



# Using the Pump

1. Wear the protective equipment if working on or near the pump.
2. Set the pump in position and connect the suction hose and strainer, ensuring the strainer is not blocked and is completely submerged. If there is an air leak in the suction hose, the pump will not work efficiently. Do not use this pump without the strainer properly attached.
3. Connect the discharge hose and lay it out carefully to the selected discharge area.
4. After starting the engine, the pump will start pumping the water immediately.
5. If the pump operates but fails to pump water effectively, it is probably because there is an air leak in the suction hose or connection, or the strainer is not fully immersed; or the strainer is blocked.
6. When pumping dirty waters with solids in suspension, the strainer may need regular cleaning.
7. Stop the engine before re-siting the unit; moving hoses; or cleaning the strainer or any filters.
8. Keep a check on the discharge area to make sure that no hazard is being created. Do not pollute rivers or drains – if in doubt check with the hire company or local Environment Agency – their number will be in the telephone directory.
9. Do not allow vehicles to run over the hoses at any time, unless a layflat discharge hose is being used.
10. After pumping dirty or contaminated water flush the pump through with clean water if possible.
11. In cold weather prevent the pump from freezing up when not in use – contact the hire company if a lot of work is planned in freezing conditions.
12. To protect the engine and help starting it is advisable to keep the machine under cover when not in use.
13. If the equipment does not work properly do not attempt to repair it. Contact the hire company.
14. Please store this leaflet safely. It may be required for further information.

Please keep this leaflet safely as it may be required for future reference



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# Diesel Diaphragm Pump

The rules and procedures in force where people are at work may require the person responsible for this equipment to carry out a specific risk assessment.

It is important to read this entire leaflet BEFORE using the Pump

1. Diesel fuel is flammable – take care not to cause a fire or explosion.
2. This pump is designed for pumping clean and dirty water with solids in suspension, on building sites and other similar places.
3. Pumping water can cause damage and possibly injury if the operation is not planned and controlled.
4. If the operator has not used this type of water pump before, they should familiarise themselves with the equipment before starting work.
5. The work should be thought out and planned ahead to ensure that it will always be carried out safely.
6. The following items of personal protective equipment must be worn as a minimum:  
Ear muffs or plugs giving protection for levels up to 95 dB(A);  
Dust mask – a minimum of EN149 FFP3(s) protection;  
Gloves.
7. This equipment must not be used by minors, or by anyone under the influence of drugs or alcohol.
8. This pump is designed for operation by an able bodied adult. Anyone with either temporary or permanent disability must seek expert advice before using it.



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v:032017

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1. Do not use this pump where there is a danger of explosion. It will ignite a flame from petrol, or gas cylinders.
  2. Using this equipment indoors or in confined spaces could cause fatal carbon monoxide poisoning. Never use it in domestic premises and only use it in domestic situations if its suitability has been fully assessed. Mechanical extraction ventilation will almost always be required.
  3. If there is a risk of falling into the water to be pumped, make sure that the area is clear and safe and that no distraction.
  4. If the work involves pumping contaminated water or other liquids that may be hazardous to the environment, check first with the hire company or local Environment Agency – their number can be found in the telephone directory.
  5. Ensure the pump is sited on a firm level base; secure it to prevent accidental movement.
  6. Route the suction and discharge hoses where they will not be damaged by vehicles. Also make sure that they will not create a hazard to vehicles or people.
  7. Check the area where the water will be discharged. Make sure that a hazard will not be created for persons or the environment. Contaminated water and other liquids that are hazardous to the environment must not be discharged into rivers or down drains.
  8. There will be a limit on how high the equipment can pump water – this is sometimes called the 'head'. If a strainer fitted to the inlet hose.
- DIAPHRAGM PUMP**
1. Check the pump, engine, hoses and strainer. If anything is found to be damaged do not use the pump – contact the hire company.
  2. Before starting, ensure all hose connections are tight.
  3. The hoses must be laid out, free of any kinks or sharp bends.
  4. Do not operate this pump without the strainer fitted to the inlet hose.
- OPERATORS**
1. The following items of personal protective equipment (ppe) are the minimum that should be worn whenever this pump is used. Particular jobs or environments may require a higher level of protection. This equipment is likely to cause appropriate ear muffs or plugs must be worn giving protection for this level as a minimum.
  3. Dirty or stagnant water can contain harmful bacteria and other hazards. Cover any cuts or broken skin with waterproof dressings. Wash hands before smoking, eating or drinking.
  4. Wearing waterproof gloves can help to protect the hands.
  5. Anyone who is working nearby will also need to wear personal protective equipment.
- STARTING AND STOPPING THE ENGINE**
1. If the hire company has given special instructions follow them. Otherwise, follow the instructions given below.
  2. Check the oil and fuel levels before trying to start the engine.
- REFUELLING**
1. No smoking.
  2. Stop the engine and let it cool down.
  3. Clean the filler cap and the area around it to prevent dirt falling into the fuel tank.
  4. Use a funnel when refuelling. Do not spill any fuel on persons or the machine.
  5. Wipe any fuel off the machine.
  6. Dispose of fuel soaked cloth carefully.
  7. If any fuel is spilled on the ground, wipe it up or cover it with soil.
  8. If any fuel is spilled on clothes, they should be changed straight away.
  8. Put all fuel caps back on properly, and move the fuel can to a safe, cool place.
- STOPPING THE ENGINE**
1. If the hire company has given special instructions follow them. Otherwise, follow the instructions given below.
  2. Check the oil and fuel levels before trying to start the engine.
- Before Starting Work...**
3. Move the STOP control to the RUN position.
  4. Check that the throttle lever is in the IDLE position.
  5. Do not wear gloves when starting the engine. Also, make sure that no loose clothing or flapping sleeves could get caught.
  6. Fit the starting handle to the shaft, and check by turning it anti-clockwise that the ratchet mechanism works. Check also that the handle slides on and off the shaft easily.
  7. Move the decompression valve lever into the decompression position.
  8. If the engine is fitted with a cold start button, press it in when starting from cold.
  9. Grasp the starting handle firmly in one hand – but do not wrap the thumb around the handle. Keep it on the same side as the fingers – this is very important. The thumb could be broken if it is wrapped around the handle, and the engine kicks back.
  10. Crank the engine strongly before lowering the decompression lever smoothly. The engine should fire up. If it doesn't, go through the steps again from instruction 6 above.
  11. If the engine is now running, slide the handle off the shaft.
  12. If the handle is accidentally released when the engine fires up, do not try to grab it. Stop the engine using the stop control. Then start the engine again.
  13. To stop the engine use the RUN / STOP control. Never stop the engine using the decompression lever. This may damage the engine and will be regarded as misuse by the hire company.