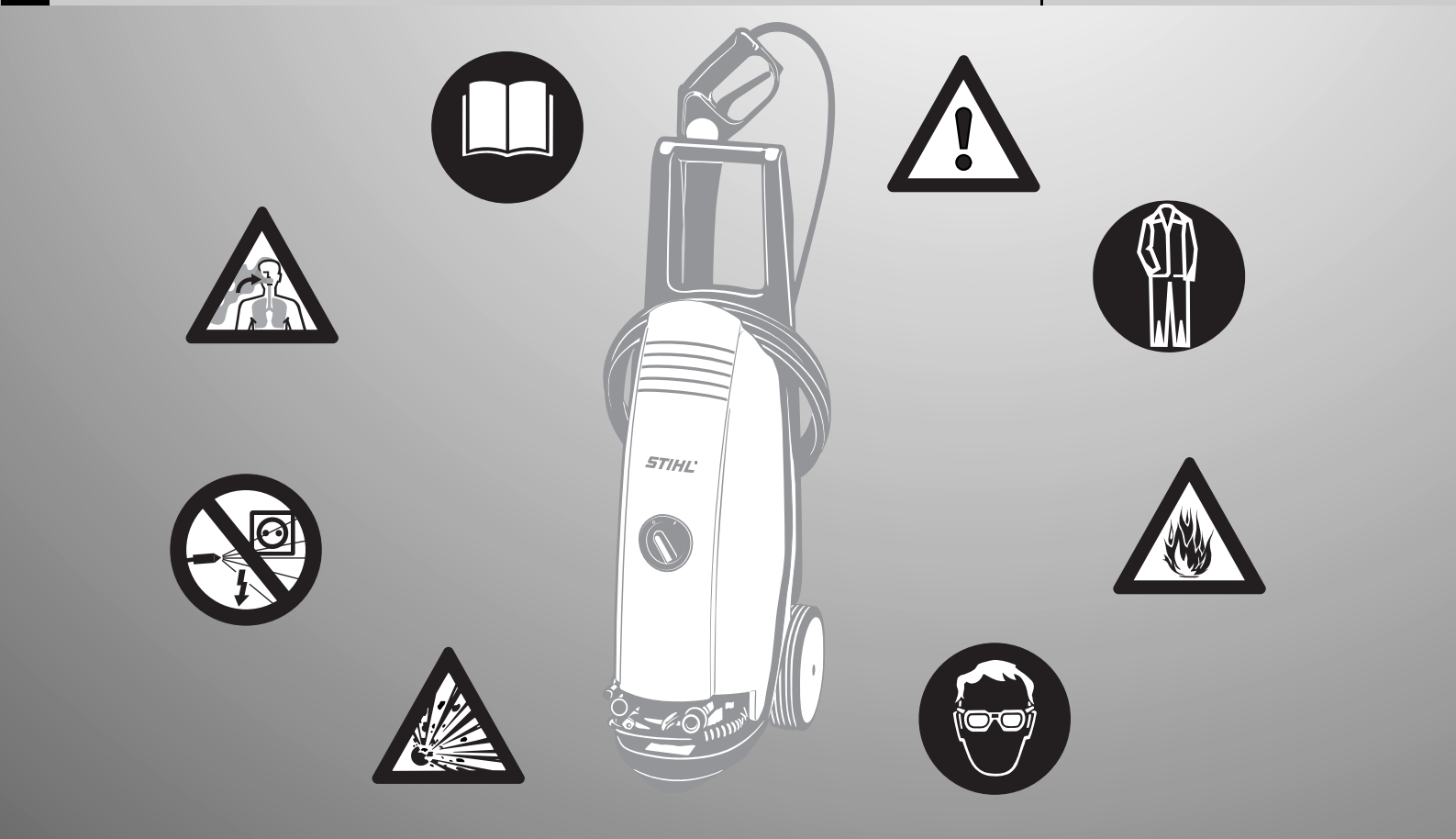
Cleaning Systems
Safety Manual



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This booklet summarizes the detailed instructions relating to safety and working technique contained in the individual instruction manuals for STIHL cleaning systems. With the aid of this booklet, even long-standing users of a cleaning system can familiarize themselves – in their own best interests – with the latest findings for working safely with a cleaning system.

Note that the illustrations in the chapter "Main parts" show the high-pressure cleaners RE 107, RE 117, RE 127 PLUS, RE 521, RE 551 PLUS and RE 581 PLUS by way of example, as well as the vacuum SE 121.

Other cleaning system models may feature different operating elements.

This booklet also contains references to various chapters in the instruction manuals of the individual machines.

It therefore goes without saying that the instruction manual for the cleaning system concerned must always also be consulted without fail.

Contact your STIHL dealer if you have any further queries after reading this booklet.

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Safety precautions and working techniques

General



The high water pressure generated by the machine and its electrical connections are a particular source of danger.



The following safety precautions must be read and understood before using the machine for the first time. Keep the manual in a safe place for future reference.
Non-compliance with the owner's manual may cause serious or even fatal injury.

Note the national safety regulations issued, for example, by the employers' liability insurance association, social security institutions, occupational safety and health authorities or other organizations.

The machine may only be used by duly trained and authorized operators.

Ensure that the operating instructions are available to **all** users.

The high-pressure cleaner must never be used by adolescents.

The machine must not be altered or modified in any way, as this may endanger your personal safety.

The high-pressure cleaner can be used to clean motor vehicles, machines, tanks, facades, stables and to remove rust without dust or sparks.

Other uses are not permitted and may lead to accidents or damage to the machine. The machine must not be modified in any way – this may also lead to accidents or damage to the machine.

High-pressure hoses, fittings and couplings are very important for the safety of the machine. Only high-pressure hoses, fittings, couplings and other accessories which have been approved by STIHL for this machine or technically equivalent parts may be mounted on the machine. Contact a dealer if in doubt. Use only high-quality accessories, in order to avoid the risk of accidents or damage to the machine.

STIHL recommends the use of genuine STIHL accessories. Such parts have been optimized for the machine and the user's requirements.

Unsuitable extension leads may be dangerous.

When using extension leads, ensure that the minimum conductor cross-sections are maintained
(refer to the chapter "Connect machine to power supply").

When using extension leads, the connector and coupling must be waterproof or routed in such a way that they cannot come into contact with water.

All plugs and connectors must be at least splashproof.

The machine may only be operated if all parts are undamaged. Pay particular attention to the power cable, mains plug, high-pressure hose, spray attachment and safety mechanisms.

The high-pressure hose must not be driven over, pulled, buckled or twisted.

Never pull the high-pressure hose in order to move the machine.

Never operate the machine with a damaged high-pressure hose – it must be replaced immediately.

The high-pressure hose must be approved for the permissible excess pressure of the machine.

The permissible excess pressure, the maximum permitted temperature and the date of manufacture are stated on the cladding of the high-pressure hose. The permissible pressure and date of manufacture are specified on the fittings.

Unsuitable detergents can cause damage to health, as well as to the machine and the object to be cleaned. Contact a dealer if in doubt.

STIHL recommends the use of genuine STIHL detergents. Note the instructions for use (refer to the catalogue of chemical detergents).

Chemical detergents may contain physiologically harmful (toxic, caustic, irritant), flammable or explosive substances. **Note the manufacturer's safety data sheets!**

Clothing and equipment

Wear shoes with non-slip soles.



Wear goggles and protective clothing.

STIHL recommends that a boilersuit be worn in order to reduce the risk of injury due to accidental exposure to the high-pressure jet.

Transporting the machine

When transporting the machine in or on a vehicle, it must be secured, e.g. with straps, so that it cannot slip or tip over.

The use of anti-freeze is recommended if the machine and accessories are to be transported at temperatures near or below 0 °C (32 °F); refer to the chapter "Storing the machine".

During work



Never spray water onto electrical appliances - **risk of short-circuiting!**



Never direct the high-pressure jet or water hose against the machine itself or against other electrical appliances and equipment - **risk of short-circuiting!**



Never direct the high-pressure jet against yourself or other people, not even to clean clothing or shoes - **serious injuries may result!**

Never use the machine when there are people without protective clothing in the working area.

Do not direct the high-pressure jet against animals.

Keep children, animals and bystanders at a safe distance.

Hazardous substances (such as asbestos or oil) must not be allowed to escape into the environment unchecked when working with the machine.
The applicable environmental regulations must be observed without fail!

Surfaces of asbestos cement must never be cleaned with a high-pressure jet, as hazardous, breathable asbestos fibres may be released in addition to the dirt. The danger is greatest when the washed surface has dried.



The machine must immediately be unplugged from the mains supply if the power cable is damaged - **danger due to electric shock.**

Delicate parts made of rubber, fabric or similar materials must not be cleaned with a pencil jet, e.g. from the rotary nozzle. Maintain a sufficient distance between the high-pressure nozzle and the surface in order to avoid damaging the surface to be cleaned.

The trigger on the spray gun must move easily and automatically return to its starting position when released.

Always check that the machine is in good working order before starting work. Pay particular attention to the power cable, mains plug, high-pressure hose, spray attachment and safety mechanisms.

The machine may only be operated in an upright position.
Do not cover the machine and ensure adequate motor ventilation.

Keep the high-pressure cleaner as far away as possible from the object being cleaned.

Ensure that the power cable is not damaged by being driven over, squashed or pulled, etc.

Never disconnect the machine by pulling the cable out of the socket: always grip the plug itself.

The power cable and mains plug must never be touched with wet hands!

Always unroll the power cable from the cable drum completely to avoid all risk of fire due to overheating.

Hold the spray attachment firmly with both hands in order safely to withstand the kickback force and additional torque produced when using spray attachments with angled spray lance.

Always ensure a firm and safe footing.

The voltage and frequency specified for the machine (see rating plate) must match those of the mains power supply.

Safety device

When the safety device is tripped, any impermissibly high pressure will be diverted back to the intake side of the high-pressure pump via an overflow valve.
This safety device is set by the manufacturer and must not be adjusted.

Safety precautions and working technique

Maintenance and repairs

Before starting any work on the machine:
always disconnect the machine from the mains power supply.

The machine must be serviced regularly. Do not attempt any maintenance or repair work not described in the owner's manual. All other work should be carried out by a servicing dealer.

STIHL recommends that maintenance and repair work be carried out only by authorized STIHL dealers. STIHL dealers receive regular training and are supplied with technical information.

Use only high-quality replacement parts, in order to avoid the risk of accidents or damage to the machine. Contact a dealer if in doubt.

STIHL recommends the use of genuine STIHL spare parts. Such parts have been optimized for the machine and the user's requirements.

The power cable may only be repaired or replaced by authorized and qualified electricians.

General



The high water pressure generated by the machine and its electrical connections are a particular source of danger.



Read the entire user manual through carefully before starting the machine for the first time and keep it in a safe place for future reference.
Non-compliance with these instructions can prove fatal.

Note all safety instructions specific to your country, such as those issued by the employers' liability insurance association, social insurance institutions, public authorities responsible for occupational safety and others.

The machine may only be used by duly trained and authorized operators.

Ensure that the user manual is available to **all** users.

The high-pressure cleaner must never be used by adolescents.

The machine must not be altered or modified in any way, as this may endanger your personal safety.

The high-pressure cleaner can be used to clean motor vehicles, machines, tanks, façades, stables and for removing rust without dust or sparks.

The machine must not be used for other purposes, otherwise it may be damaged and/or cause accidents. It must not be altered or modified in any way, as this may also lead to accidents or damage the machine.

High-pressure hoses, fittings and couplings are very important for the safety of the machine. Only use high-pressure hoses, fittings, couplings and other accessories which have been approved by STIHL for use on this machine or technically equivalent parts. Contact your dealer in case of doubt. Only use high-quality accessories in order to avoid the risk of accidents or damage to the machine.

STIHL recommends the use of genuine STIHL accessories, as these are optimally adapted to the machine and the requirements of the user.

Unsuitable extension leads can be dangerous.

When using extension leads, ensure that the minimum conductor cross-sections are maintained (refer to the chapter entitled "Connecting the machine to the power supply").

When using an extension lead, ensure that the plug and socket are watertight or route the lead so that they cannot come into contact with water.

The plug connectors and couplings on power cables must at least have splash-proof enclosures.

The machine may only be used when all parts are in perfect working order. Particular attention must be devoted to the power cable and mains plug, the high-pressure hose with spray attachment and to the safety parts.

The high-pressure hose must not be driven over, pulled, buckled or twisted.

Never pull the high-pressure hose in order to move the machine.

Never operate the machine with a defective high-pressure hose – ensure that it is replaced immediately.

The high-pressure hose must be approved for the permissible excess pressure of the machine.

The permissible excess pressure, the maximum permitted temperature and the date of manufacture are stated on the cladding of the high-pressure hose. The permissible pressure and date of manufacture are specified on the fittings.

Unsuitable chemicals can cause damage to health, as well as to the machine and the object to be cleaned. Contact your dealer if in doubt.

STIHL recommends the use of STIHL chemicals. Note the directions for use (refer to the catalogue of chemicals).

Chemicals may contain physiologically harmful (toxic, caustic, irritant), flammable or explosive substances. **Note the manufacturer's safety data sheets.**

Personal protection

Wear shoes with non-slip soles.



Wear goggles and protective clothing.

STIHL recommends that a boilersuit be worn in order to reduce the risk of injury due to accidental exposure to the high-pressure jet.

Transporting the machine

So that the machine can be transported safely on or in a vehicle, it must be secured with straps so that it cannot slip or tip over and the brake applied.

Antifreeze is recommended if the machine and accessories are to be transported at temperatures near or below 0 °C (32 °F), refer to the chapter entitled "Storage".

During work



Never spray electrical appliances with water – **risk of short-circuiting!**



Never direct the high-pressure jet or water hose onto the machine itself or onto other electrical appliances or machines – **risk of short-circuiting!**



Never direct the jet of liquid towards yourself or other people, not even in order to clean clothing or shoes – **risk of injury!**

Never use the machine when there are people without protective clothing in the working area.

Do not direct the high-pressure jet against animals.

Keep children, animals and bystanders at a safe distance.

For reasons of hygiene, the machine cannot be used to clean surfaces which come into contact with foods.

Hazardous substances (such as asbestos or oil) must not be allowed to escape into the environment unchecked when working with the machine.
The relevant environment regulations must be observed without fail!

Do not use the high-pressure jet or steam jet to clean any surfaces containing asbestos cement, as dangerous breathable asbestos fibres may be released in addition to the dirt. The danger is greatest when the correspondingly cleaned surface has dried.

Do not smoke near the machine and when working with it – **risk of fire!** The fuel tank may give off inflammable vapours.



Pull the plug immediately if the power cable is damaged – **danger due to electric shocks!**

Delicate parts made of rubber, fabric or similar materials must not be cleaned with a pencil jet, e.g. from the rotary nozzle. Maintain a sufficient distance between the high-pressure nozzle and the surface in order to avoid damaging the surface to be cleaned.



Toxic gases are produced in hot-water operation; these gases may be odourless and invisible. Never operate the machine in enclosed or poorly ventilated rooms.
Risk of poisoning!

The trigger on the spray gun must move easily and automatically return to its starting position when released.

Always check that the machine is in good working order before starting work. Particular attention must be devoted to the power cable and mains plug, the high-pressure hose with spray attachment and to the safety parts. Check the oil level.

Do not cover the machine and ensure adequate motor ventilation.

Keep the high-pressure cleaner as far away as possible from the object being cleaned.

The fuel tank may only be filled when the machine is switched off and the heat exchanger is cold. Do not smoke and keep the machine away from naked lights.

Switch off the machine before filling with fuel.

Ensure that the power cable is not damaged by being driven over, squashed or pulled, etc.

Never disconnect the machine by pulling the cable out of the socket: always grip the plug itself!

The power cable and mains plug must never be touched with wet hands.

Always unwind the power cable completely to prevent any risk of fire due to overheating.

Hold the spray attachment firmly with both hands in order safely to withstand the kickback force and additional torque produced when using spray attachments with angled spray lance.

Always ensure a firm and safe footing.

Do not touch any of the metal parts of the spray attachment and the heat exchanger during hot-water operation, as this
may cause serious burns!

Do not bend over the exhaust outlet and keep away from the exhaust outlet.
Do not cover the exhaust outlet.
Risk of burns and fire!

The voltage and frequency specified for the machine (see rating plate) must match those of the mains power supply.

Safety device

When the safety device is tripped, any impermissibly high pressure will be diverted back to the intake side of the high-pressure pump via an overflow valve.
This safety device is set by the manufacturer and must not be adjusted.

Maintenance and repairs

Always disconnect the machine from the mains power supply before starting any work on the machine.

The machine should be serviced regularly. Only carry out the maintenance work and repairs described in the user manual.
All other work should be entrusted to a servicing dealer.

STIHL recommends that all maintenance and repairs be carried out by a STIHL dealer. STIHL dealers regularly attend training courses and are supplied with the necessary technical information.

Only use high-quality replacement parts, otherwise accidents may occur or the machine may be damaged. Contact your local dealer if in doubt.

STIHL recommends the use of genuine STIHL replacement parts, as these are optimally adapted to the machine and the needs of its user.

The power cable may only be repaired or replaced by authorized and qualified electricians.

Important safety instructions

General



Particular safety precautions must be taken when working with the machine. The power connection is a particular source of danger.



Read all instructions before using this machine. The following safety precautions must be observed.

Before starting work, always check that your vacuum cleaner is operating correctly and is in good condition. Pay special attention to the power cable and plug.

The machine may only be used by duly trained and authorized operators. The machine must never be used by adolescents.

Keep children, animals and bystanders at a safe distance.

The machine may only be operated with an undamaged filter element.



Never attempt to pick up flammable materials (hot ashes, inflammable explosive dust, glowing cigarettes, etc.) or combustible liquids (petrol, thinners, etc.).

The machine cannot be used to vacuum physiologically harmful dust.



Risk of fire or explosion

Avoid damage to the power cable by rolling over, crushing or pulling it.

Never pull the power cable to disconnect the plug from the wall outlet. Always grasp the plug, never the cable, to unplug.

Inspect the power cable regularly for signs of damage or ageing. Never use the machine if the power cable is damaged in any way – risk of electrocution.



The main plug must be disconnected immediately if the power cable is damaged – electric shocks can kill.

Always remove the paper filter bag and check correct operation of the float before using the vacuum cleaner to pick up liquids or wet materials. Always use the filter element.
Stop work immediately and empty the container if foam forms.

Never modify your vacuum cleaner in any way, as this could be extremely dangerous.

Only carry out the maintenance work and repairs described in this manual. Other work should be performed by your STIHL servicing dealer.

Only use original replacement parts.

Always disconnect the plug from the power supply (unplug it) before performing any kind of work on the machine.

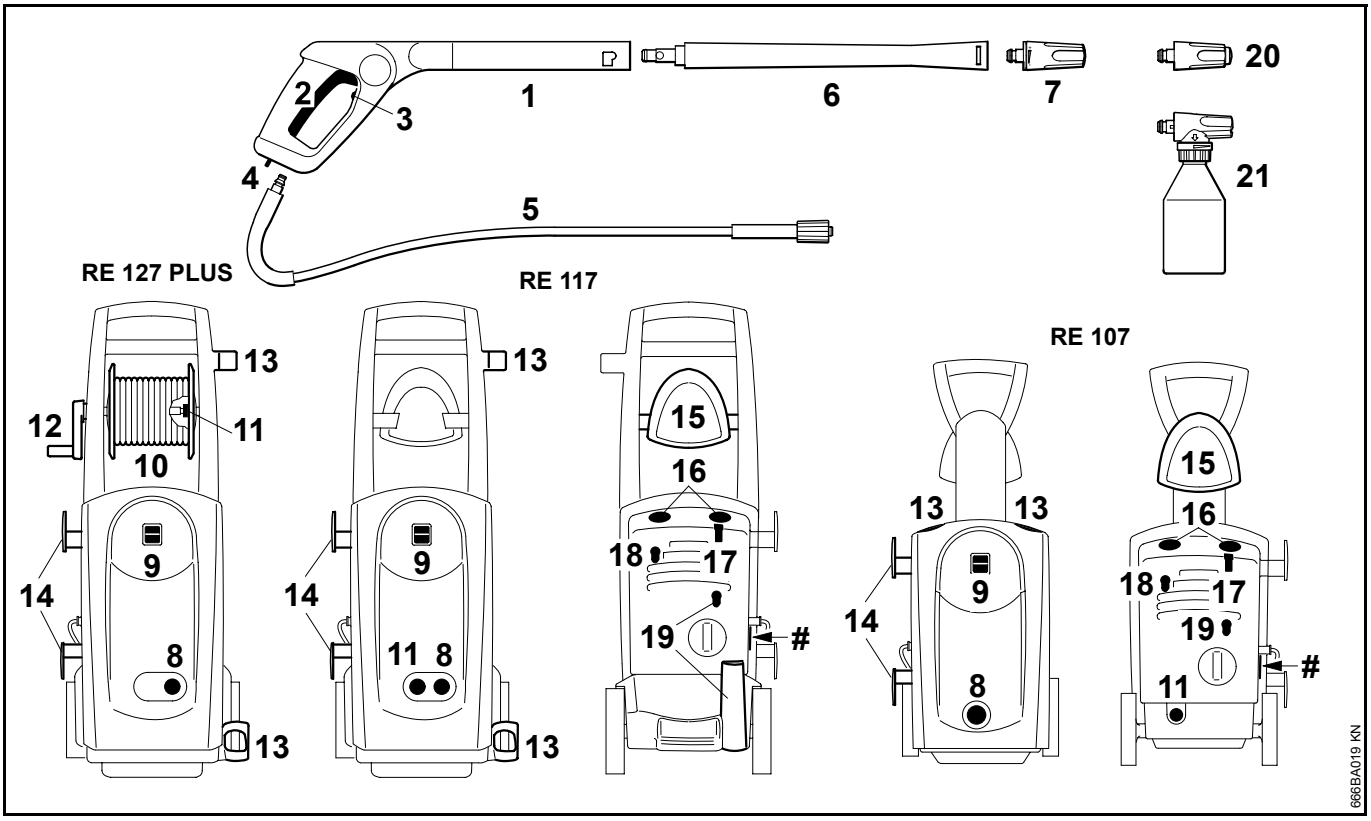
The power cable may only be repaired or replaced by authorized personnel.

All plugs and connectors for power cables must at least be splash-proof.

The machine must be unplugged from the power supply before cleaning or servicing it and before replacing any parts.

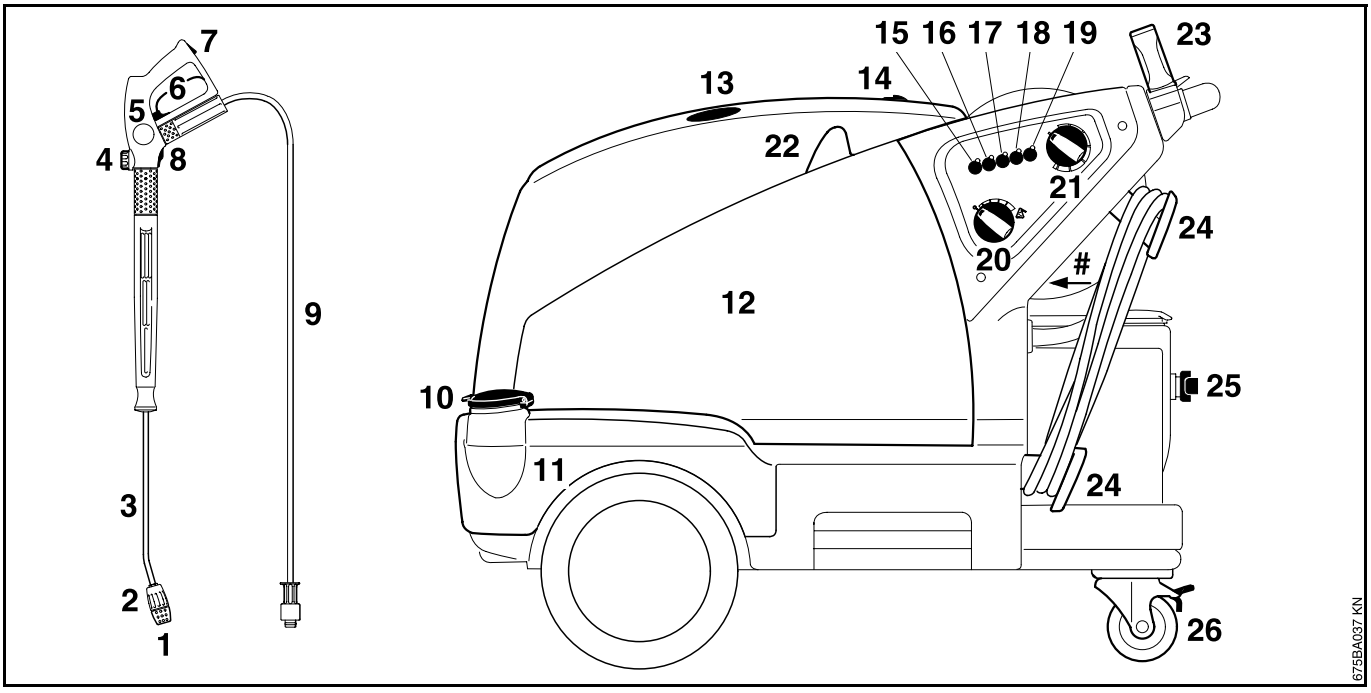
Never spray the upper part of the vacuum cleaner with water: danger to people, risk of short-circuiting.

Main parts of the machine



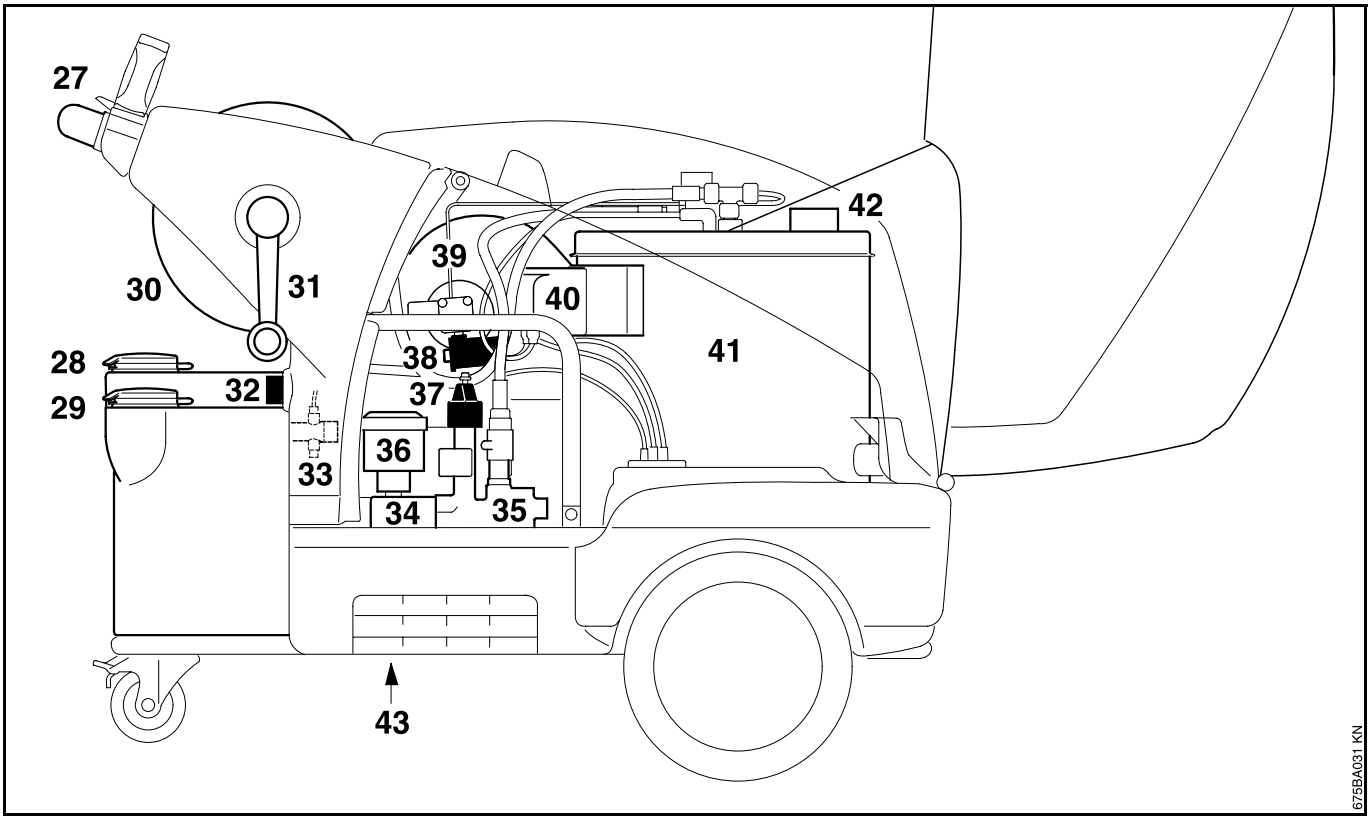
1 Spray gun
2 Trigger
3 Trigger interlock
4 Safety catch
5 High-pressure hose
6 Spray lance
7 High-pressure nozzle, variable
8 Water inlet
9 Master switch
10 Hose reel
11 High-pressure hose connection
12 Crank handle for hose reel
13 Bracket for spray attachment
14 Bracket for power cable
15 Bracket for high-pressure hose
16 Bracket for nozzles
17 Bracket for cleaning pin
18 Bracket for spray set
19 Bracket for brushes
20 Rotary nozzle
21 Spray set for chemical detergent
Rating plate

Main parts of the machine



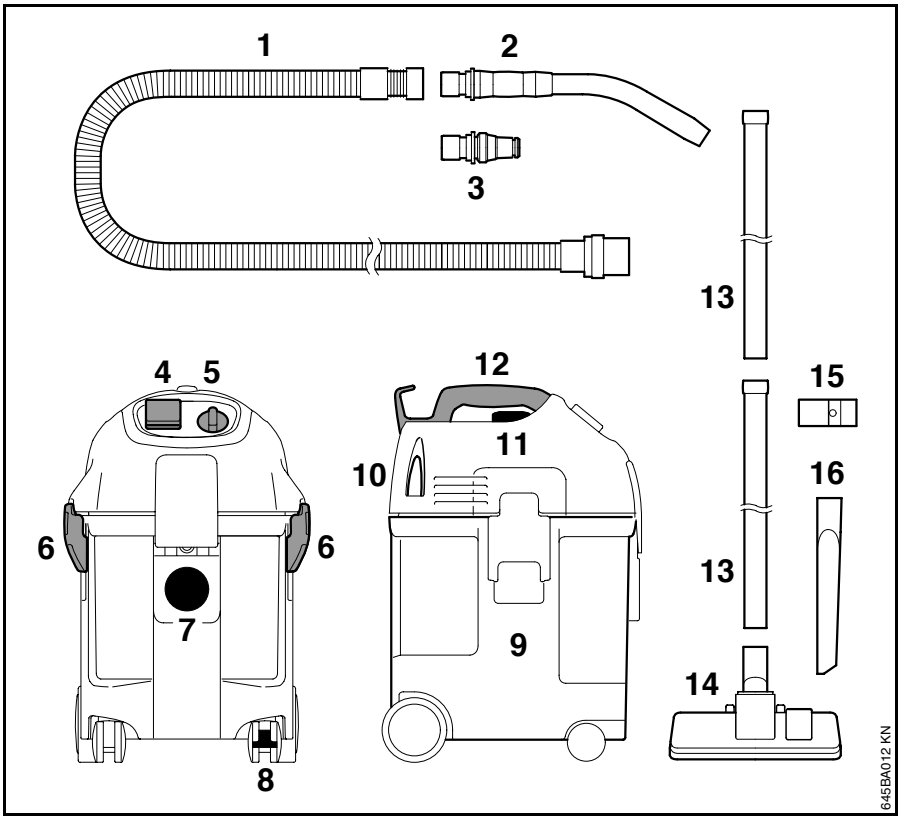
1 Spray head
2 Selector sleeve for working pressure
3 Spray lance
4 Vario-Press valve
5 Lock for high-pressure hose
6 Trigger
7 Safety latch
8 Lock for spray lance
9 High-pressure hose
10 Filling port for fuel
11 Fuel tank
12 Machine cover
13 Pressure gauge
14 Handle on machine cover
15 Indicator for operating condition
16 Pump oil indicator [1)]
17 Service indicator
18 Scale inhibitor indicator [1)]
19 Fuel indicator [1)]
20 Metering valve for detergent
21 Switch / temperature regulator
22 Holder for spray attachment
23 Holder for spray attachment
24 Bracket for power cable
25 Water inflow
26 Swivel wheel with brake
Rating plate

1) not on RE 521



27 Push handle
28 Filling port for scale inhibitor
29 Filling port for antifreeze
30 Hose reel
31 Crank handle for hose reel
32 High-pressure hose connection (machines without hose reel)
33 Metering valve for scale inhibitor
34 High-pressure pump
35 Safety valve block
36 Expansion tank for oil
37 Rotary knob for working pressure
38 Fuel filter
39 Fan for combustion air
40 Ignition transformer
41 Heat exchanger
42 Exhaust outlet
43 Oil drain plug

Main parts of the machine



1 = Suction hose

2 = Handle tube

3 = Sleeve for power tool [1)]

4 = Socket outlet for power tool [1)]

5 = Switch

6 = Catches

7 = Intake port for connecting the suction hose

8 = Castor with parking brake

9 = Container

10 =Holder for nozzles and accessories

11 =Filter cleaning button

12 =Handle

13 =Suction tube

14 =Floor tool

15 =Suction tube holder

16 =Crevice tool

[1)] Only for SE 121 E

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