

# 118 P - 600 PX



Betjeningssvejledning Bruksanvisning Bruksanvisning Operating guide Betreibsanleitung Mode d'emploi Gebruiksaanwijzingen Instrucciones de manejo Instruções para uso





### **OPERATING GUIDE**

Safety instructions .....44

	cleaner. We are confident that your new high-pressure clea- ner will fully come up to your	All high pressure cleaners are constructed for simple and quick operation. If problems
Description of the	expectations from a high pres-	occur, which you cannot solve
high pressure cleaner1	sure cleaner produced at one	yourself with the aid of this
Operation and	of Europe's foremost high	manual, please contact our
starting guide	pressure factories. Gerni A/S	service department, whose
Assembling before start2	cover all industries with a	experience and expertise will
Starting	complete range of cold and	be at your disposal.
Stopping2	hot water cleaners and a wide	
High pressure hose	range of accessories.	By following the instructions in
Turbo Laser		this manual you will ensure
Fine sand filter	In order to ensure that you	economical and reliable opera-
Detergent application2	derive the full benefit from	tion of your high pressure cle-
Maintenance	your high pressure cleaner,	aner.
Oil level	please study the following	
Oil change	manual.	In the manual references to
Water filter		pictures will be indicated as
Turbo Laser	The manual is part of your	e.g. (2.6) which means that

INTRODUCTION

Allow us to congratulate you

on your new high pressure

Fault finding .....4 GB DESCRIPTION

Your new high pressure cleaner is constructed as shown in the functional diagram and photograph No. 2. The machine consists of petrol engine (2.1) driving the high pressure pump (2.2). Through the water filter (2.4), the pump sucks the water from the water supply (2.3) and into the top piece.

The pump will pressurise the water and force it out of the pressure outlet (2.5), the high pressure hose (2.6), the pistol (2.7) and out through the Turbo Laser nozzle (2.8).

The pressure of the machine may be adjusted by the pressure adjusting handle (2.9) and read on the pressure gauge (2.10). Releasing the pistol handle (2.7) will cause the water to flow via the bypass valve (2.11). If the water pressure should exceed normal operating pressure the safety valve (2.12) will open for circulation and prevent damage to the high pressure cleaner.

- 2.1 Petrol engine 2.2
- Pump Water supply 2.3
- Water filter 2.4
- 2.5 Pressure outlet
- 2.6 High pressure hose
  - Pistol

high pressure cleaner and

reach of the operator. The

should always be within the

- 2.7 2.8 Turbo Laser
- 2.9 Pressure regulation handle
- Pressure gauge 2.10
- By-pass valve 2.11

2.14	Detergent valve (600P)
2.15	Oil glass/pump
2.16	Waste oil
	container/pump
2.17	Oil rod/pump
2.18	Oil rod/engine
2.19	Petrol tank
2.21	Ignition switch
2.21	Start cord
2.22	Gas regulation handle
2.23	Choke

reference is given to picture

No 2 and object No 6 (in this

instance: the high pressure

hose).

manual provides a brief

sure cleaner.

account of the construction

and operation of the high pres-

Petrol cock 2.24

Туре: ..... Date of purchase: .....

# 2.12 Safety valve 2.13 Detergent supply (600P) (10)



# OPERATING AND STARTING GUIDE

### **Fine Sand Filter**

If you use water containing fine sand we recommend that you mount a fine sand filter. The filter element is changed as required.

If a fine sand filter is not mounted there is a risk that the fine sand will deposit in the by-pass valve which may result in damage to the bypass valve, top section and Turbo Laser, and this is not covered by the warranty.

### High pressure hose

Your new high pressure cleaner is provided with a heavy high pressure hose. Do not attempt to pull the high pressure hose when moving the high pressure cleaner. Be careful not to run over or in any other way damage the high pressure hose. The warranty does not cover broken hoses or hoses which have been run over.

### Turbo Laser

The high pressure cleaner is also provided with a Turbo Laser nozzle for highly improved cleaning efficiency (see "Technical Data").

### Starting

Study carefully the safety instructions in the "operation manual HONDA GX 390 (600X) / HONDA GX 140 (118P)". Also observe the periodic maintenance of the petrol engine. The maximum RPM of the engine is fixed from the factory and must not be altered.

- 1. Fill the tank (2.19) with fresh automobile petrol (lead-free is fine).
- 2. Check the oil level in the engine and refill when necessary with SAE 10W/30 or SAE 10W/40 motor oil. The oil is just to touch the oil rod (2.18).
- 3. Check the oil level of the pump. The level should only be read at stand-still. The oil should reach the "MAX" mark on the oil rod (2.17) (600 PX) / the oil must be at the indication "oil level" on the oil glass (118P). Refill with "HYPOID 80W/90" oil in the oil glass.

The water supply hose is flushed through before it is connected to the high pressure cleaner. Hose diameter is minimum 3/4". The water supply pressure must not exceed 10 bar during operation.

- 4. Mount the high pressure hose (2.6) to the pressure outlet (2.5).
- 5. Turn the petrol cock (2.24) to the extreme right and turn the ignition switch to "ON".
- 6. Turn the choke (2.23) to the extreme left.
- 7. Turn the throttle (2.22) a little to the left.
- 8. Pull the start cord (2.21) out in one long pull and let it return slowly. While the machine is warming up the choke handle is gradually turned to the right. Then, the throttle is turned to the extreme left. Open the pressure regulation handle (2.9) and activate the pistol (2.7). Let the machine run until constant pressure is achieved.

The machine is now ready for operation. By means of the pressure regulation handle the pressure may be adjusted infinitely variable up to the machine's maximum pressure rate.

### Stop

Turn the throttle (2.22) to the extreme right. Turn the ignition switch (2.21) to pos. "OFF" and turn the petrol handle (2.19) to the extreme left. If the machine has been out of operation for quite a long time - see the "Operation manual HONDA GX 390 (600 PX) / HONDA GX 140 (118P)".

# Detergent Application (600 PX)

When the pressure regulation handle (2.9) is open (turned anti-clockwise) detergent may be applied via the detergent valve (2.14). For maximum supply of detergent - see Technical Data. The detergent valve must be closed when detergent is not being used as the pump may otherwise draw air.







## MAINTENANCE

### **Oil Level**

Check the oil level of the pump in the oil glass (2.15) daily. The oil level should be at the "MAX" mark on the dipstick (2.17) (600 PX) / the oil must be at the indication "oil level" on the oil glass (118 P). The oil level must only be read with the high pressure cleaner switched off. When filling, pour HYPOID 80W/90 into the oil glass (2.15). Used oil/water is collected in an oil waste container (2.16), which is placed underneath the frame. Empty the waste container as required, by gripping the container and turning it counter clockwise.

### **Oil Change**

The pump oil should be changed after max. 500 wor-

king hours (600 PX) / 100 working hours (118 P), and at least once a year. If the pump oil contains water, the impure oil should be changed, and new oil, HYPOID 80W/90, added.

#### Water Filter

Clean the water filter (2.4) as required. Dismantle the water inlet hose and remove the water filter. If the water is delivered from tanks, waterholes, rivers, etc., the suction hose should be fitted with a suction filter, and the water filter should be inspected more often.

### **Turbo Laser**

Clean the filter in the Turbo Laser lance (2.7) regularly. The filter is mounted in the inlet opening at the throttle control to prevent particles such as calcium and sand from entering the Turbo Laser where they may cause increased wear, leaks or in serious cases operating malfunctions. It may be necessary to change the filter. If so, put a screwdriver or similar tool through the filter and pull it out. Mount the new filter with an O-ring and press it into the opening of the Turbo Laser lance. Make sure that the filter is placed with the largest contact face towards the Turbo Laser head. When inspecting or replacing parts in the Turbo Laser spray the metal parts with "Pronto Universal". "WD 40". "Servisol", "Caramba" or similar products that are able to:

- a. Counteract moisture
- b. Protect against corrosion
- c. Lubricate and clean

GE

<b>TECHNICAL DA</b>			
Model		118P	600P
Operating pressure	bar	130	200
Reaction force, max.	N	13	40
Turbo pressure	ETP-bar	175	240
Water quantity	l/h	780	1170
Motor power	kW/HP	4.0/5.5	9.5/13
Supply temperature, max.	°C	70	80
Supply pressure, max.	bar	10	15
Self-priming max. height	m	5	5
High pressure detergent	%		0 - 5
Water supply	"	3/4	3/4
High pressure hose	m	8	10
Pump oil HYPOID 80W/90	1	0,6	0,6
Double lance high pressure r	1505	1506	
Double lance low pressure no	ozzle dim.	4040	4040
Nozzle angle	0	15/40	15/40
Pistons	pce.	3	3
By-pass pressure	bar	10	17
Opening pressure	bar	155	225
Noise level dB(A) )*	Lpa/Lwa	95/108	99/113
Length	mm	950	750
Height	mm	680	700
Width	mm	480	630
Weight, complete	kg	48	96

)\* (EN 60704-1) (EN ISO3746)

We also recommend the above mentioned treatment if the machine will not be operated for an extended period of time.

### **Frost Protection**

The best frost protection is to place your high pressure cleaner in a room free of frost. If this is not possible, the high pressure cleaner must be frost protected as follows: Immerse the water supply hose into a tank of 5 litres antifreeze. Start the machine, activate the pistol (2.7) and let the machine run with open pressure regulation handle (2.9) until antifreeze is coming out of the Turbo Laser nozzle. Activate the pistol a few times to allow the antifreeze to work properly through the by-pass and safety valve. The antifreeze may be collected and used again.

### Cleaning

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

Disassembly/destruction All replaced parts such as water filter, fine sand filter, Turbo Laser filter as well as contaminated oil and antifreeze must be handed to the local approved authority/institution for deposit/destruc-tion. When the high pressure cleaner is no longer to be used, the detergent as well as pump and stator oil must be drained off and delivered in accordance with the above mentioned instructions. The high pressure cleaner must likewise be handed in to the local, approved institution for destruction. Any replaced parts from service visits may be given to the service personnel who will deliver them to the proper authority.

FAULT FINDING				
Symptoms	Cause	Corrective action		
Machine does not start	Ignition switch is not "ON". No petrol in the tank. Petrol too old. Petrol cock not in extreme right pos. Too much fuel in the engine. Too little motor oil. On spark plug worn/ defective.	Turn the switch to "ON". Refill Replace Turn cock to extreme right. Wait 5 min., then restart as usual. Refill oil. Check electrode gap/ replace.		
The machine suddenly stops.	Check points under preceding paragraph. Carbonised spark plug. Petrol filter clogged up.	Take necessary action. Clean spark plug. Empty petrol tank and clean filter.		
Too high pump pressure.	Pressure nozzle partly blocked.	Dismantle and clean the nozzle. Flush the pistol through before remounting.		
The cleaner does not run on max. pressure/ pressure fluctuates.	Air in the system. Too little water.	Open the pressure regulation handle and activate the pistol. Let the machine run until stable pressure is achieved. The supply hose too small - diameter should min. 3/4". Clean suction filter.		
	Worn pressure nozzle. Wrong pressure nozzle. Pressure nozzle partly clogged, machine runs in by-pass.	Replace nozzle. Note correct type (see Technical Data). Replace nozzle. Note correct type (see Technical Data). Dismantle and clean the nozzle.		
High pressure hose and pistol are shaking.	Air in the system.	Open the pressure regulation handle, activate the pistol. Let the machine run until stable pressure is achieved.		
By-pass valve "knocks" or the pressure gauge oscillates with open pistol.	Pressure nozzle partly clogged. Water filter clogged. Suction hose not tight/torn.	Dismantle and clean. Dismantle and clean (see Maintenance). Tighten/replace clamp on hose.		
No detergent supply.	Detergent tank empty. Dosing valve and/or regulation handle closed. Detergent filter clogged. Turbo Laser filter clogged. Pre-nozzle blocked. Low pressure nozzle in Turbo Laser blocked.	Refill. Open. Clean filter. Clean filter (see Maintenance). Dismantle and clean pre-nozzle. Dismantle and clean.		
Safety valve starts to function or the machine runs at too high pressure.	Pressure nozzle partly clogged. Pre-nozzle partly clogged. Wrong pressure nozzle.	Dismantle and clean pressure nozzle. Dismantle and clean pre-nozzle. Replace nozzle (see Technical Data).		
The nozzle does not oscillate.	Turbo Laser dirty. Wrong pressure nozzle.	Dismantle and clean Turbo Laser. Replace nozzle (see Technical Data).		
Turbo Laser leaks.	Defective gaskets.	Leakage may rectify itself by further use. Replace gasket (service kit)		

# ALLE FINDING

GB