Domestic waterworks



Pro-Tech shop

Instructions for use

Translation of the original instructions

WARNING! For your own safety, read this manual before using the machine.

Safety regulations for use

General safety rules

The following safety instructions should be used to help you use the equipment properly and to protect your safety, so read them carefully.

When handing over this equipment to a third party, the following instructions must also be handed over.

Keep this manual and all other literature supplied with the equipment for future reference.

Observe all safety information and warnings on the equipment.

Before attempting to use the device, familiarise yourself with its controls and correct use and, above all, make sure you know how to stop it in an emergency.

Following these simple guidelines will keep your equipment in good working order.

- The equipment must be properly assembled before use.
- Use the equipment only for its intended purpose.
- There may also be stickers on the equipment and other details of the safety devices to consider. Preventing accidents depends on awareness, common sense and proper training of all persons involved in the operation, transport, maintenance and storage of the equipment.
- Never leave the equipment unattended.
- Never allow children to use this device. Children should be supervised to ensure that they do not play with the device.
- Keep children and pets out of reach. All observers should keep a safe distance from the tool while using it.
- The user is responsible for third parties when working with the device.
- The device must not be used by persons who are not familiar with the operating instructions, children, minors who have not reached the minimum age for using the device and persons under the influence of alcohol, drugs or medication. Local regulations may restrict the age of the operator.

WARNING

Alcohol, medication and drug consumption, as well as states of illness, fever and fatigue, affect your ability to respond. Do not use this device in any of these situations.

- Check that all protective equipment (if fitted) is fitted and in good condition.
- Never operate the equipment with damaged safety devices or guards (if available), or without safety devices in place.
- Inspect the entire machine and look for loose parts (e.g. nuts, bolts, etc.) and possible damage. At frequent intervals, check that bolts and nuts (if present) are properly tightened to ensure that the machine is in safe working condition. If necessary, repair or replace them before using the equipment. Serious injury to the operator and bystanders could result if the equipment is damaged in any way.

- Dress properly when using the equipment. Do not wear loose clothing or jewellery that could get caught on the machine. Wear suitable work clothing. It is recommended that you keep your legs and feet covered to protect them from any flying debris. Do not work barefoot or in open sandals. Long hair should be slicked back.
- Keep handles and grips dry, clean and free of oil and grease.
- Use the correct protective equipment. Wear safety goggles and protective gloves. Wear a dust mask when dusting or if exhaust fumes are present. If necessary, also wear non-slip shoes or boots, a protective cap and earplugs. If the noise level exceeds 85 dB(A), hearing protection is mandatory.

WARNING! Wear personal protective equipment! Safety equipment and personal protective equipment protect your health and the health of others and ensure the smooth operation of the equipment.

- Do not start using the device if it is in an inverted position or not in proper operating condition.
- Make sure you have a good attitude when working with the equipment. Maintain proper support and balance at all times.
- Keep the work area clean. Clutter in the workplace is a cause for accidents. All foreign objects must be removed from the work area before use, also pay attention to foreign objects while working.
- Do not exert force on the device.
- Work only in daylight or sufficiently good artificial light. Never operate the equipment without good visibility.
- Be careful not to drop the device or bump it into obstacles.

ATTENTION
Be alert. Watch what you do. Distractions can cause you to lose control. Use common sense.

Electrical safety rules

ATTENTION
The following safety instructions must be observed when using power tools to avoid the risk of electric shock, personal injury and fire. Read and follow these instructions carefully before using the tool.

- To increase electrical safety, it is recommended to use a residual current device (RCD) with a maximum tripping current of 30 mA. Always check the RCD each time it is used. Consult a reliable electrician.

WARNING
The use of a circuit breaker or other circuit breaker does not relieve the operator of the obligation to follow the safety instructions and safe operating procedures in this manual.

- The main voltage must correspond to the voltage marked on the labels and in this manual. Do not use other power sources.
- Before inserting the plug into the main socket, make sure that the nominal values of the socket are correct and correspond to the values indicated on the type plate on the appliance.
- Avoid body contact with grounded surfaces such as pipes, radiators, stoves and refrigerators. If your body is grounded, this increases the risk of electric shock.

ATTENTION
Touching electrified parts can cause death by electric shock or burns.

- Never move the appliance by pulling on the cables.
- Do not abuse the cable. Keep it away from heat, oil, sharp edges, or moving parts.
- Always route the connection line safely.
- Do not use power tools near flammable liquids or gases.

- Always disconnect the appliance from the mains before moving it to other locations.

ATTENTION
The appliance should always be unplugged from the mains before disconnecting the plug and socket or extension leads.

- Never pass the appliance through the extension cord while working with the tool. Make sure you always know where the cord is located.
- Do not plug the extension cable directly into the device. Instead, take the device to the nearest authorized service center.
- To avoid danger, a damaged power cord should be replaced by the manufacturer or his representative or similar qualified person.
- If the cable is damaged or cut, disconnect the tool immediately.

BEWARE OF RISK OF ELECTRIC SHOCK! Consider the work area environment. Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep the work area well lit and dry. Avoid getting the equipment wet or exposing it to moisture. Do not leave it outside overnight. Water that gets into the power tool will increase the risk of electric shock.

- The power cord should be checked regularly and make sure it is not damaged or worn out before using it. If the cord is not in good condition, do not use the appliance; take it to an authorized service center.
- If the tool is used outdoors, only use an extension cord that is suitable for outdoor use and that is marked for that specific use. Keep it out of the work area, away from damp, wet, or oily surfaces, and away from heat and combustible materials.
- Avoid accidental start-up: before plugging in the tool, make sure that the switch (if available) is in the "off" position.
- Remove the adjusting wrenches before switching on the tool.
- Do not use the tool if the switch does not turn on or off. Any tool that cannot be operated by the switch is dangerous and must be repaired.

WARNING
Dust containing chemicals known to cause cancer can occur when using power tools. Some of these chemicals are: lead from lead-based paint, crystalline silica from brick and cement and other masonry products, arsenic and chromium from chemically treated lumber, and other hazardous products. If dust is present, your risk from these exposures varies depending on how often you do this type of work. **To reduce your exposure to these chemicals, whenever you perform dust operations, work in a well-ventilated area and work with approved safety equipment, such as dust masks that are specifically designed to filter out microscopic particles.**

- If the appliance hits a foreign body, check the appliance for signs of damage and make the necessary repairs before restarting and resuming work.
- If the appliance starts to vibrate abnormally, switch it off and check the cause immediately. Vibration is generally a warning of a malfunction.
- Whenever you leave the appliance, before carrying out maintenance, before checking, cleaning or working on the appliance, switch off the appliance and wait until the appliance has come to a complete stop.
- It is forbidden to move or modify any internal parts of the device.

Special safety rules

- "Protection Class I" devices must only be connected to properly earthed power supplies.
- This pump must not be used in swimming pools, ponds, tanks and all similar environments where people and animals are in contact with the water.
- The pump must not be used to operate swimming pools.
- The device must not be installed in drinking water pipes.
- Any use in explosion hazardous areas is prohibited.
- It is forbidden to pump poisonous, flammable, aggressive or explosive substances or foodstuffs.

- Use this equipment only for pumping clean water.
- The temperature of the pumped liquid must be between 4 °C and 35 °C. Do not exceed 35 °C.
- Do not run the pump dry.
- Operation of the machine in the suspended position is prohibited. The pump must stand on its base.
- Never hang the pump by the supply hose or the power cable.
- Do not expose the device to a direct stream of water.
- Make sure electrical plugs are in places that are not at risk of flooding and protect them from moisture.
- Protect the pump from freezing.
- Consequential damage caused by flooded environments/spaces in the event of equipment failure must be prevented by the user by appropriate measures (e.g. alarm system or spare pump, etc.).
- Use a suitable handle to transport the machine; carrying with cables or hoses is prohibited.
- Pull the mains plug before starting any work on the device.

Technical data

Model	GP-1201EI
Voltage/frequency	230/50 HZ
Rated power	1200W
Maximum flow rate	3600 l/h
Maximum self-priming height	8m
Maximum displacement	50m
Socket diameter	1"
Safety class	IP44

Intended use

This model of electric pump allows to maintain the required pressure in the pressure line. Thanks to this function, the device can be used to arrange water supply systems, to increase the water pressure when the pressure in the water supply system is low, etc. The pump can also be kept in operation for a long period of time.

Installation

Install the device on a firm and level surface. The pump must be positioned as close to the water surface as possible while maintaining a safe distance.

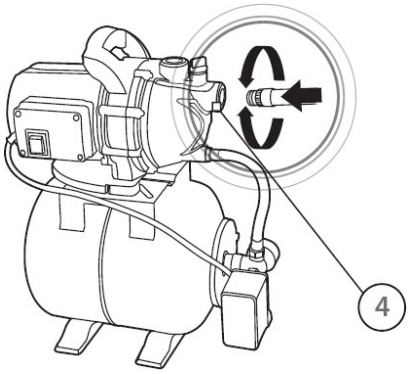
Receiving equipment

In order to ensure the proper operation of the machine, it is necessary to maintain a certain pressure in the reservoir. If the pressure drops, connect an automotive pump or compressor to the slide valve and pump until the pressure
in the storage tank does not reach the minimum level for the pressure of the water supply system.

Connecting the suction hose

The diameter of the suction hose must not be smaller than the diameter of the intake socket (4). The suction hose connects to the unit using a threaded coupling tube (not provided in this kit), which is inserted into the threaded hole of the suction socket (4). [F1]

F1



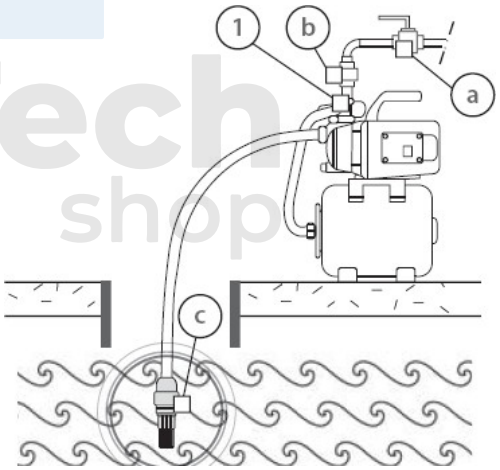
The suction hose must be tilted slightly upwards towards the suction socket to prevent air bubbles. Make sure that the suction hose connection is airtight; this will prevent air blockage and ensure normal machine operation. Ensure that the suction hose is completely airtight and immersed in water.

Always fit the bottom (non-return) valve (c) (not available in this kit) to the end of the suction hose. It is recommended to use a hose that is equipped with a filter element.

Installing the bottom (non-return) valve (c) [F2]

F2

a. flow adjustment slider (not supplied)
b. non-return valve (not supplied)
c. bottom (non-return) valve (not included)



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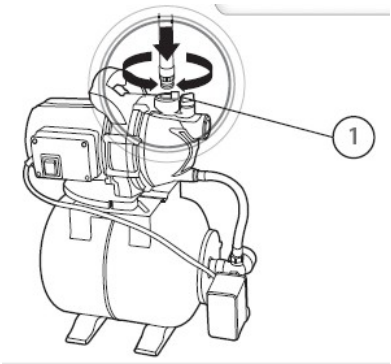
If the unit is used to pump water from a tank or well that is below the pump level, a bottom (check) valve (c) must be installed at the end of the suction line.
A bottom (check) valve (c) is a type of check valve that allows fluid to flow in one direction only and prevents backflow.
It should be connected to the end of the suction hose to prevent backflow and complete emptying of the unit.
To ensure efficient pump operation, it is recommended to ensure that a certain amount of water is always available in the unit to avoid pump "dead running" or dry running.

WARNING! Do not operate the unit without water to prevent engine failure due to overheating.

1. Connect the bottom (non-return) valve (c) to the end of the suction hose. Use a hose clamp (not provided in this kit) to make the connection more secure.
2. Connect the suction hose to the pump using the threaded connector and hose clamp. Make sure that the connection is hermetic: this prevents air blockage and ensures normal operation of the pump.
3. Submerge the end of the suction hose with the fitted bottom (non-return) valve (c) into the water to be pumped. The lower (non-return) valve (c) must be completely below the water level.

Connecting the discharge hose

F3



The diameter of the discharge hose should be selected to suit the flow and pressure required at the sampling points.
The discharge hose is connected to the unit by a threaded coupling pipe (not available in this kit), which is screwed into the threaded hole of the discharge spout (1).
[F3]]

It is recommended to insert a non-return valve (b) (not available in this kit) - between the discharge spout (1) and the slide adjuster
flow rate (a) - to prevent dangerous water hammer in case of sudden pump stop. This measure is mandatory if the column of water supplied is greater than 20 metres.

Watering

WARNING! The pump must be filled with water before operation. Do not operate the device without water in it!

Before starting the pump, fill it completely with clean water through the pump spout.

- Unscrew the stopper of the pump neck and pour water into the machine. Then screw the pump plug back in.

The pump should be refilled whenever it has not been used for a long time or when air has entered the system.

On/off

Turn on
1. Connect the suction and discharge hose correctly.
2. Fill the pump body with water through the water filling screw
3. Open the drain pipe.
4. Connect the mains cable and set the power switch to the "ON" position.
5. The reception process starts automatically.

ATTENTION! When the pump is in operation, the discharge pipe should be open to remove air from the hose. If the discharge pipe is closed, the pump can be seriously damaged overheating after only 5 minutes of operation.

Shutdown
Set the on/off switch to the "OFF" position.

ATTENTION! The pump should be refilled whenever it has not been used for a long time or when air has entered the system.

Operating Instructions

- The maximum pumping height shall not exceed 8 metres.
- Grease and abrasive particles in the water can reduce the performance of the pump and cause it to malfunction.
- The end of the suction hose must always be immersed in the liquid to prevent air from being drawn into the hose. If the weight of the hose is not sufficient and the hose floats, it is necessary to artificially increase the weight of the hose or to fix it.

Operating Regulations

1. Connect the hoses as described.
2. Submerge the suction hose in the water tank to be pumped.
3. Hang the suction hose; this prevents the machine from slipping, as the weight of the hose is taken by the hanger, not the machine.
4. Unscrew the stopper of the pump neck and fill the machine with water. Screw the stopper of the pump neck back into the neck.
5. Connect the power cord to the power source and turn on the device. If the machine does not start pumping within 3 minutes (due to air blockage, pumping height too high, hose too long), it must be switched off and the cause of the pumping fault must be rectified. Then restart the machine.

It is necessary to control the operation of the unit and troubleshoot the problems in time, thus extending the operation time of the unit and enabling its efficient operation.

Maintaining the required pressure

The ability to maintain a constant pressure in the pressure line can expand the use of this equipment in several areas (water system layout, water pressure boosting to low pressure, water supply systems, etc.).
This can be achieved thanks to special design elements.
The reservoir contains an elastic liquid tank. The pressure in the reservoir is up to 4 bar. The elastic walls of the rubber tank are under the influence of air pressure.
When the engine is switched on, the pump starts to discharge fluid into the rubber tank, gradually filling it. The air in the reservoir is compressed and as soon as a certain pressure value is reached (depending on the factory set value), an automatic switch stops the pump motor.
The liquid in the tank is under pressure (created by the air in the tank against the walls of the flexible tank), which is necessary for the water supply system. When the water in the water supply system is drained (i.e., when some household appliances are turned on, taps are turned on, etc.), the pressure in the resilient tank is reduced, as is the pressure in the reservoir. If the pressure drops by 1.4 bar, the automatic switch will turn on the pump motor and the pump will start pumping water into the system until the automatic switch turns on (and the motor stops). This operation is repeated to maintain the desired pressure in the water system.

When successively connecting the machine to the pressure system, it must be taken into account that the pressure in the system and the pressure generated by the machine are added together. The total pressure must not exceed 10 bar.

Maintenance and storage



Pull the mains plug before doing any work on the device itself.

- Always keep the equipment and vents (if available) clean. Regular cleaning and maintenance of the appliance will ensure its efficiency and prolong the life of your appliance.
- Should the equipment malfunction despite strict manufacturing and testing procedures, repair should be carried out by an authorised customer service centre.
- Keep all nuts and bolts tightened securely to ensure that the equipment is in safe working condition.
- Replace worn or damaged parts for safety reasons.
- Use only original spare parts. Replacement parts that are not manufactured by the manufacturer may cause poor condition and possible injury.
- Store the device in a dry room out of the reach of children and away from any combustible material.

- The outer surfaces of the machine should be cleaned with a soft brush and cloth. Do not use solvents or polishing compounds. All dirt must be removed.
- Frost can cause damage to equipment that has not been completely dried. Equipment should be stored in a frost-free environment.

Environmental protection



Recycle raw materials instead of disposing of them as waste. Tools, accessories and packaging should be sorted for environmentally friendly recycling. Plastic components are marked for categorised recycling.
These instructions are printed on recycled paper made without chlorine

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