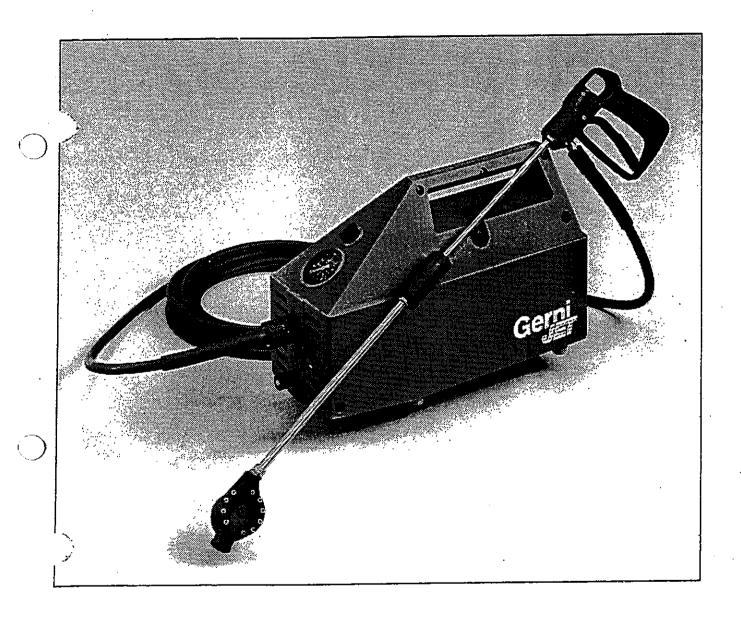
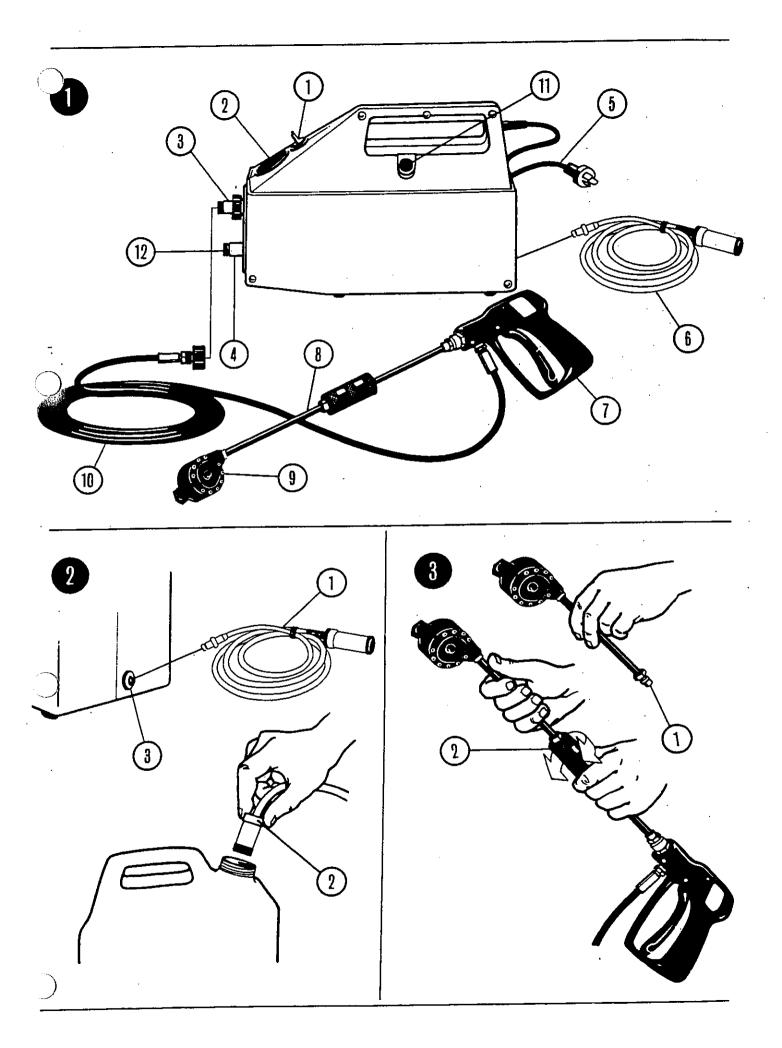
Gerni

NILFISK-GERNI A/S . Myntevej 2 . DK-8900 Randers . Denmark . Tel. 86 42 84 33 . Telex 64 123 DK







ENGLISH

INTRODUCTION

Congratulations on the purchase of your new Gerni high-pressure cleaner. The equipment has been designed and built by one of Europe's foremost high-pressure leaner manufacturers, and we are confident that it will meet all of your expectations. Gerni covers all types of applications with a complete range of cold and hot water cleaners, an advanced range of accessories and high-pressure detergents.

In order to ensure that you derive the full benefit from your Gerni high-pressure cleaner, please study the following manual, which provides a brief account of the construction and operation of the equipment.

The manual should always be within the reach of the operator.

Gerni high-pressure cleaners are constructed for simple and quick operation. If problems nevertheless occur which you cannot solve yourself with the aid of this manual, please contact our service department, whose experience and expertise is at your disposal.

By following these instructions you will ensure economical and reliable operation of your Gerni high-pressure cleaner.

In the manual, references to pictures will be given such as (1.10) which means that reference is given to picture No. 1 and object No. 10 (in this instance: the high-pressure hose).

No.: ______

Date of purchase: ______

CONTENTS

Description of the machine	16
Safety	76
Operating and starting guide	17
Extension cable	78
Maintenance	78
Fault finding	19
Technical data	20
Function diagram	41

DESCRIPTION OF THE MACHINE

Your new high pressure cleaner is constructed as shown in the functional diagram (4). The machine consists of an electric motor (4.1) which works the high pressure pump (4.2). The pump extracts water from the water supply (4.3), through the water filter (4.4) into the top section.

The pump pressurizes the water and forces it out of the water outlet (4.5), through the high pressure hose (4.6), the pistol (4.7) and through the Turbo Laser nozzle (4.8).

The pressure of your high pressure cleaner can be read on the pressure gauge (4.9).

When you release the pistol handle (4.7) the water will run in by-pass through the by-pass valve (4.10). If the water pressure exceeds

the normal working pressure, the safety valve (4.11) will allow by-pass and prevent damage to the high pressure cleaner.

- 4.1 Electric motor
- 4.2 Pump
- 4.3 Water inlet
- 4.4 Water filter
- 4.5 Water outlet
- 4.6 High pressure hose
- 4.7 Pistol
- 4.8 Turbo Laser
- 4.9 Pressure gauge
- 4.10 By-pass valve
- 4.11 Safety valve
- 4.12 Detergent inlet
- 4.13 Non-return ball valve

SAFETY

Your new Gerni high-pressure cleaner complies with the most recent regulations regarding working safety. In using your new equipment, however, the following safety precautions should be observed.

- The machine must be earthed according to regulations.
- 2. The water jet leaves the nozzle at high speed. Therefore, never aim the jet in the direction of people, animals, electric installations or any electrical conductor.
- 3. In case of operational failure, cut off the electrical supply to the machine at the main switch and shut off the water supply.
- 4. Use only Gerni high-pressure hoses. Do not use nonauthentic high-pressure hoses as they do not comply with the safety standards required by Gerni. Never attempt to bind defective high-pressure hoses. Send the high-pressure hose to be repaired at Gerni if it shows signs of being defective.

- 5. Use only Gerni high-pressure detergents which are specially adapted to highpressure cleaners. Our detergents are economical in use and care for the cleaning object and the high-pressure cleaner in the most effective way.
- If the pressure in the pump exceeds the normal operating pressure, a safety valve will relieve the pump, thus preventing damage.
- 7. Your new high-pressure cleaner should not run in by-pass, i.e. with closed pistol for more than 20 minutes as the water the pump is heated when the high-pressure cleaner runs in by-pass.
- 8. If there is silt in the water used, we recommend that you mount a silt filter on the water inlet of the high-pressure cleaner.
- 9. Always lock the pistol with the safety device on the trigger when you leave your Gerni high-pressure cleaner.

EXTENSION CABLE

A stong cable with earth connection - min. 1 mm² should be used. The permissible length of the extension cable depends on the quality of the electric installation.

In a good installation the voltage amounts to 220 V (possibly 240 V in some countries)

irrespectively of the power consumption. In an installation of poor quality the voltage is heavily reduced when the power consumption increases, e.g. when operating the Gerni JET, which consumes 8 or 10 A.

220 V installation 220 V Gerni JET			240 V installation 240 V Gerni JET			
Voltage in plug during operation	Max. per sible leng of cable		Voltage in plug during operation	Max. per sible leng of cable		_^
volt)	(m) 1.0 mm ²	(m) 1.5 mm²	(volt)	(m) 1.0 mm²	(m) 1.5 mm²	ر.
220 210 200 190 180	50 40 30 20	75 60 45 30	240 230 220 210 200	60 50 40 30 ÷	90 75 60 45 ÷	· ·

MAINTENANCE

Change of oil

Change the pump oil after a maximum of 100 working hours, at least once a year. Use 0.17 litre of SAE 10W/40 oil.

Water filter

Clean the filter in the water inlet (1.12) once a week or as occasion requires. If the pump pressure falls, the filter must be checked for dirt.

If you use water from tanks, ponds, or the like, we recommend that a suction basket (100320) is mounted on the inlet hose. If the water contains silt there is a risk of the silt settling in the by-pass valve. This could damage both the by-pass valve and the top section and also cause additional wear and tear to your Turbo Laser. Therefore, you should mount a silt filter (100328) on the water inlet.

Turbo Laser

Your new Turbo Laser nozzle requires no maintenance.

To prevent your Turbo Laser from clogging up, you should always flush the high-pressure hose and pistol with clean water before

mounting your Turbo Laser. When putting Turbo Laser down, make sure that the front of Turbo Laser does not get dirty. After use of Gerni high-pressure detergent, always flush your Turbo Laser with clean water.

Frost protection

The best way of protecting your Gerni highpressure cleaner is to place it in a room free of frost. If this is not possible, the cleaner must be frost protected as follows:

Place the water inlet hose in a tank with 5 litres of antifreeze. Start the machine an activate the pistol until the antifreeze comes out of the nozzle. Activate the pistol trigger a couple of times to frost protect the by-pass valve. The antifreeze can be collected and reused.

Cleaning

Always keep your Gerni high-pressure cleaner clean. This increases the life and function of the individual parts of the machine considerably.

The lances not being used should be stored so that they are protected from sand and dirt, e.g. in their packaging.

TECHNICAL DATA

Туре		JET
Working pressure max./min	psi	1000/116
Reaction force max./min.	N	13/2
Turbo Power, ETP-bar/EW-bar	•	125/140
Cleaning power, EW	kW	1,7
Water capacity	l/min.	8
Motor size	kW	1.3
Amp. consumption 1×220V/240V	А	8.6/7.8
Size of fuse	A	10
Suction height	m	2.5
Water inlet pressure, max.	psi	145
Water inlet temp., max.	°F	140
Electric cable	m	2.5
High-pressure hose	m	. 8
Pump oil, SAE 10W/40		0.17
Dimensions I/w/h	mm	455/165/265
Weight	kg	18.5
Water connection	, 11 .	1/2
Reaction force, min/max	N	2/13

FAULT FINDING

SYMPTOMS	CAUSE	REMEDY
Machine does not start.	Fuse blown. Cleaner not connected to electricity network. The extension cable is too long.	Replace. Connect machine. See page 17.
Machine stops.	Fuse blown. Thermal protector disconnects the motor.	Replace. If the fuse blows again, contact service department. The extension cable is too long. See page 17.
ump pressure oo high.	Nozzle partially blocked.	Dismount and clean nozzle with air. Flush lance.
Cleaner does not reach max. pressure/fluctuating bressure. Lack of water. Nozzle partially blocked. Water filter dirty. Suction side leaks.		Ventilate cleaner by dismounting front nozzle pipe and let the machine run until stable pressure is achieved. Inlet hose too small - must be min. 1/2". Dismount and clean nozzle. Wash through nozzlepipe. Dismount and clean. Tighten clip on suction hose.

OPERATING AND STARTING GUIDE

Starting

- Check that the oil touches the oil gauge pin (1.1), the oil level must not, however, exceed the »MAX.« indication. If necessary, fill with motor oil »SAE 10W/40« into the oil glass.
- The water inlet hose must be washed through before connecting it to the inlet (1.4) of the high-pressure cleaner. The hose must be min. 1/2". The water temperature must not exceed 60° C.
- Connect the electric cable. The machine must be earthed according to instructions. If an extension cable is being used this must also be earthed.
- 4. Mount the high-pressure hose (1.10) on the water outlet (1.3).
- 5. Mount the lance (3.1) on the pistol (3.2) and turn it towards stop.
- 6. Activate the start knob (1.11). Activate the pistol (1.7). The cleaner is ready for use when constant pressure is achieved.
- 7. Always flush the high-pressure hose (1.10) before mounting Turbo Laser on the pistol.

Note: Always stop your machine during long working pauses, as it should not run in by-pass for more than 20 minutes.

Stopping

- 1. Stop the high-pressure cleaner by pressing the start/stop knob (1.11)
- 2. Shut off the water supply.
- When the job has been completed remove the electrical plug from the switch and dismount the water inlet hose.

High-pressure detergents

- 1. When applying detergents, use the pistol without nozzle pipe.
- 2. Place the coupling socket (2.1) of the detergent hose into the detergent connection (2.3).
- 3. Ensure that the detergent filter is completely submerged into the detergent (2.2.). Use only our high-pressure detergents. They are specially adapted to high-pressure cleaners and do not cause damage to the cleaner.

Note: Having used detergent, the pump should be flushed by letting it run for a few minutes with the detergent filter immersed in clean water.