



PETROL POWERED WATER PUMPS 6.15HP 4-STROKE ENGINES

MODEL NO: **PWP50, PWP80, PWP80DW**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Wear eye protection



Wear ear protection



Wear protective gloves



WARNING!
Hot surfaces



WARNING!
Flammable



Check for spilled fuel or fuel leaks. Stop engine before refuelling.

1. SAFETY

1.1. GENERAL SAFETY

- ☐ **WARNING!** Stop the engine and disconnect the inlet and outlet pipes before performing any maintenance.
- ☐ **WARNING! DO NOT** operate the pump if damaged. Replace or repair using recommended parts only. Unauthorised parts may be dangerous and will invalidate your warranty. Use authorised service agents only.
- ✓ Keep the pump in good condition. Regular maintenance will give best and safest performance. **DO NOT** modify/remove components.
- ☐ **WARNING! DO NOT** operate the pump without any water passing through it. To do so will damage the machine.
- ☐ **WARNING! DO NOT** operate the pump without priming it first. To do so will damage the machine.
- ☐ **WARNING!** Use the pump on a flat, level surface, in a horizontal position. Failure to do so will invalidate your warranty.
- ✓ Wear safety goggles, adequate protective clothing and anti-slip rubber soled footwear.
- ✓ Hearing protecting devices may be used in case of long exposure to noise.
- ✓ Keep all persons and animals at a safe distance from the working pump.
- * **DO NOT** allow children or untrained persons to operate the pump.
- * **DO NOT** use the pump if the water inlet pipe is damaged. Also check that the hose is laid out straight and safely.
- * **DO NOT** try to move the pump by pulling on the inlet or outlet pipes. Use the machine frame.
- * **DO NOT** direct the pump output towards yourself, other persons or animals, electrical equipment or the pump itself.
- * **DO NOT** use the pump if you are tired or under the influence of alcohol, drugs or intoxicating medication.
- * **DO NOT** use the pump inside.
- * **DO NOT** allow the pump to become frozen.
- ✓ When not in use, drain any water from the pump. Clean and dry the pump and store in a safe, dry, temperate, childproof area.
- ✓ In the event of an accident, malfunction or breakdown, **DO NOT** use. Contact an authorised service centre for repair/replacement.
- ✓ Ensure normal operation before and during use. **DO NOT** use if the unit fails to operate normally.

1.2. ENGINE SAFETY

- ☐ **WARNING!** Check the engine oil level before each startup. Only use an SAE10W30 oil and never operate the engine with insufficient oil.
- ☐ **WARNING! DO NOT** touch spark plug or plug lead with wet (or dry) hands whilst the engine is running - severe, potentially fatal, electric shock may result.
- ✓ Clean up fuel spills that are on or near the unit.
- * **DO NOT** check ignition system by removing the spark plug or spark plug lead. Use specific tester or contact service agent.
- * **DO NOT** operate the pump in an enclosed area as the motor exhaust fumes are a health hazard. Outdoor use only.
- * **DO NOT** use the pump with flammable, toxic or corrosive liquids.
- * **DO NOT** leave the pump unattended whilst operating, and **DO NOT** remove the fuel cap whilst the engine is running.
- * **DO NOT** refuel the engine whilst it is running. Stop the engine and allow it to cool for two minutes before attempting to refuel.
- * **DO NOT** refuel in a closed or poorly ventilated environment as there is a danger of explosion or fire. Refuel outdoors.
- * **DO NOT** smoke or place the pump near any naked flames whilst re-fuelling. Risk of fire/explosion.
- * **DO NOT** operate pump if there is a fuel leak. Move the unit and avoid any combustion until the leak has been fixed and the machine is dry.
- * **DO NOT** start the engine if there are any flammable materials near the exhaust system or in the path of the exhaust gases.
- * **DO NOT** block the engine ventilation grilles.
- * **DO NOT** expose the engine to extreme hot/cold temperatures, water or humidity.
- ✓ Ensure engine fuel is stored in an approved container.
- ✓ For long term storage ensure the fuel is drained and that the pump is adequately protected against frost.
- * **DO NOT** operate the engine with either the silencer or air filter removed.
- * **DO NOT** touch the engine during or after use. To avoid burns allow it to cool before handling.

2. INTRODUCTION

Petrol-powered water pumps with recoil start for reliable performance where mains power is unavailable. Suitable for draining pools, foundations, trenches, pits, and general site dewatering. Equipped with a large 3.6L fuel tank and a powerful 6.15hp 212cc engine for extended, high-volume operation. Mounted on a sturdy frame with high-density rubber shock absorbers to minimise vibration and protect against accidental damage. Model No's PWP50 and PWP80 are suitable for clean water and Model No. PWP80DW is suitable for dirty water, handling particles up to 28mm.

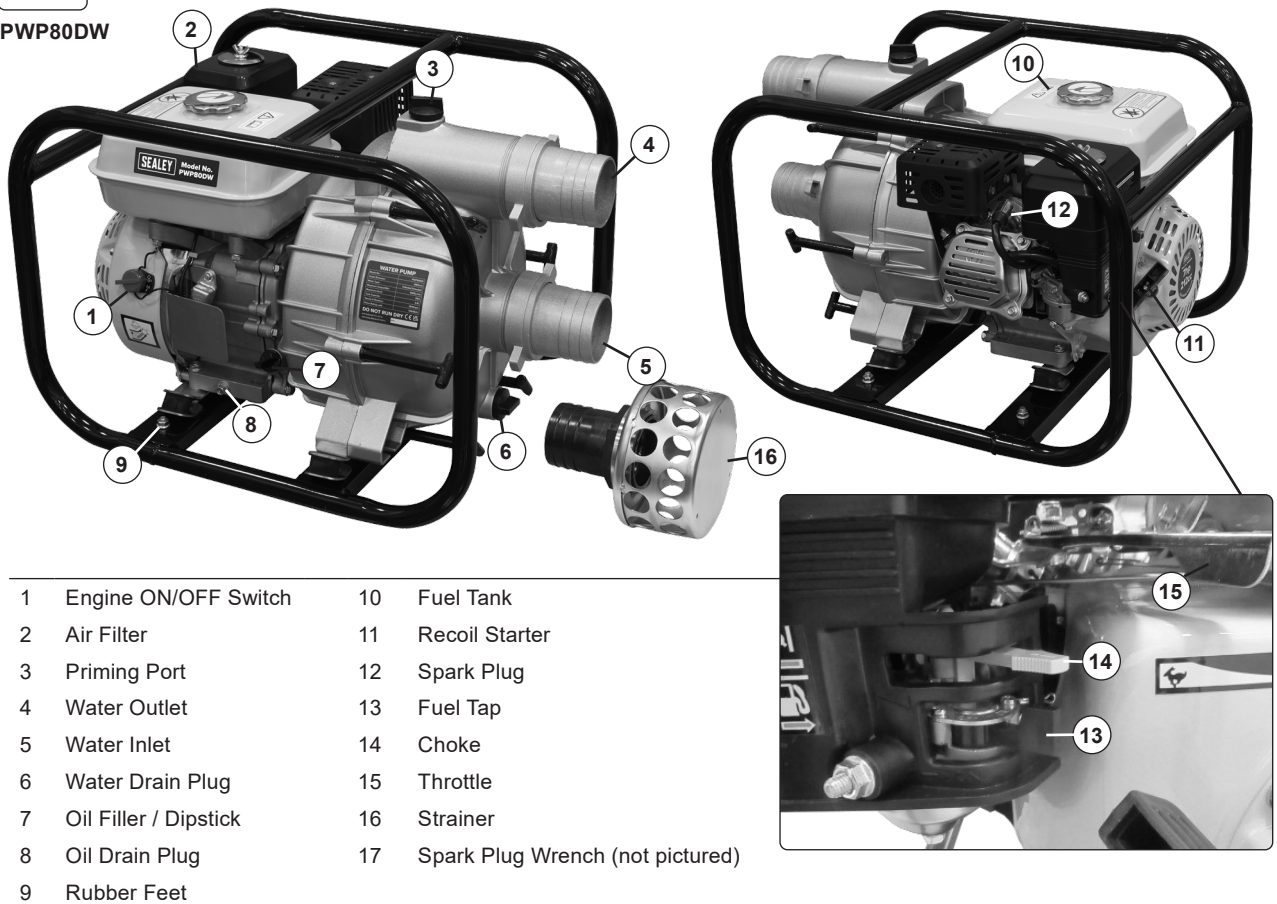
3. SPECIFICATION

MODEL NO:	PWP50	PWP80	PWP80DW
Dimensions:	470 x 370 x 380mm	500 x 370 x 405mm	550 x 440 x 410mm
Dry Weight / Nett Weight:	21kg	23kg	33kg
Inlet Diameter:	Ø50mm	Ø80mm	Ø80mm
Maximum Head:	26m	25m	25m
Maximum Output/Min:	550L/min	1000L/min	1000L/min
Maximum Suction Head:	7m	7m	7m
Motor Power:	6.15hp	6.15hp	6.15hp
Motor Type:	4-Stroke Air-Cooled/Unleaded	4-Stroke Air-Cooled/Unleaded	4-Stroke Air-Cooled/Unleaded
Noise Rating LwA:	106dB(A)	106dB(A)	106dB(A)
Outlet Diameter:	Ø50mm	Ø80mm	Ø80mm
Tank Capacity:	3.6L	3.6L	3.6L
Allowable Forces on Inlet / Outlet:	≤200N	≤200N	≤500N
Screw Thread Tightening Torques:	≤20N.m	≤20N.m	≤20N.m
Max. Passed Particulate Size:	5mm	5mm	30mm

4. OVERVIEW

FIG.1

PWP80DW



5. PREPARATION

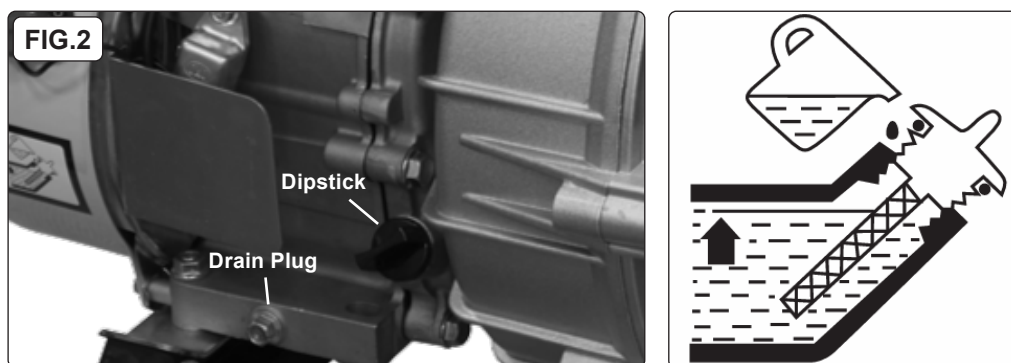
5.1. FITTING THE FEET

Fit the 4 rubber feet to the frame using the supplied fixings.

5.2. FILL/CHECK THE OIL LEVEL (FIG.2)

NOTE: the unit comes without oil. 0.6L of SAE10W30 oil is required for operation.

Ensure the unit is on a level surface. Unscrew the dipstick/oil filler cap and wipe it clean of oil. **NOTE:** the maximum oil level should be just below the opening of the filler neck. Check the oil level by seating the dipstick into the hole without screwing it in. On removal the oil level should be between the two marks on the dipstick. If it is at the lowest level or below, top-up immediately with an SAE10W30 oil. Screw dipstick fully home to seal the oil fill hole.

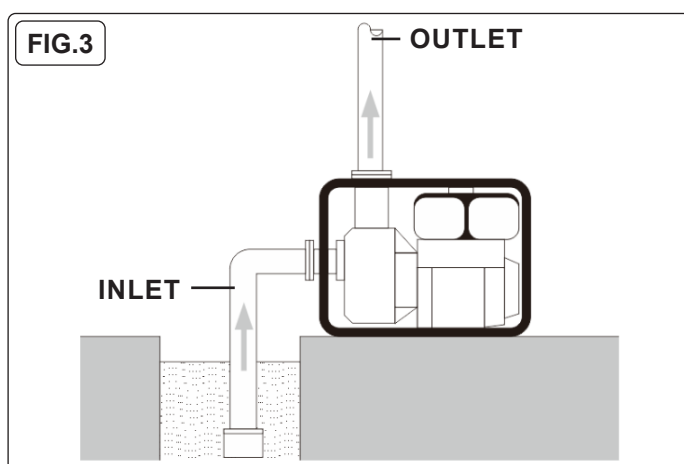


5.3. FILL/CHECK THE FUEL LEVEL

Fill/check the fuel level prior to use, ensuring all safety points are followed. Ensure the fuel cap is secure before proceeding.

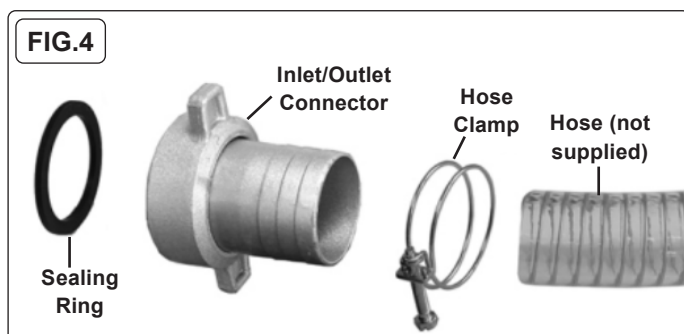
5.4. POSITIONING THE PUMP

Position the pump on a firm foundation, as near to the water source as possible. Follow the piping diagram below.



5.5. CONNECTING HOSES (FIG.4)

Connect the suction and discharge hoses to the pump using the hose clamps and sealing rings supplied. Ensure an airtight seal. There must be no damage to the hoses, which must be adequately protected and supported.



IMPORTANT: an air leak in the suction line will prevent priming, and reduce the performance of the pump. Pay particular attention to the following:

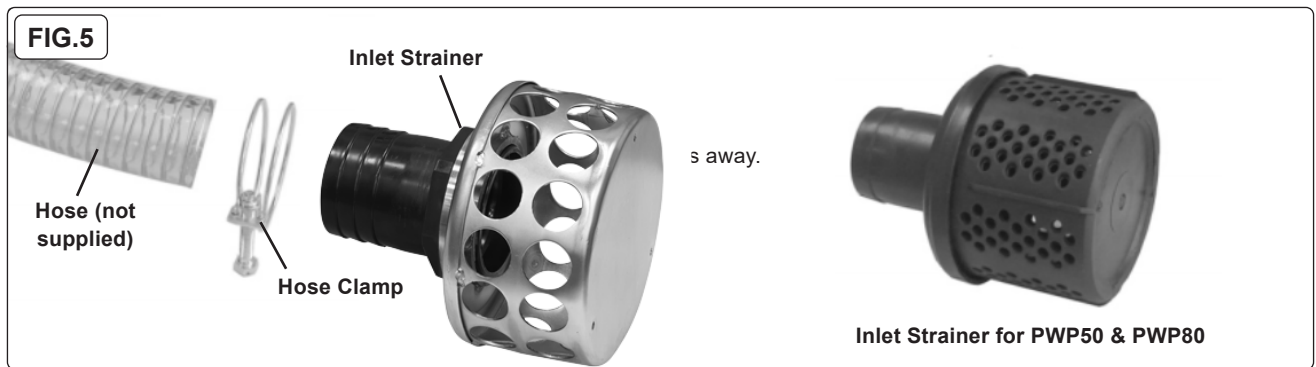
- ✓ Ensure sealing rings are in place and correctly fitted.
- ✓ Ensure hoses are at least 300mm (1ft) in length.
- ✓ Keep hoses/pipes as short and straight as possible. Avoid sharp bends.
- ✓ If a flexible hose must be laid across a roadway, protect it with planking.
- ✓ Ensure adequate drainage for discharged water.
- ✓ Ensure that there is no risk of damage to property as a result of pumping activity.

NOTE: instantaneous shut-off pressure, applied when a vehicle runs across an unprotected hose will cause "hydraulic shock", which can damage the pump and/or the hose.

5.6. ATTACH INLET STRAINER (FIG.5)

Attach the inlet strainer to the end of the suction hose using a hose clamp to help prevent large stones from being drawn up into the pump which could cause damage. Keep the strainer free of debris. If it is likely to clog with dirt/debris, proceed by either:

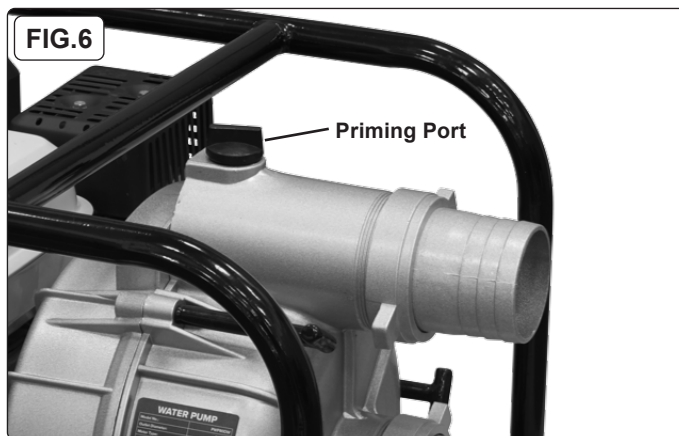
1. Preparing a bed of stones on which to rest the strainer.
2. Tying the strainer so that it stays off the bottom of the pit, pond or excavation.



5.7. PRIME THE PUMP (FIG.6)

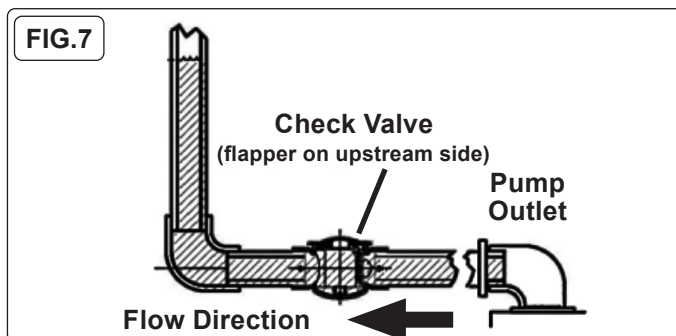
Unscrew the cap from the priming port at the top of the pump and fill the chamber with water, leaving no air gap. Replace the cap.

NOTE: the pump is self-priming only when the pump is filled. It will prime and re-prime itself without refilling. Refilling is only necessary if the pump has been drained. **NEVER** allow the pump to run dry.



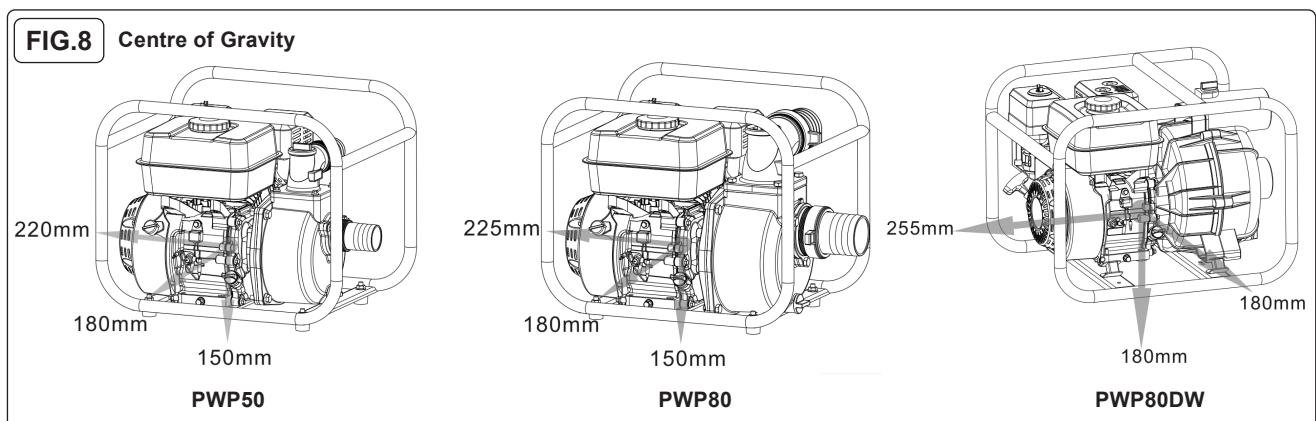
5.8. CHECK VALVE (FIG.7)

If the discharge hose runs vertically more than 9m a check valve should be installed in the discharge hose near the pump to stop water hammer when the pump is shut down. **NOTE:** it is the pump owner's responsibility to supply and install a suitable check valve to protect the pump in this way.



5.9. HANDLING, TRANSPORT & STORAGE

This item is heavy. Always use correct and safe lifting technique. Seek the assistance of another person when handling. Ensure the unit is balanced. Risk assess the lifting task. Lift from the base of the unit. Ensure the unit is level and secure if transported in a vehicle. For long term storage ensure the fuel and water are drained and that the pump is adequately protected against frost. Clean with a damp cloth. Dry the pump and store in a safe, dry, temperate, childproof area.

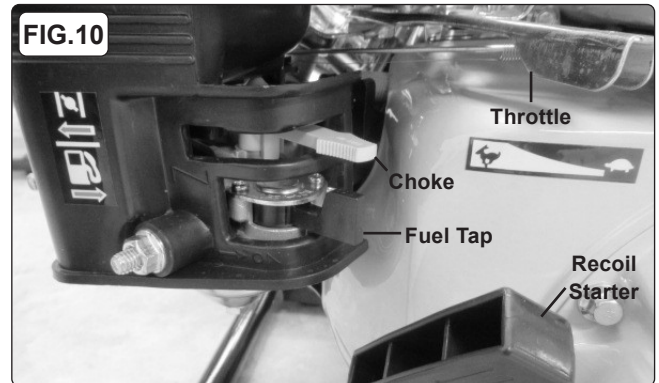


6. OPERATION

IMPORTANT: If the pump has not been primed, do it now, otherwise the pump may be damaged. Fill with fuel safely. When the machine is new it should be 'run in'. This means running the unit at low speed and low load for the first 20 hours. Check engine oil level before each use, and fill as per preparation instructions. Check that the inlet and outlet hoses are laid straight and untwisted. Check to ensure there are no leaks from hoses or connections. Check bearings, seals, connections etc. Ensure there is adequate space to safely operate the pump. In the case of a blockage, turn the unit off before clearing. Disassembly of the pump for maintenance is to be carried out by an authorised service centre only.

6.1. STARTING THE ENGINE (FIG.9 & 10)

Rotate the engine switch to the ON position. Push the fuel tap to the open position. If the engine is cold close the choke. Move the throttle lever to the fully open position then ease it back slightly. Take hold of the recoil starter handle and pull it slowly until you feel resistance, then let it return slowly. Now pull the starting handle hard and fast all the way out. If the engine doesn't start, repeat the process. Once started adjust throttle lever to the required setting and return the choke to the open position when the engine is warm.



6.2. SHUT DOWN PROCEDURE (FIG.9 & 10)

Stop the engine by pushing the throttle lever fully to the closed position. Turn the engine switch to the OFF position. Turn off the fuel tap. In an emergency turn the engine switch to the OFF position.

7. MAINTENANCE

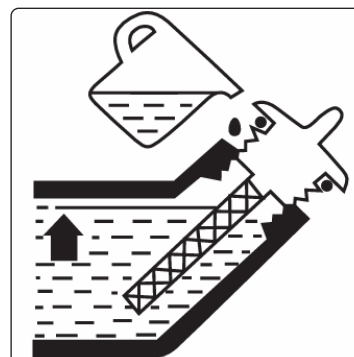
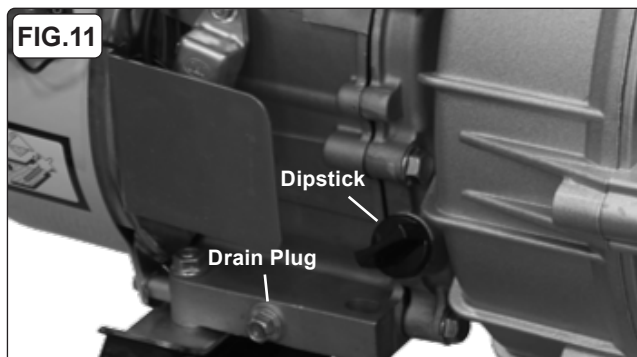
IMPORTANT: Maintenance should only be performed with the engine turned off and the unit disconnected from the inlet and outlet pipes. Ensure there is adequate workspace to safely perform maintenance. Replace or repair using recommended parts only. Unauthorised parts may be dangerous and will invalidate your warranty. Use authorised service agents only. In the case of a blockage, turn the unit off before clearing. Disassembly of the pump for maintenance is to be carried out by an authorised service centre only.

7.1. OIL

Change engine oil after the first 20 hours of operation. Thereafter, change oil every six months or every 100 hours of operation, whichever comes first. Change oil more often if engine is operated under heavy load, or in high ambient air temperatures. Use SAE 10W-30 oil or equivalent. The engine requires 0.6L to fill. Failure to change the the oil according to the conditions defined above will invalidate your warranty.

7.2. CHECKING THE OIL LEVEL (FIG.11)

Ensure the unit is on a level surface. Unscrew the dipstick/oil filler cap and wipe it clean of oil. **NOTE:** the maximum oil level should be just below the opening of the filler neck. Check the oil level by seating the dipstick into the hole without screwing it in. On removal the oil level should be between the two marks on the dipstick. If it is at the lowest level or below, top-up immediately with an SAE10W30 oil. Screw dipstick fully home to seal the oil fill hole.

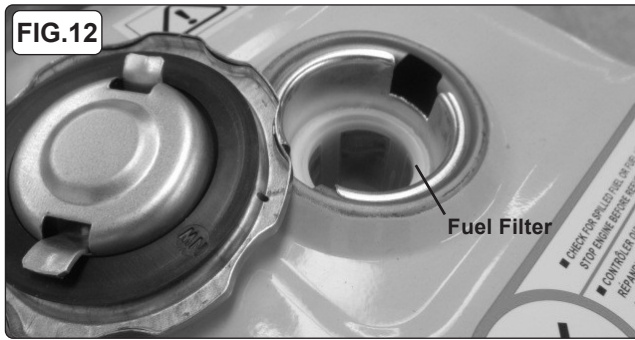


7.3. CHANGING THE OIL (FIG.11)

Operate the engine for 3 minutes to warm the oil and then stop the engine using the shut down procedure described above. Place a suitable container below the frame. Remove the plug and allow the oil to drain. Replace the drain plug and refill with fresh oil. Check the oil level using the dipstick. Dispose of the old oil according to local authority guidelines.

7.4. FUEL FILTER (FIG.12)

The fuel filter is in the neck of the fuel tank. Clean it every 300 hours.



7.5. AIR FILTER (FIG.13 & 14)

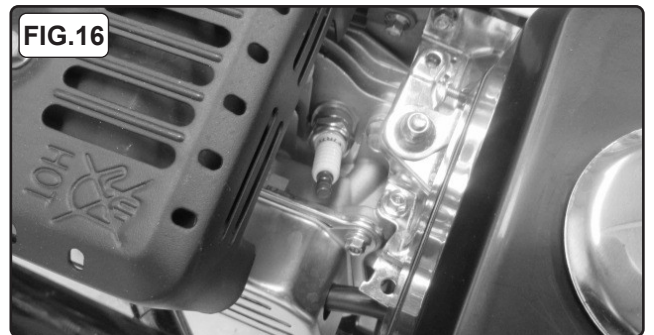
To access the air filter element unscrew and remove the wing nut on the top of the cover. Lift the air filter cover off its threaded mounting rod. Remove the foam filter from the air intake base moulding. Wash the foam element with a household detergent or a high flash-point solvent and squeeze dry. When the element is thoroughly dry soak it in clean engine oil. Squeeze out any excess oil. Refit foam element in the air intake base moulding. Place the air filter cover onto the threaded rod and secure with the wing nut.

NOTE: The foam element should be replaced after every 300 hours of service.



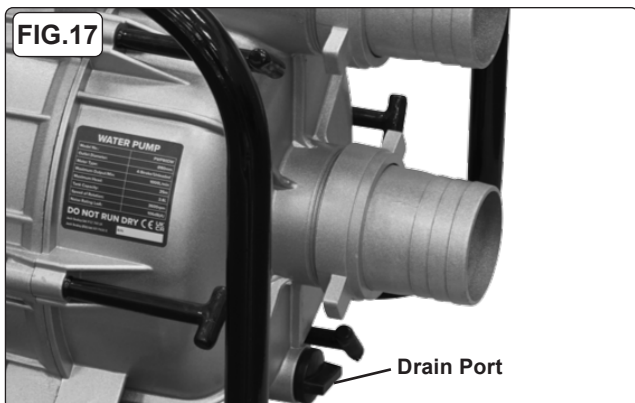
7.6. SPARK PLUG (FIG.15 & 16)

To remove the spark plug, pull off the spark plug lead and remove the spark plug using the spark plug wrench supplied. **NOTE:** Care must be taken if the engine is hot due to the close proximity of the exhaust silencer to the spark plug. Clean spark plug using a wire brush and check the insulator for damage. Replace if damaged or at service schedule. Check the electrode clearance with a feeler gauge. Adjust if required using a plug gap tool. Clearance gap should be 0.7-0.8mm. Replace spark plug and refit plug lead.



7.7. WINTER STORAGE (FIG.17)

To prevent ice damage to the pump during winter storage drain water out of the pump by removing the stopper from the drain port. Replace the stopper when all water has drained out.



7.8. PUMP SEALS

During the course of the working life of the pump it may be necessary to replace the pump seals. If this service is required the unit should be returned to your local Sealey stockist for maintenance by qualified engineers.

8. ENGINE MAINTENANCE SCHEDULE

OPERATION HOURS		DAILY	FIRST MONTH OR 20HRS	EVERY 3 MONTHS OR 50HRS	EVERY 6 MONTHS OR 100HRS	EVERY 12 MONTHS OR 300HRS
Check and tighten nuts and bolts	Check	✓				
Engine Oil	Oil Level Check	✓				
	Replace		✓		✓	
Replace air filter	Check	✓				
	Clean			✓		
	Replace					✓
Spark Plug	Clean / Adjust				✓	
	Replace					✓
Fuel Tank & Fuel Filter	Clean					✓
Fuel Supply Line	Check	Every 2 years (replace if required)				
Carburettor Deposit Cup	Clean				✓	
Idling & Throttle	Check / Adjust					✓
Intake & Exhaust Valve clearances	Check / Adjust					✓

9. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
No output from pump	Not fully primed	Open priming port and fill chamber with water
	Inlet pipe leakage	Tighten clamp and/or renew pipe
	Pump speed too slow	Investigate cause / increase speed if required
	Filter basket is clogged	Remove obstruction / debris
	Suction / overall head too high	Reduce installation height to recommended levels
	Damaged pump seal causing air leak	Return to Sealey stockist to install new seals
Insufficient flow of water	Filter basket, impeller or pipeline obstructed	Inspect and clear obstruction
	Speed is too slow	Increase speed
	Impeller seal badly worn	Return to Sealey stockist for adjustment or replacement
	Inlet pipe leakage	Tighten clamp and/or renew pipe
	Damaged impeller	Return to Sealey stockist for replacement
Excessive fuel consumption	Impeller rubbing on casing	Return to Sealey stockist for adjustment
	Impeller obstructed by weeds or foreign matter	Clear obstruction
Flow ceases suddenly	Inlet connector loose and leaking	Tighten connector locking ring
	Cavitation caused by too high a suction head	Lower the position of the pump
Unit noisy & vibrating	Cavitation caused by too high a suction head	Lower the position of the pump
	Excessive water output	Decrease speed to reduce output
	Input pipe obstructed by foreign body	Inspect and clear obstruction
	Loose rotary part	Return to Sealey stockist for identification and replacement
	Unstable pump installation	Stop engine and consolidate position of unit
	Air in the pump or pipeline	Stop engine, open priming port to release air
	Impeller damaged	Return to Sealey stockist for replacement



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



REGISTER YOUR PURCHASE HERE

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

Jack Sealey (EU) Ltd t/a Sealey Group Farney Street, Carrickmacross, Co. Monaghan, A81 PK68 Ireland
Jack Sealey Ltd t/a Sealey Group Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk, IP32 7AR UK
Tel: 01284 757500 • **Email:** sales@sealey.co.uk • **Web:** www.sealey.co.uk