

High Pressure Washer - SAFETY INSTRUCTIONS



1 Symbols used to mark instructions



WARNING & Safety instructions in these operating instructions which must be observed to prevent risks to persons are marked with this danger symbol. Please note the warning signs placed on the machine.



Before starting up your high- pressure washer for the first time, instructions must be read through carefully. Save all the instructions for later use. Instructions contains: Part 1: Safety instructions. Part 2: Instructions for use.



This symbol marks safety instructions related to connection of the machine to water mains.



Do not inhale fumes



Rebounding object



Hot surface



Steam



Electrical components



Dangerous voltage



The jet must not be directed at persons, animals, live electrical equipment or the cleaner itself. Do not direct the jet towards yourself or towards other persons in order to clean clothes or footwear.

2 Safety instructions. For your own safety




WARNING! The high pressure washer may only be used by persons instructed in its use and who have been expressly authorised to do so

- This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety
- Machines shall not be used or maintained by children. Children should be supervised to ensure they do not play with the appliance
- Use of this machine is subject to the applicable local safety regulations and proper use. Please refer to Operating Instructions for recommended use, maintenance and problem solving
- Never spray electrical equipment with water: danger for persons, risk of short-circuiting

- Never detach the high pressure hose while the machine is in operation.


HOT WATER: Danger of scalding! Never dismount high-pressure hoses at water temperatures above 122°F.



- High temperature on the lance and hose after hot water use.

 **IMPORTANT:** Prior to dismounting of the high-pressure hose, the machine should be cooled down. After cooling down, stop the machine and close the shut-off cock. Then activate the trigger of the spray handle to relieve the high-pressure hose of pressure

- Beware of hot water and steam discharge up to 300°F when operating in steam stage.
- After use of the hot water/steam function the high-pressure cleaner must be flushed with cold water for about 1 min. High temperature on the lance and hose after hot water use.





3 Before starting the cleaner DO READ INSTRUCTIONS FOR USE BEFORE USE!

 Before use, check that the machine is safe and in proper condition and in upright position on a plain and stable ground to ensure stability. Regularly check whether the power cord is damaged or shows signs of ageing.

  **WARNING!** Do not use the machine if a supply cord or important parts of the machine are damaged, e.g. safety devices, high pressure hoses, spray handle or lance

- Check the rated voltage of the machine before connecting it to the mains power supply. Ensure that the voltage shown on the rating plate corresponds to the voltage of the local mains power supply.
- For safety reasons, hoses, spray lances and other accessories should always be thawed prior to use. MIN: 2°C/ 36°F.

NOTE: If your 3-phase cleaner was supplied without a plug, have it fitted with a suitable 3-phase plug with earth conductor.

    **WARNING!** • High-pressure water jets can be dangerous if misused. The jet must not be directed at persons, animals, live electrical equipment or the cleaner itself

- Do not direct the jet towards yourself or towards other persons in order to clean clothes or footwear
- Do not use the cleaner when other people without appropriate protective clothing are in the working area. Wear appropriate protective clothing, safety gloves, boots, hearing aids and helmets with visor and eye protection
- When operating the spray handle, kickback forces are produced at the spraying device and when the spray lance is held at an angle, a torque is also created. The spray handle and spray lance must therefore be held firmly with both hands
- Check that cleaning will not result in dangerous substances (e.g. asbestos, oil) being washed off the object to be cleaned and harming the environment
- During use of high pressure cleaners, aerosols may be formed. Inhalation of aerosols can be hazardous to health. The employer shall perform a risk assessment in order to specify the necessary protective measures regarding aerosols, depending on the surface to be cleaned and its environment. Respiratory masks of class FFP 2, an equivalent or higher are suitable for the protection against hydrous aerosols.

- This machine has been designed for use with the cleaning agent supplied or recommended by the manufacturer. The use of other cleaning agents or chemicals may adversely affect the safety of the machine
- **Risk of explosion** – Do not spray flammable liquids. Do not clean delicate parts made of rubber, fabric, etc. with the jet nozzle. Keep some distance between the jet nozzle and surface in order to prevent the surface from damage



Combustion engine powered machines: Do not use combustion engine powered machines indoors unless adequate ventilation is assessed by national labour authorities.


- Ensure that any exhaust emissions are not in the vicinity of air intakes
- Incorrect fuels shall not be used as they may prove hazardous.
- Do not operate belt-driven units without attached belt cover
- The machine must not be used in flammable or explosive environments. When using the machine, it must stand at least 3 feet from buildings, etc.

4 Transport



For safe transport in and on vehicles we recommend to prevent the equipment from sliding and tilting by fixing it with belts. For transport and storage at temperatures around or below 32°F, anti-freeze should be drawn into the pump beforehand (Please refer to Operating Instructions).


5 Water connection

  If the machine don't have a watertank, the machine is only allowed to be connected with the potable water mains, when an appropriate backflow preventer has been installed, Type BA, according to EN 60335-2-79. The length of the hose between the backflow preventer and the machine must be at least 35 feet (min diameter 3/4 inch) to absorb possible pressure peaks.

 **WARNING!** Water that has flowed through backflow preventer and high pressure washer is considered to be non-potable.

6 Electrical connection

  The connection of the electrical supply must be performed by an qualified electrician. The earth wire must be connected to correct potential and it is recommended that the electric supply to this machine should include either a residual current device or another device that will protect the user against indirect contact. The electrical installation to the machine must be according to local regulations.

 **WARNING!** Inadequate extension cords can be dangerous. If an extension cord is used, it shall be suitable for outdoor use, and the connection plug has to be kept dry and off the ground. It is recommended that this is accomplished by means of a cord reel, which keeps the socket at least 2.5 inches above the ground. Always unwind cord from the reels completely to prevent the power cord overheating. Disconnect the power cord from the power source by pulling the plug only (do not pull or tug the power cord).

1. For a product rated 250 volts or less, single phase:

GROUND FAULT CIRCUIT INTERRUPTER PROTECTION

This pressure washer is provided with a ground-fault circuit-interrupter (GFCI) built into the plug or the power-supply cord. This device provides additional protection from the risk of electric shock. Should replacement of the ground-fault circuit-interrupter or cord become necessary, use only identical replacement parts

2. For a product rated more than single phase, or more than 250 volts:

GROUND FAULT CIRCUIT INTERRUPTER PROTECTION


To comply with the National Electrical Code (NFPA) and to provide additional protection from the risk of electric shock, this pressure washer should be protected by a ground fault circuit interrupter (GFCI)

7 Safety devices

- **Thermal sensor:** A thermal sensor protects the motor against overloading. The machine will restart after a few minutes when the thermal sensor has cooled.
- **Locking device on spray handle:** The spray handle features a locking device. When the pawl is activated, the spray handle cannot be operated.

HOT WATER: • **Safety valve:** Unacceptably high pressure is fed back without residual pressure via a bypass line into the intake line of the pump when the safety device is tripped. The safety valve is set and sealed at the factory and must not be adjusted.

8 Maintenance and repair

 **WARNING!** Always switch off the mains disconnecting switch when leaving the machine unattended

- Always remove the plug from the mains plug socket before carrying out maintenance work or cleaning of the machine.

Combustion engine powered machines: NOTE! Before cleaning and maintenance of the high pressure washer, always remove the spark plug cable.

Carry out only the maintenance operations described in the operating instructions. To ensure machine safety, use only original Nilfisk spare parts. Do not make any technical modifications to the high-pressure washer. Ensure that the machine is regularly serviced by authorized Nilfisk dealers in accordance with the maintenance plan. Failure to do so will invalidate the warranty.

CAUTION! High-pressure hoses, fittings and couplings are important for the safety of the cleaner. Use only high-pressure spare parts approved by Nilfisk!

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to prevent hazards.