

# PORTABLE HIGH PRESSURE PUMP GEYSER

# Instructions for use and operation



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The design of the product complies with the requirements of Act No. 22/1997 Coll.

The manufacturer reserves the right to make technical changes and product innovations that do not affect performance of the device described in textual and graphical information in this manual without prior notice and without any exposure to liabilities.

# **CAUTION!**

The user is obliged to read this manual and follow all instructions for operating the device to avoid endangering the health and property of the user as well as other persons. The safety instructions in this manual do not describe all the possibilities, conditions and situations that may occur in practice.

Only a mentally and physically healthy person over the age of 18 may work with this device.

The manufacturer is not liable for damage caused by unauthorized use, incorrect operation and for damage caused by any modification of the equipment without the consent of the manufacturer.

When using the device professionally, the owner is obliged to provide the operator with training on work safety and to carry out instructions for operating the device.

If you do not understand some of the information in the manual, contact the manufacturer directly. The address and connection are given on the title page of this manual.

The operating instructions with which this device is equipped are an integral part of the device and must be available at all times. When selling the device to another person, the operating instructions must be handed over to the new owner.

In particular, it is necessary to follow the safety instructions when working in order to avoid the risk of injury to yourself or others around you.

Carefully read the enclosed engine operating instructions.

An integral and additional part of this "Instructions for Use" is - Instructions for use of the power supply (battery) for the electric motor starter.

#### Introduction

Dear customer.

By buying this device, you have become the owner of one of the wide range of Pavliš a Hartmann s r.o. products.

Please read carefully these Instructions for Use. If you follow these guidelines, the device will serve you for many years without any defects.

At the time of sale, the device is ready for immediate operation, i.e. it is delivered with full tanks and it has been tested.

#### ADVANTAGES OF A PORTABLE HIGH PRESSURE PUMP:

- Low weight
- Easy handling
- Fixed motor-pump mounting in one structural block
- Float with built-in handles for pump handling
- Electric and manual (winding) starter
- Common gasoline fuel with min octane No. 95 + oil (mix 1:30) The oil must meet or exceed API TC, JASO FD, ISO-L-EGD specification
- Possibility of long-term full load
- Speed control
- Mechanical ceramic seal
- Service background

#### SAFETY REGULATIONS

Safety instructions and warnings for engine operation are given in a separate engine operating manual. It is included with the device.

- The operator of the facility must be over 18 years of age
- NEVER operate the pump without water. The pump may be damaged.
- Do not leave the device running unattended.
- It is forbidden to remove covers and protective devices.
- When cleaning or adjusting the device, turn off the main power switch and disconnect the cable from the spark plug.
- It is forbidden to insert your fingers into the suction opening (RISK OF INJURY).
- Use only original spare parts approved by the manufacturer.

#### **OBLIGATIONS OF THE OPERATOR**

Learn how the pump shuts down quickly in an emergency. If you leave the pump for any reason, always switch off the motor. Learn to use all the controls and connections. Ensure that all persons operating the pump are properly trained. Allowing other people, especially children, to operate the pump without proper training can result in serious injury. Do not carry or handle the device while it is in operation.

#### **PUMP OPERATION**

Only pump water that is not intended for human consumption, the maximum temperature of which does not exceed 35 degrees C. Pumping flammable liquids, such as petrol or fuel oil, can lead to fire or explosion. Pumping beverages, chemical solutions or any liquids that cause corrosion can damage the pump.

#### **WARNING!**

#### RISK OF FIRE AND BURNS



Gasoline is highly flammable and gasoline fumes can explode. High care must be taken when handling petrol. STORE OUTOFTHE REACH OF CHILDREN!!! Refuel only in well-ventilated areas with the engine off. Do not handle in areas with open flames and sparks and do not smoke in areas.

When refueling, be careful not to spill fuel. Do not overfill the fuel tank (there should be no fuel in the throat). After refueling, tighten the filler plug well. If any fuel is spilled, make sure the area is dry before starting the engine.

Switch off the fuel valve after use. Ensure that storage areas are well ventilated and away from appliances such as water heaters and clothes dryers.

#### DANGER OF INJURY FROM ROTATING PARTS



Rotating parts can cause serious injuries. To prevent injury, do not touch or keep a safe distance between hands, feet, hair, and other parts of the body, clothing, tools, and work equipment from moving parts. Never operate equipment with covers, hoods, or guards removed.

#### **HOT EXHAUST**



The engine and exhaust system become hot during operation and remain hot for some time after stopping. Contact with hot engine components can cause burns and can ignite some materials.

Do not touch the hot engine and exhaust system. Before performing maintenance, allow the motor to cool down as before transporting the pump or storing the pump indoors.

#### DANGER OF CARBON MONOXIDE POISONING



 $\label{prop:eq:contain} Exhaust \ gases \ contain \ toxic \ carbon \ monoxide, \ which \ is \ a \ colorless, \ odorless \ gas.$ 

Inhalation of exhaust fumes can cause loss of consciousness and death.

If the engine is run in enclosed or even partially enclosed spaces, the air can become contaminated with dangerous amounts of exhaust gases.

Provide adequate ventilation to ensure that exhaust gases do not accumulate...

#### USE

The device can be used with Fire departments for water transport up to a maximum discharge height of 95 m.

#### **TECHNICAL PARAMETERS**

Max flow: 480 l/min

Total head: 95m

 Engine: 2-stroke petrol engine with a capacity of 124 cc and an output of 8 HP

• Engine power: 6.1 kW / 8HP

Fuel tank capacity: 5 liters

 Fuel: unleaded petrol (BA 95) + oil mix according to the engene manual

• Device with electric and manual starter: Dry weight: 21.2 kg

Device with manual starter only: Dry weight: 19 kg

#### • Pump: centrifugal Aluminium casting

Rotor: aluminium casting

Float: plastic monolith with integrated handles

Discharge connection: Storz C 52 (2")

 Suction / Inlet: fitted with ø 5mm stainless steel grid to prevent access of debris

Pump dimensions (LxWxH): 830x515x425 mm

## **DESCRIPTION AND ARRANGEMENT OF THE DEVICE**

The pump is firmly connected to the motor in one unit. Therefore, the pump cannot be used alone. The motor shaft passes through the pump chamber through a ceramic seal, which prevents water from flowing around the shaft to the motor. The pump cannot be connected to another motor type. The underside of the pump chamber is equipped with an aluminium lid without a strainer to catch dirt. A strainer against the ingress of dirt and solid particles larger than 5 mm in diameter is attached to the bottom of the float. The delivery outlet is fitted with a Storz C52 (2") hose coupling. The float body is made of polyethylene by centrifugal injection as one block. The design of the float features outstanding stability on the water surface. The two handles are used for carrying, handling and also for fastening the cord to protect against swimming. The engine of this pump is equipped with a handle also, which can be used to remove the unit from the floater and manipulate the pump. The 5 liter fuel tank is attached to the floater and connected to the engine's fuel pump. The 2-stroke engine with a volume of 124 cc and an output of 8 HP is equipped with a manual and electric starter.

**Pump float** 

**Built-in handles for** carrying the pump

Electric starter coil

Electric starter

engine

Exhaust

**Exhaust** 

Plug for connection (battery) to start the engine



Fuel tank

Fuel tank cap

Anti-suction

strainer

Handle for carrying the pump or for removing the pump from the float

Spark plug cable

**Engine switch** 

On

Off

Electric starter switch

Idle speed adjustment screw **Fuel supply** hose from

Fuel cap Open (ON)

Closed (OFF)

Discharge from

the pump

Power supply (battery) for electric cable to start the engine

Air filter

Connecting cable with terminals (battery-plug on the motor)

Carburetor with fuel pump

Choke lever

Open (ON)

Closed (OFF)

Throttle control lever

Fast running

Slow motion

**Pump holder** 

Pump chamber







Power supply (battery) switch On: on Off: off

## First run procedure

Read this user manual carefully.

Carefully read the operating instructions for the power supply (battery).

Remove the remnants of transport packaging from the device.

Fill the fuel tank. Gasoline fuel with min octane No. 95 + oil (mix 1:30) The oil must meet or exceed APITC, JASO FD, ISO-L-EGD specification.

Check that all safety elements and covers are fitted and securely tightened.

# Procedure before each subsequent start

Check the engine.

Check the battery charge status, follow the battery operating instructions.

Check the overall condition of the pump.

Inspect the pump from below for signs of damage.

Remove any dirt, especially around the suction opening and the start control panel.

Check the tightness of all nuts, bolts.

Check the overall condition of the hoses, ensure that the hoses are in good condition before connecting to the pump.

Check the safe installation of the hose couplings and clamps.

## Starting the device

Place the pump on a firm and stable surface in a horizontal position.

Connect a C52/2" fire hose to the delivery outlet.

Attach a rope to the float to prevent drifting of the pump.

Switch the fuel cap from OFF to ON.

Move the switch lever to the ON position (upper position).

Move the choke lever to the ON position (upper position).

Slightly by moving the throttle lever from idle speed to fast travel.

You start the engine:

**1– using an electric starter -** connect the battery using the connecting cable to the plug to the motor. by pressing the start switch, let the starter turn the engine about 3 times and release the start button. Then move the choke lever to the OFF position (lower lever position) and press the start switch again.

**2- using a manual starter** - grasp the handle of the hand starter and pull about 3 times hard on the cord of the hand starter. Then switch the choke lever to the OFF position (lower lever position). Then pull hard again on the cord of the hand starter.

Place the pump on the water source and move the lever to the required power position.

Secure the rope on the shore to prevent the pump from moving freely on the water surface.

#### Switching off the device

Shift the throttle lever to idle.

Move the power switch lever to the Off position (down position). This will turn off the engine.

Switch the fuel cap from the ON position to the OFF position.

Disconnect the connected hose.

If necessary, clean the strainer in the suction opening.

Note Important note - rinse the chamber with clean water after each use.

#### **MAINTENANCE**

Keep the pump clean.

Keep the suction strainer and the opening in the lid clean.

Regularly check the tightness of the screws on the entire device.

Carry out battery maintenance according to the instructions for use.

Carry out engine maintenance, condition and oil change, air filter according to the schedule as specified in the Honda engine maintenance manual.

Treat the connection points (suction, discharge) with lubricating grease, in the case of couplings treat the rubber seal with silicone grease.

# **DEFECTS, THEIR CAUSES AND REMEDIES**

THE PUMP HAS NO POWER	POSSIBLE CAUSE	TROUBLESHOOTING
Check the pump chamber	The pump did not draw water.	Check the cleanliness of the strainer and the suction opening in the pump cover.
Check the hose.	The hose is kinked, cut or leaky, damaged liner in the hose.	Replace the discharge hose.
Check the engine.	The engine has no power.	See engine maintenance instructions.

Engine fault:	Possible cause	TROUBLESHOOTING
The engine cannot be started.	There is no fuel in the tank. Power switch off. Fuel cock closed. There is no fuel in the carburetor.	Refuel Turn the switch to the ON position Open the fuel valve Remove the spark plug from the engine cylinder head. Remove the air filter from the carburation. Move the choke lever to the ON position. And start starting. Move the choke lever to the off position and check that fuel is visible in the carburation knee. If yes. Reassemble everything.
	Wet spark plug.	Remove the spark plug from the engine head, dry it and refit it.
The engine fails.	The carburettor is dirty. The fuel is old, dirty or damaged. The spark plug is dirty or not. working properly.	Clean the carburetor. Drain and replace with fresh fuel. Clean or replace the spark plug with a new one.
The engine lacks power.	The air filter is clogged. The muffler is clogged. The engine exhaust is blocked.	Clean or replace the filter with a new one. Clean or replace the muffler. Clean the engine exhaust.
Check the engine.	The engine has no power.	See engine maintenance instructions.

Note: If you do not have the necessary tools and qualifications, service, maintenance and repairs must be carried out by a specialist workshop.

Note: Observe the applicable environmental protection legislation when handling petrol and oil.

Note: If further service is required, contact a service partner

Note: Keep an operation log of pump operation and maintenance.

#### **STORAGE**

Before storage, clean the device from dirt.

When washing and cleaning the equipment with solvents or other chemicals, follow the applicable laws and regulations on the protection of the environment, watercourses and water resources from their pollution.

Store the device in a dry place and always in a horizontal position.

Protect the device against weather conditions.

Prevent access and manipulation by unauthorized persons.

If a longer storage time is assumed, drain the petrol from the tank and consume the petrol in the carburetor.

Check the tightening of the screws on the entire device.

Treat the connection points (outlet) with grease and on couplings treat the rubber seal with silicone grease.

Store the battery according to the instructions.

#### **DELIVERY**

The device is delivered assembled, tested and with operating charges. The delivery includes instructions for operation and maintenance of the engine and a warranty card.

#### **DISPOSAL**

Have the device disposed of by a specialist company at the end of its service life.

#### **WARRANTY CONDITIONS**

For the delivered equipment, the manufacturer is responsible for the construction, function, quality and completeness of the equipment only under the condition that the equipment has been handled according to the operating instructions, which are an integral part of each equipment.

The warranty does not cover defects caused by normal wear and tear, defective storage or unprofessional operation, or damage caused by the customer or a third party.

The warranty expires in the event of an equipment accident that was not caused by a defect caused by the manufacturer or by any intervention in the construction of the equipment without the manufacturer's consent.

The warranty for the complete equipment is 12 months from the date of sale and is applicable to Paylis and Hartmann.