

# HYUNDAI

## WATER/TRASH/CHEMICAL PUMPS

Models HY50/HYC50/HY80/HYT80



## User Manual

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## PREFACE

Thank you for purchasing a Hyundai water pump.

Please keep a copy of this manual for your reference.

This manual should be kept with this water pump for future reference and be given with it if resold. This is important to ensure the correct and safe running of this water pump for all current and future users. This owner's manual contains instructions for the 2" and 3" water pumps. It is extremely important that these instructions are read thoroughly before operating the water pump in order to obtain the best results. If any problems occur in relation to this water pump, please call us to speak to a technical advisor. All of the information and diagrams contained in this manual are correct and relevant at the time of publishing. We reserve the right to make changes to this manual at any time without prior notice.

Our range of water pumps are designed to give safe and reliable service if the instructions contained in this manual are followed carefully. For this reason it is important to read and understand all information contained in this manual before attempting to operate the water pump. Failure to comply with these instructions may result in personal injury or damage to the water pump.

Clean water pumps and high pressure water pumps in our range have been designed for pumping clean fresh water only.

Trash pumps have been designed to deal with debris up to 25mm in diameter.

Chemical pumps can be used for the transmission of weak acid and bases (pH 4-11) and commonly used for liquid fertilizer and seawater.

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## 1. SAFETY

- 1.1 The operator of the machine is responsible for and has a duty of care in making sure that the machine is operated safely and in accordance with the instructions in this user manual. Please note the following safety points.
- 1.2 The machine should never be left in a condition which would allow an untrained or unauthorised person/s to operate this machine.
- 1.2.1 All due care and diligence should be taken by the operator for the safety of and with regard to those around whilst using the machine.
- 1.2.2 Some or all of the following PPE, Warning Signs and symbols may appear throughout this manual and you must adhere to their warning/s. Failure to do so may result in personal injury.

### Personal Protective Equipment (PPE)



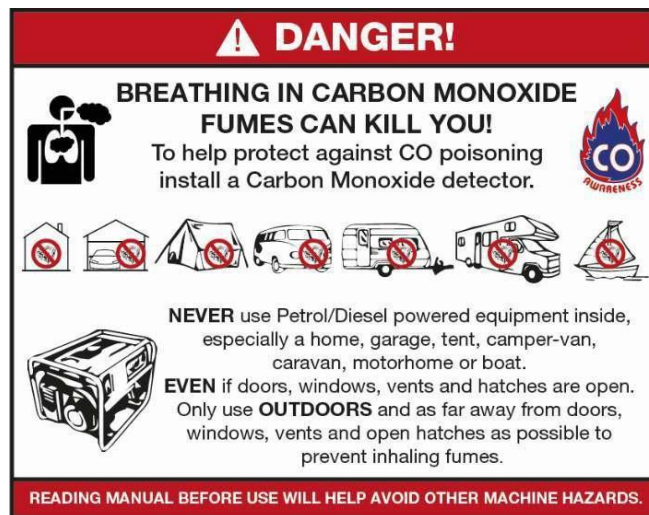
### Warning Signs and Symbols – FOLLOW safety messages to avoid or reduce risk of injury or death.

 <b>DANGER</b>  DANGER - indicates a hazard, which, if not avoided, could result in serious injury or death.	 <b>WARNING</b>  WARNING - indicates a hazard, which, if not avoided, could result in serious injury or death.	 <b>CAUTION</b>  CAUTION - indicates a hazard which, if not avoided, might result in minor or moderate injury.	 <b>NOTE</b>  NOTE - indicates a situation that could easily result in equipment damage.	  READ MANUAL	
 EXPLOSION	 FIRE	 ELECTRIC SHOCK	 TOXIC FUMES	 KICKBACK	 FLUID INJECTION
 HOT SURFACE	 FLYING OBJECTS	 SLIPPERY	 FALL	 MOVING PARTS	 HOSES UNDER PRESSURE

### 1.3 Carbon monoxide.




- 1.3.1 Carbon monoxide is a colourless and odourless gas. Inhaling this gas can cause death as well as serious long term health problems such as brain damage.
- 1.3.2 The symptoms of carbon monoxide poisoning can include but not limited to the following;
  - 1.3.2.1 Headaches, dizziness, nausea, breathlessness, collapsing or loss of consciousness.
  - 1.3.2.2 Carbon monoxide symptoms are similar to flu, food poisoning, viral infections and simply tiredness. It is quite common for people to mistake this very dangerous poisoning for something else.
- 1.3.3 To avoid carbon monoxide poisoning DO NOT use Petrol/Diesel powered equipment inside a home, garage, tent, camper van, mobile home, caravan or boat. The list is not exhaustive if you are in any doubt contact your dealer.
- 1.3.4 If you think you or someone around you has been affected by carbon monoxide poisoning;
  - 1.3.4.1 Get fresh air immediately, by opening doors and windows, turning off the machine and leaving the affected area.
  - 1.3.4.2 See your doctor immediately or go to hospital - let them know that you suspect carbon monoxide poisoning.
- 1.3.5 **DO NOT** use in an enclosed area or a moving vehicle.



### 1.4 General fuel safety.



- 1.4.1 Fuel Safety additional information can be obtained from the Health and Safety Executive.
- 1.4.2 All fuels are flammable.  **CAUTION**
- 1.4.3 Keep away from all ignition sources i.e. heaters, lamps, sparks from grinding or welding.
- 1.4.4 Hot work on tanks that have contained fuel is extremely dangerous and should not be carried out.
- 1.4.5 Keep work area clean and tidy.
- 1.4.6 Clean up all spills promptly using correct methods i.e. absorbent granules and a lidded bin.
- 1.4.7 Dispose of waste fuels correctly.



### 1.5 Petrol safety.

- 1.5.1 Always fuel and defuel in well-ventilated area.
- 1.5.2 Always wear correct, suitable and fit for purpose Personal Protective Equipment (PPE), suggested items are as follows, but are not limited too.

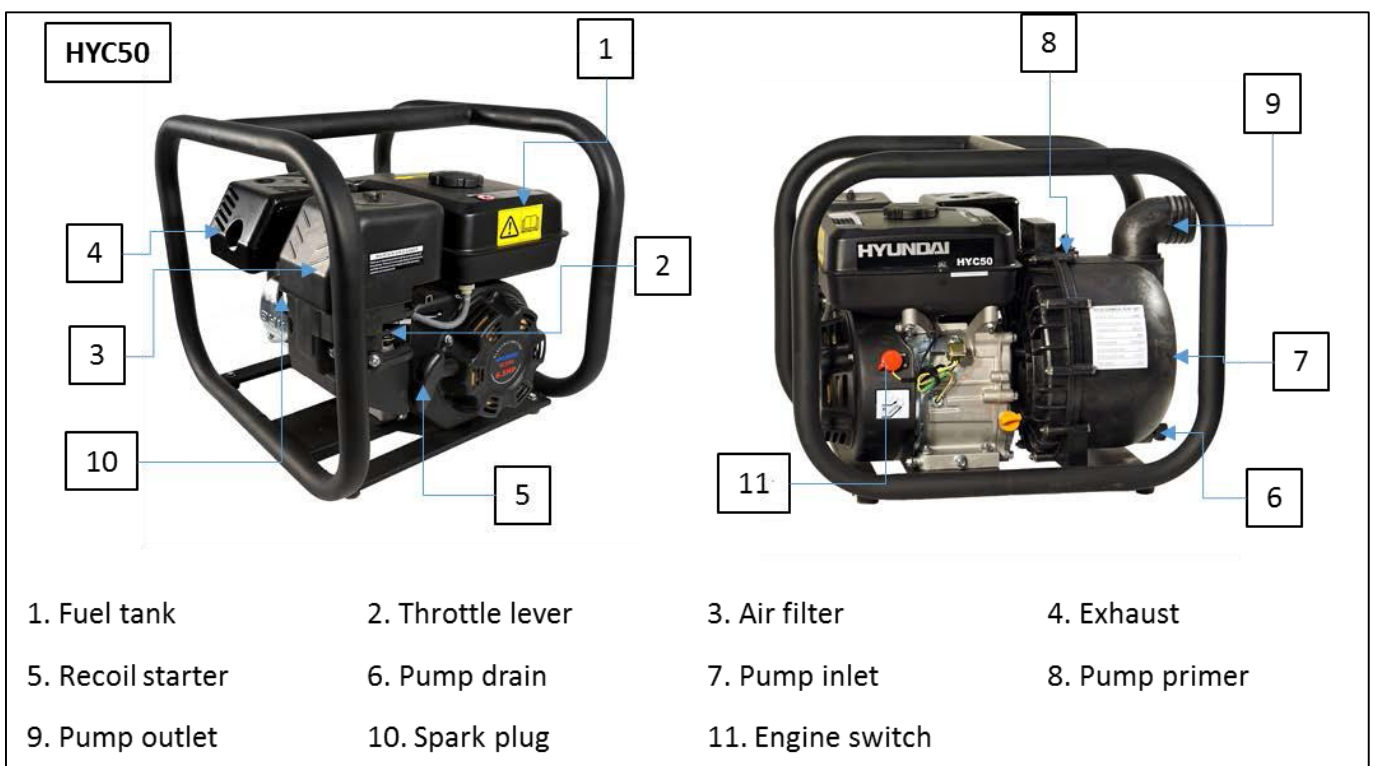
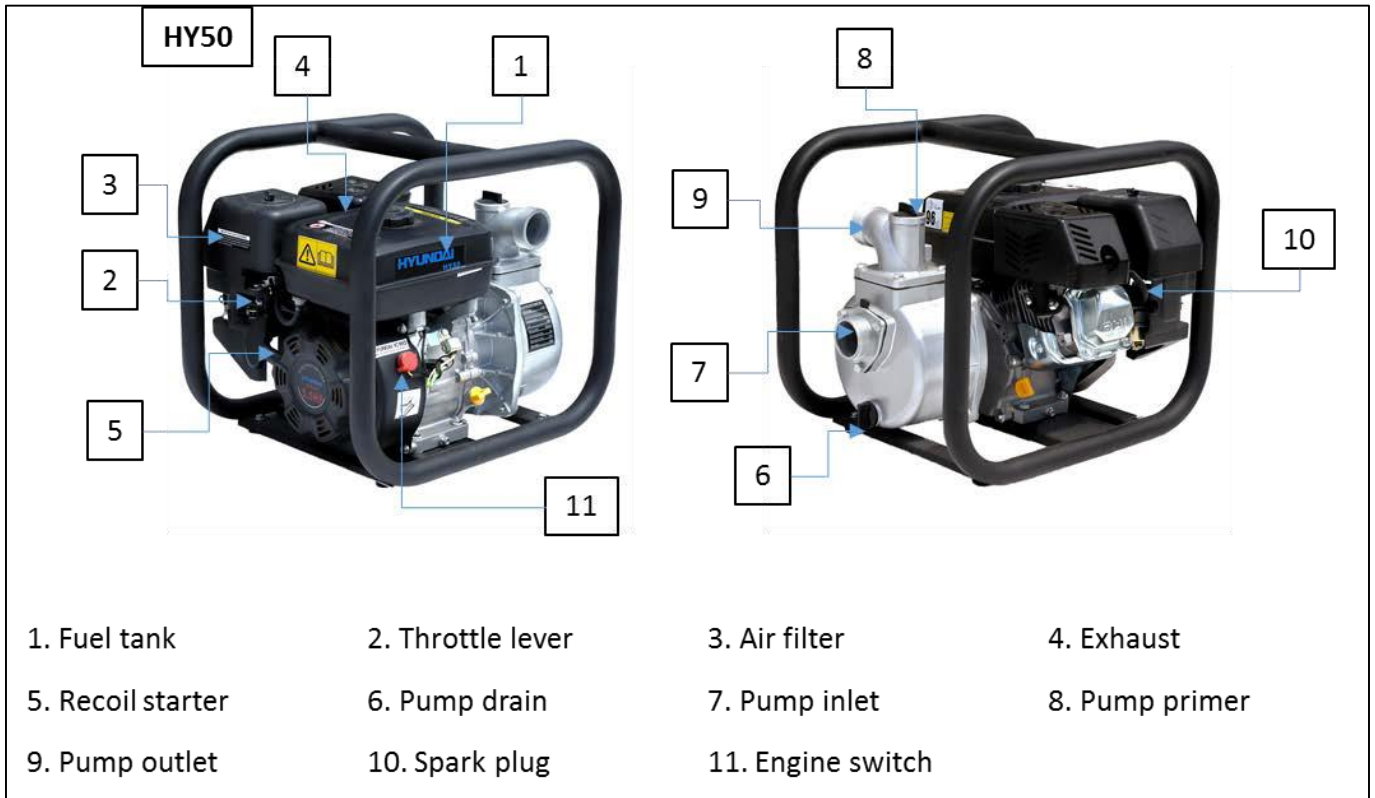


- 1.5.3
  - 1.5.4 Respiratory protective equipment should be used when in an unventilated area.
  - 1.5.5 When defueling always use a propriety fuel retriever.
  - 1.5.6 Always carry fuel in the correct and clearly marked container.
- 1.6 Additional Safety guidelines.
- 1.6.1 To prevent fire.
    - 1.6.1.1 Never add fuel to the fuel tank whilst the engine is running. Wipe away any spilt fuel or oil with a clean cloth before operating. Keep explosives and any other flammable products away from the machine at all times.
    - 1.6.1.2 To prevent fire and to provide adequate ventilation, keep the machine at least one metre away from buildings and other equipment during operation.
    - 1.6.1.3 Operate the machine on level ground. - Do not place the machine indoors whilst the engine is still hot.
    - 1.6.1.4 To prevent inhaling exhaust fumes.
    - 1.6.1.5 Exhaust gas contains poisonous carbon monoxide which is harmful to health and can kill.
    - 1.6.1.6 For this reason, never use the machine in a closed area or areas with poor ventilation.
  - 1.6.2 To prevent burns.
    - 1.6.2.1 The muffler and the engine body becomes very hot whilst the engine is running or just after running.
    - 1.6.2.2 To prevent any burns, do not touch these parts during these times.
    - 1.6.2.3 Careless or improper use of any water pump may cause serious or fatal injury.
  - 1.6.3 If you are unsure how to use the machine you must read all of this manual and get your dealer to demonstrate its use.
  - 1.6.4 Observe all applicable local safety regulations and standards.
  - 1.6.5 Children should never be allowed to use this machine.
  - 1.6.6 Bystanders, especially children, and animals should not be allowed in the area where a water pump is in use.
  - 1.6.7 The operator is responsible for avoiding injury to third parties and damage to their property.
  - 1.6.8 Do not lend or rent your water pump without the owner's manual. Be sure that anyone who uses your water pump fully understands the information contained in this manual.
  - 1.6.9 You must be fit to work with a water pump.
  - 1.6.10 You should not operate the machine if you are not well or physically unable. if you get tired, take a break in good time.
  - 1.6.11 Do not operate the blower/vacuum if you are under the influence of any substance (drugs, alcohol, etc.) which might impair vision, dexterity or judgment.
  - 1.6.12 Only attachments supplied are expressly approved for use with your specific model are authorised.
    - 1.6.12.1 Other attachments must not be used because of the increased risk of accidents.
    - 1.6.12.2 No liability will be accepted for personal injury and damage to property caused while using unauthorised attachments.
  - 1.6.13 Before starting check the following points:
    - 1.6.13.1 The choke lever must move freely.
    - 1.6.13.2 The stop switch must move easily to "OFF"
  - 1.6.14 Tightness of spark plug cap - if cap is loose, sparks may occur and ignite the escaping fuel vapours.
- 1.7 Starting.
- 1.7.1 For safety reasons, this water pump must not be used in potentially explosive atmospheres.
  - 1.7.2 Start the engine at least 3 m (10 ft.) from the fueling spot, outdoors only.
  - 1.7.3 To reduce the risk of breathing toxic fumes, never start or run your unit in confined spaces.
  - 1.7.4 Place the machine on firm level ground in an open area.
  - 1.7.5 Make sure you have good balance and secure footing and hold the unit securely.
  - 1.7.6 DO NOT allow other persons to be near the running unit - even when starting. For specific

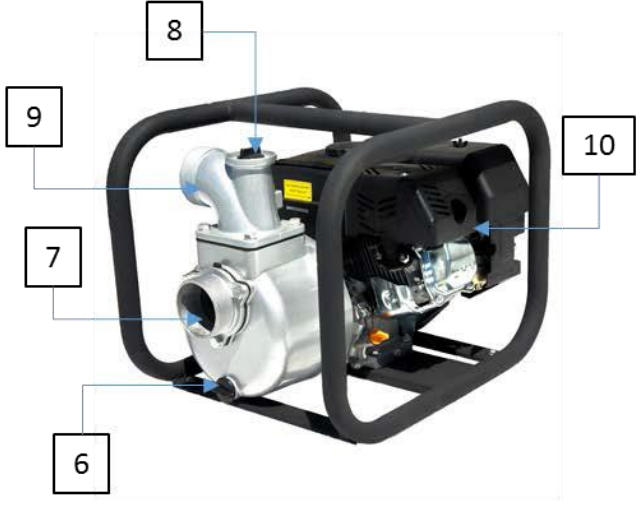
starting instructions, see chapter "Starting and Stopping the machine" in the owner's manual.

- 1.7.7 Take care in slippery conditions such as on ice, in wet or snow and on slopes or uneven ground.
- 1.7.8 Watch out for obstacles, such as roots, ditches, holes or rubbish which could cause you to trip or stumble.

## 2. COMPONENT LOCATION

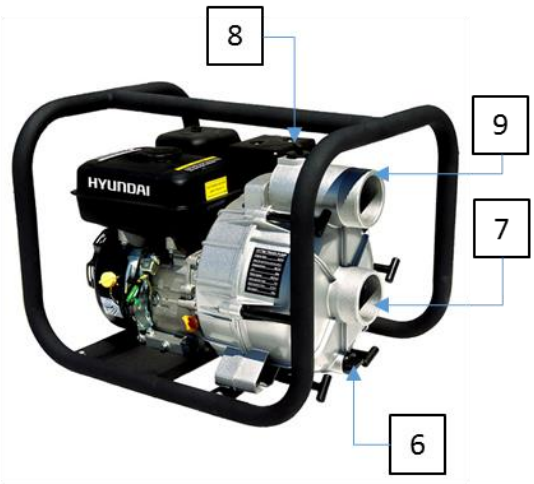


**HY80**



- |                   |                   |                   |                |
|-------------------|-------------------|-------------------|----------------|
| 1. Fuel tank      | 2. Throttle lever | 3. Air filter     | 4. Exhaust     |
| 5. Recoil starter | 6. Pump drain     | 7. Pump inlet     | 8. Pump primer |
| 9. Pump outlet    | 10. Spark plug    | 11. Engine switch |                |


**HYT80**



- |                   |                   |                   |                |
|-------------------|-------------------|-------------------|----------------|
| 1. Fuel tank      | 2. Throttle lever | 3. Air filter     | 4. Exhaust     |
| 5. Recoil starter | 6. Pump drain     | 7. Pump inlet     | 8. Pump primer |
| 9. Pump outlet    | 10. Spark plug    | 11. Engine switch |                |



### 3. PRE-OPERATION INSPECTION

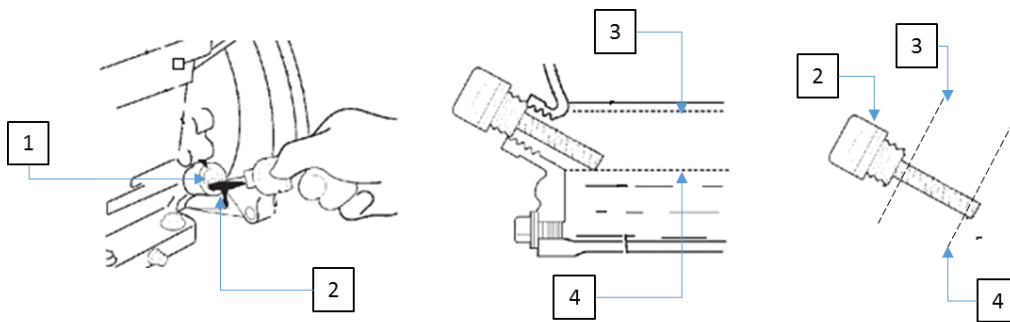
 **WARNING** Failure to maintain this pump or deal with any problems that arise before operation could cause a malfunction in which you could be seriously injured.

- 3.1. For your safety and to maximize the service life of the water pump, it is important to check the pump over before use. If any problems are found, you **MUST** make sure that they are dealt with by the appropriate person before you operate the pump.
- 3.2. The exhaust gas contains poisonous carbon monoxide gas and so it is important to avoid inhalation of these fumes. Ensure that you are using the water pump in a well ventilated area and never use in a closed garage or other closed area. To prevent fire hazards, keep the water pump away from all walls and do not place flammable objects close to the engine. Before beginning your pre-inspection checks ensure the pump is on a level surface and the ignition switch is in the 'OFF' position.
- 3.3. Routine check.
  - 3.3.1. Check around and underneath the water pump for signs of oil or fuel leaks.
  - 3.3.2. Remove any dirt or debris, especially from the engine muffler and recoil starter.
  - 3.3.3. Look for any signs of damage.
  - 3.3.4. Check that all nuts, bolts, screws, hose connectors and clamps are tightened.
- 3.4. Suction & discharge hose checks.
  - 3.4.1. Check the general condition of the hoses.
  - 3.4.2. Before connecting the hoses to the water pump, make sure that they are in good condition.
  - 3.4.3. Remember that the suction hose must be of a reinforced construction to prevent the hose from collapsing.
  - 3.4.4. Check that the sealing washer in the suction hose connector is in good condition. If there are any leaks or a poor connection, the pump will draw in air and will not function.
  - 3.4.5. Check that the hose connectors and clamps are securely installed.
  - 3.4.6. Check that the strainer is in good condition and is secured on the suction hose.
- 3.5. Engine oil check.

 **WARNING** Operating the water pump with a low oil level will damage the engine.

 **NOTE** Before checking oil place the water pump on a flat level surface.

- 3.5.1. Remove the oil filler cap (1) and wipe the dipstick clean.
- 3.5.2. The oil level should be at the top of the filler neck.
- 3.5.3. If the oil level is low, add the recommended oil to bring the level to the top of the filler neck.
- 3.5.4. After adding the oil, remember to refit and screw down the oil dipstick.



1. Oil filler hole  
2. Oil dipstick  
3. Upper oil level  
4. Lower oil level

### 3.6. Air filter check.

**NOTE** Ensure that the assembly of the air filter is correct. Never run the water pump without the air filter or with a damaged air filter.

- 3.6.1. A dirty air filter will restrict air flow to the carburetor, reduce engine performance and thereby reduce the water pump performance. For this reason, it is important to check the air filter regularly.
- 3.6.2. The images on following page are representative of the models there may be differences but the removal and cleaning process is a common approach to each model.
- 3.6.3. Undo air filter cover Allen screw/wing nut (1) and remove cover.
- 3.6.4. Remove air filter cartridge (2).
- 3.6.5. Remove, inspect and clean foam element (3) all models. Clean by washing in warm soapy water, rinse with fresh water and allow to dry fully, soak it in clean engine oil until it has saturated and then squeeze out excess oil before refitting. Replace damaged foam filter elements.
- 3.6.6. Paper elements must be have all dust and dirt blown out using a low pressure airline. Replace damaged paper filter elements.
- 3.6.7. Clean the lower body of the air filter, housing and rubber cushions. It is important to prevent dust from entering into the path of the oil carburetor.

#### All models



1

1. Air filter cover wing nut.



2

2. Air filter cartridge.



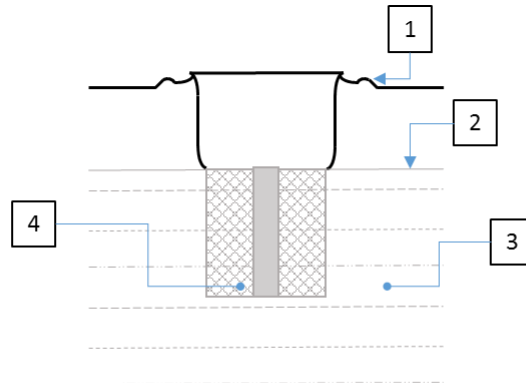
3

3. Air filter foam element

### 3.7. Fuel level check.

**NOTE** Do not add fuel over the fuel strainer shoulder (maximum level (2)). Fuel can damage paint and plastic. Be careful not to spill fuel when filling your fuel tank.

- 3.7.1. Before each operation of the water pump, check the fuel level with the water pump placed on a level ground. Un-screw the fuel tank cap and check the fuel level. If the level is too low, add fuel, screw on the fuel tank cap and tighten it.
- 3.7.2. Only use straight unleaded petrol (3).
- 3.7.3. Never use stale or contaminated petrol or a mixture of oil and petrol and avoid getting dirt or water in the fuel tank.



1. Fuel tank top.      2. Fuel upper limit.      3. Fuel.      4. Filter gauze

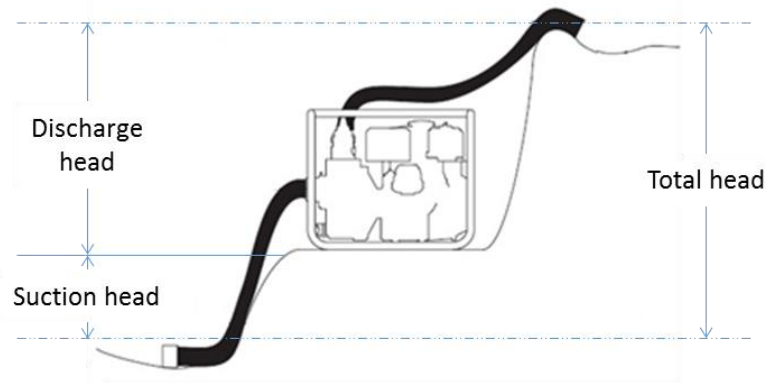
## 4. ASSEMBLY & OPERATION

### 4.1. Safe Operating Precautions.

- 4.1.1. To ensure safe usage of the water pump, you must make sure that you fully understand how to operate it properly and how to use the controls.
- 4.1.2. Before operating the water pump for the first time, please make sure you have read the SAFETY Instructions and PRE-OPERATION inspection elements of this manual carefully.
- 4.1.3. Exhaust contains poisonous carbon monoxide fumes that can build up to dangerous levels in enclosed areas. Breathing in carbon monoxide fumes can cause unconsciousness or death.

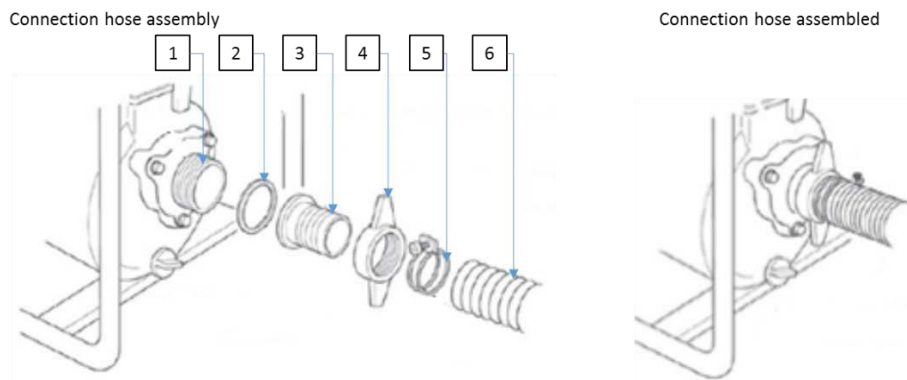
### 4.2. Pump placement.

- 4.2.1. For best pump performance, place the water pump near the water level and use hoses of the correct length and no longer than is necessary. This will allow the pump to produce the greatest output.
- 4.2.2. As the head increases, the pump output decreases. The length, type and size of both the suction and discharge hose can also significantly affect the pumps output. By placing the pump near water level, therefore minimizing the suction head, this also reduces priming time.



#### 4.3. Connecting suction hose, N.B. suction hose not supplied.

- 4.3.1. Place the supplied sealing washer (2) over the supplied suction port (1). Before using the connector sealing washer (1) make sure that it is in good condition.
- 4.3.2. Offer the supplied hose connector (3) to sealing washer (2) then put the supplied hose clamp ring (4) over hose connector and tighten in a clockwise direction.
- 4.3.3. Take the supplied hose clamp ring (5) over the end of the suction hose (6) then push suction hose over the end of the hose connector. Once in place move the hose clamp into position and tighten screw in a clockwise direction until hose is secured to prevent air entering pump and to prevent water leakage.



#### 4.4. Connecting the hose strainer.

- 4.4.1. Install the supplied hose strainer (1) (provided with the pump) on the end of the suction hose (3) (not supplied) and secure it with a hose clamp (2). The strainer will help prevent the pump from becoming clogged or damaged by debris.
- 4.4.2. The hose strainer (1) is fitted at the opposite end of the suction hose (3).
- 4.4.3. Take the hose clamp ring (2) and place over the end of the suction hose (3), then push suction hose over the end of the hose strainer (1). Tighten the hose clamp ring screw (2) in a clockwise direction until hose is firmly secured to prevent air entering pump and to prevent water leakage.

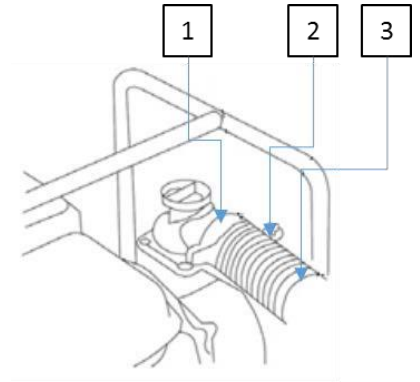
#### 4.5. Hose diameters.

- 4.5.1. The hose diameter should be no wider than the water suction port diameter. Minimum hose diameters should be as follows:
  - 4.5.1.1. 2" Water Pump - 50mm.
  - 4.5.1.2. 3" Water Pump - 80mm.

#### 4.6. Installing the discharged hose – not supplied.

4.6.1. Connect the discharge hose(3) to the to the hose connector (1) and hose clamp (2) provided with the pump to install the discharge hose, then tighten the clamp. Tighten the hose clamp ring screw in a clockwise direction until hose is firmly secured to prevent hose becoming detached.

4.6.2. For best results use a short, large-diameter hose as it will reduce fluid friction and improve the pump output.



#### 4.7. Priming the Pump.



#### NOTE

Operating the pump in a dry unprimed condition will damage the pump seal.

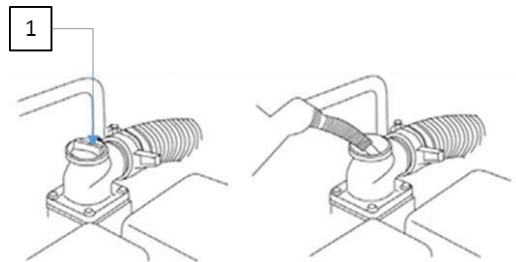
If the pump has been accidentally operated in a dry state, stop the engine immediately and allow it to cool before priming.

4.7.1. Before starting the engine, place the water pump on a flat level surface and fill the pump with water.

4.7.2. Unscrew the priming plug (1) and fill the pump full with clean water.

4.7.3. After priming, reinstall the priming plug and tighten.

4.7.4. DO NOT unscrew the priming plug during operation of the water pump.



#### 4.8. Using at high altitudes.

4.8.1. At high altitude, the standard carburetor air-fuel mixture will be excessively rich.

4.8.2. As a result output power will decrease, and fuel consumption will increase. The Air-fuel mixture will be very likely to make the spark plug dirty and make starting difficult.

4.8.3. The engine performance can be improved by installing a main fuel jet of a smaller diameter in the carburetor and readjusting the pilot screw. If you intend to regularly use the water pump at altitudes greater than 1000m above sea level, contact us regarding a carburetor modification.

4.8.4. Even with a suitable carburetor, the engine horsepower will decrease by around 3.5% for each 300 meter increase in altitude. The effect of altitude on horsepower will be greater than this if a carburetor modification is not made.



#### NOTE

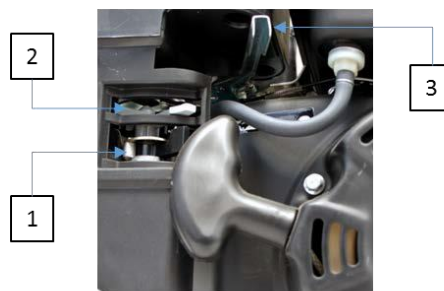
If a carburetor suitable to high altitude is equipped with an engine suitable to a lower altitude, the lean air fuel mixture will lead to lower engine output power, over-heating and serious damage.

## 5. STARTING & STOPPING THE ENGINE

### 5.1. Starting the engine.

- 5.1.1. Before starting/operating the water pump, please ensure that you are familiar with each control function and know how to operation these functions in the event of an emergency.
- 5.1.2. Check that the engine has been filled with oil and fuel.
- 5.1.3. Where fitted move the fuel valve lever (1) to the 'ON' position.
- 5.1.4. If the engine is cold, move the choke lever (2) to the 'CLOSED' position.
- 5.1.5. Adjust the throttle lever (3) and to change the speed of the engine, which will change the flow rate of water. For a higher flow rate set the throttle lever to the 'HIGH' position, and for lower flow rate set the throttle lever to a 'LOW' position.

Models - HY50/HYT50/HYC50/HY80/HYT80



1. Fuel lever      2. Choke lever      3. Throttle lever

- 5.1.6. Turn the engine switch (1) to the 'ON' position.

Models - HY50/HYC50/HY80/HYT80



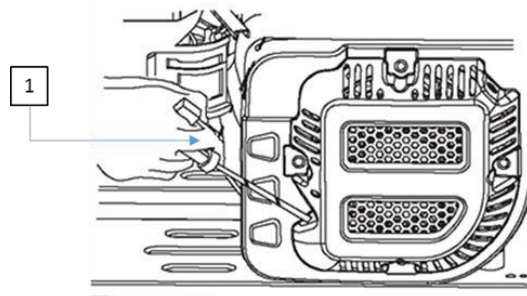
1. Engine switch

- 5.1.7. Pull the recoil starter handle (1) lightly until resistance is felt, then pull it briskly.



**CAUTION**

DO NOT allow the starter grip to snap back. Return it gently to prevent personal injury and damage to the engine.



1. Recoil starter handle

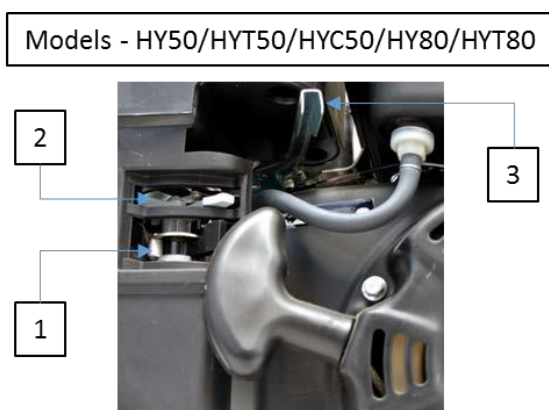
## 5.2. Stopping the engine.

5.2.1. Move the engine switch (1) on models HY50/ HYC50/HY80/HYT80 to the OFF position and the engine will come to a stop.



1. Engine switch

5.2.2. Once the machine has stopped turn the fuel valve lever (1) off.



1. Fuel lever

2. Choke lever

3. Throttle lever

5.2.3. After use, remove the pump drain plug (6 component locations section 2) and drain the pump chamber.

5.2.4. Remove the filler cap (8 component locations section 2) and flush the pump chamber with clean, fresh water.

5.2.5. Allow the water to drain from the pump chamber, then replace the filler cap and drain plug.

## 6. MAINTENANCE

6.1. Good maintenance is essential for safe, economical, and trouble-free operation. It will also help reduce air pollution. The maintenance schedule applies to normal operating conditions. If you operate your pump under severe conditions such as sustained high-load or high-temperature operation or use in unusually wet or dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

6.2. Maintenance schedule.

Regular service period		Every use	1 <sup>st</sup> month or 20 hours	Every 3 months or 50 hours	Every 6 months or 100 hours	Every year or 300 hours
Engine oil	Check level	O				
	Change		O		O	
Air filter	Check	O				
	Clean			O (1)		
Sediment cup	Clean				O	
Spark plug	Clean				O	Change
Valve clearance	Readjust				O	O (2)
Cylinder head	Wash	Every 300 hours (2)				
Fuel tank and strainer	Wash	Every 2 years (2)				
Fuel pipe	Change	Every 2 years (2)				
Impeller	Check					O (2)
Impeller clearance	Check					O (2)

6.2.1. (1) Service more regularly when pump is used in dusty areas.

6.2.2. (2) These items should be serviced by a company authorised to do so by an approved Hyundai dealer.



### WARNING

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction which may cause you serious injury or being killed. Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

6.3. Engine oil change.

6.3.1. Drain the used oil whilst the engine is warm. Warm oil drains quickly and completely. Be careful to avoid injury from hot oil.

6.3.2. Place a suitable container (4) below the engine to catch the used oil, then remove the oil filler cap/dipstick (1) and the drain plug (3) and washer (4).

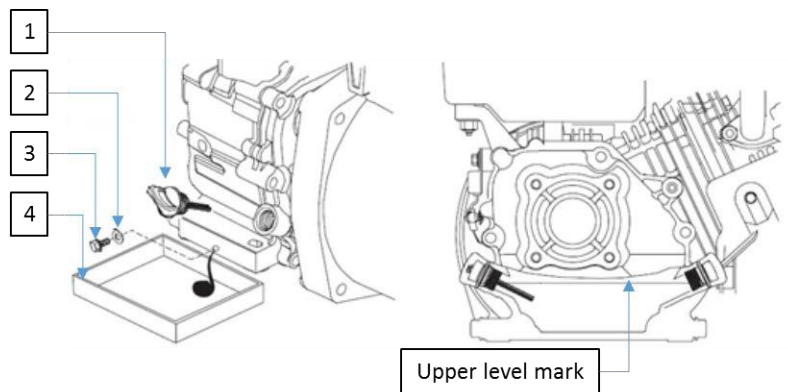
6.3.3. Allow the used oil to drain completely and then replace the drain plug and tighten it securely.

6.3.4. Please dispose of the used oil in an environmentally friendly way.

6.3.5. We suggest that you take the used oil in a sealed container to your local recycling centre. Do not throw it away, pour it on the ground or down the drain.

6.3.6. Place the engine on a level ground. Fill it to the upper level mark with the recommended oil.





**CAUTION** Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods.

Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

#### 6.4. Recommended oil.

6.4.1. Engine oil is a major factor affecting engine performance and service life. Non-detergent and 2-stroke engine oils will damage the engine and are not recommended.

6.4.2. The recommended oil is a 4-stroke petrol engine oil is SAE15W-40 or equivalent to SG grade. The recommended operating temperature of this pump is between -5°C and 40°C.

#### 6.5. Air filter service – see section 4.7.



**NOTE**

Never run the engine without the air filter or use a damaged air filter. This will result in damage to the engine.

6.5.1. A dirty air filter will restrict air flow to the carburetor, reducing engine performance. If you operate the water pump in particularly dusty areas, the air filter will need to be cleaned more regularly than specified in the maintenance schedule.

#### 6.6. Spark plug service.



**NOTE**

Using the wrong type of spark plug can result in engine damage.

6.6.1. Recommended spark plugs: NGK BP6ES or equivalent

6.6.2. Remove the spark plug cap (3) and remove any dirt from around the spark plug base.

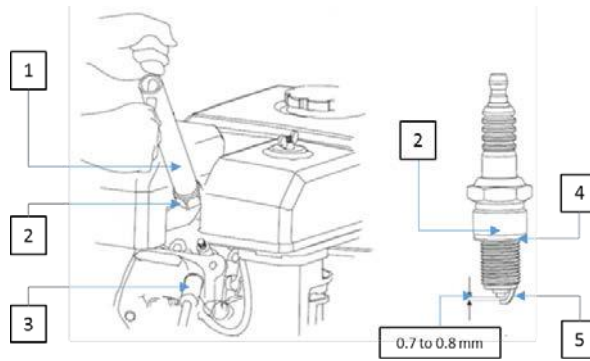
6.6.3. Use the plug wrench (1) to remove the spark plug.

6.6.4. Measure the plug gap (5) with a feeler gauge. If the electrode or insulator is damaged, replace the spark plug. Correct as necessary by carefully bending the side electrode. The gap should be between 0.7mm and 0.8mm.

6.6.5. Check if the spark plug (2) sealing washer (4) is in good condition. In order to avoid damage to the thread in the cylinder head, screw the spark plug in carefully by hand.

6.6.6. Once the spark plug has touched the washer, screw it down with a spark plug wrench and compress the washer. If a new spark plug is used, tighten the plug another half turn to compress the sealing washer. If replacing the used spark plug only tighten a 1/8 to a 1/4 turn more. The spark plug needs to be fitted firmly but not over-tightened.

6.6.7. Refit the spark plug cap.



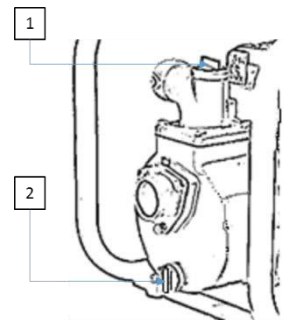
## 6.7. Engine parameters

<b>Spark Plug Gap</b>	0.7mm-0.8mm
<b>Engine Idle Speed</b>	1600 ± 160rpm
<b>Valve Clearance (Cooled)</b>	Intake valve: 0.1mm - 0.15mm Exhaust valve: 0.15mm - 0.2mm

## 7. STORAGE

### 7.1. Pump.

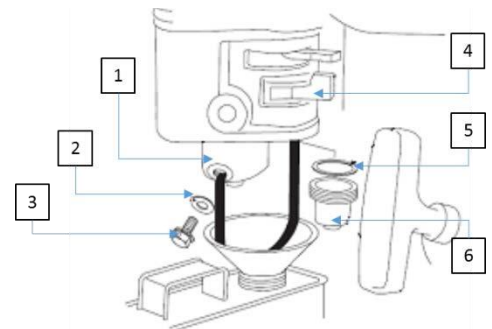
- 7.1.1. Remove the priming plug (1) and drain plug (2) from pump body, flush the chamber with clean water. Replace the priming plug and drain plug. After stopping the engine, allow it to cool for at least half an hour and then wipe clean all surfaces.



### 7.2. Carburetor.

- 7.2.1. Remove the drain plug (3) and washer (2) of the carburetor float bowl (1) and sediment cup (6) and 'O' ring (5), then open the fuel lever (4).

- 7.2.2. Completely drain the fuel from the carburetor and fuel tank, then replace the sediment cup and drain plug and re-tighten them.



### 7.3. Engine oil.

- 7.3.1. Change the engine oil.

- 7.3.1.1. Remove the spark plug.

- 7.3.1.2. Pour a tablespoon (5-10cc) of clean engine oil into the cylinder. Crank the engine several revolutions to distribute oil around the cylinder bore. Replace the spark plug.

- 7.3.1.3. Pull the starter grip slowly until resistance is felt, then release. This ensures that intake and exhaust valves are kept closed to restrict moisture entering the cylinder head.

## 8. TROUBLESHOOTING

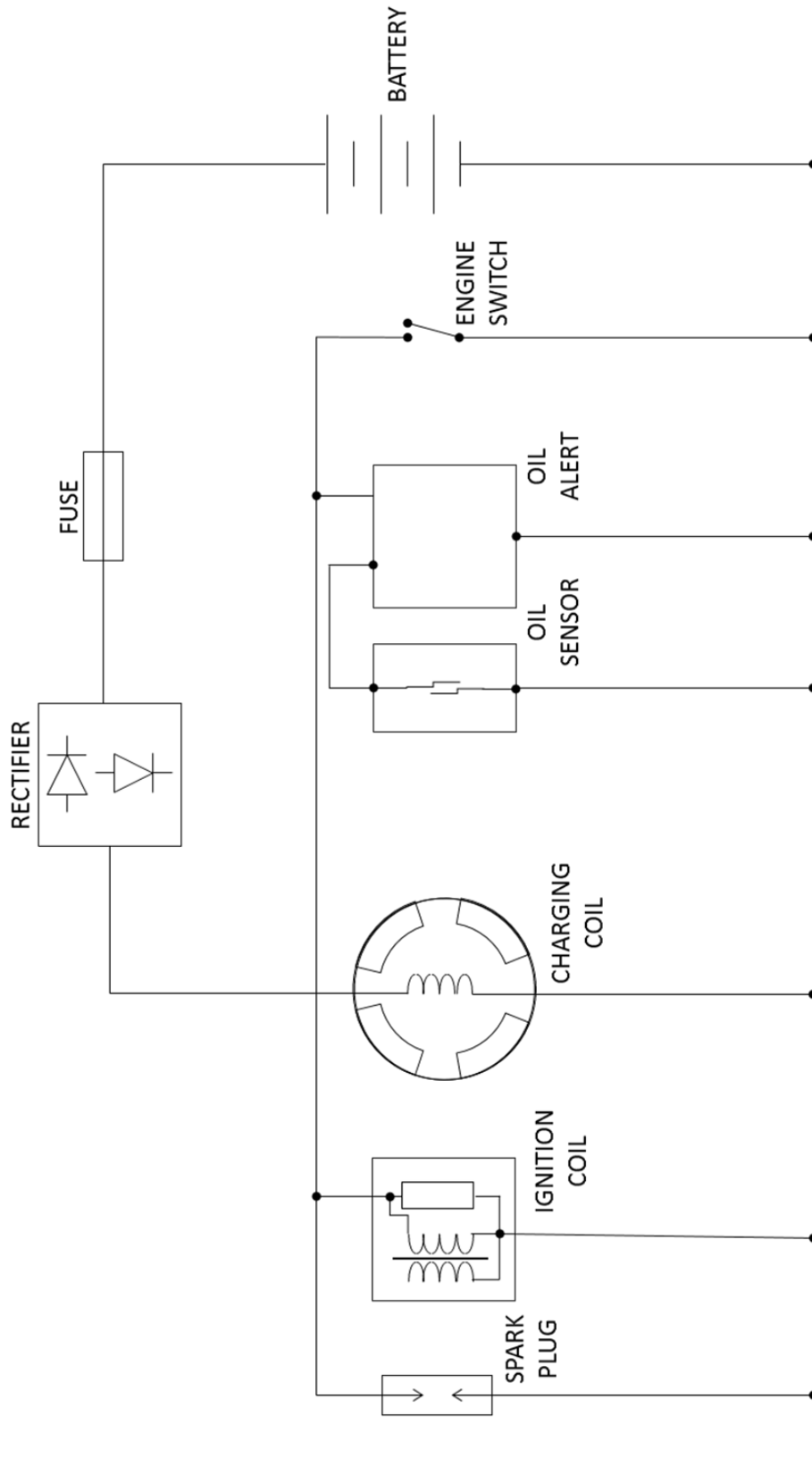
### 8.1. Engine.

Engine will not start	Cause	Corrective measure
Check controls	Fuel Valve 'OFF'	Move fuel valve lever to 'ON' position
	Choke 'OPEN'	Move the choke lever to the 'CLOSED' position unless the engine is warm
	Engine Switch 'OFF'	Turn engine switch to 'ON'
Check Fuel	Out of Fuel	Refuel
	Bad fuel, pump has been stored without treating or draining fuel or refueling with bad fuel	Drain the fuel tank and carburetor and, refuel with fresh fuel
Remove and inspect the spark plug	Faulty spark plug or improperly gapped	Adjust gap or replace with a new spark plug
	Spark plug wet with fuel, flooded engine	Dry spark plug and reinstall. Start engine with throttle lever in 'FAST'
Contact dealer	Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck etc.	Return to dealer for repair

### 8.2. Water pump.

No output from pump	Cause	Corrective measure
Check pump chamber	Pump not primed	Prime pump
Check suction hose	Hose collapsed, cut or punctured	Replace hose
	Strainer not completely under water	Sink strainer and end of suction hose completely under water
	Air leak at connector	Replace sealing washer if it is missing or damaged. Tighten hose connector and clamp
	Strainer clogged	Clear debris from strainer
Measure suction and discharge head	Excessive head	Relocate pump and hose to reduce head
Check engine	Engine lack power	See engine troubleshooting above
Low pump outlet		
Check suction hose	Hose collapsed, cut or punctured	Replace hose
	Strainer not completely under water	Sink strainer and end of suction hose completely under water
	Air leak at connector	Replace sealing washer if it is missing or damaged. Tighten hose connector and clamp
	Strainer clogged	Clear debris from strainer
Check discharge hose	Hose damaged, too long or diameter too small	Replace discharge hose
Measure suction and discharge head	Excessive head	Relocate pump and hose to reduce head
Check engine	Engine lack power	See engine troubleshooting above

9. WIRING DIAGRAM



## 10. SPECIFICATIONS

<b>Model</b>	<b>HY50</b>	<b>HYC50</b>	<b>HY80</b>	<b>HYT80</b>
<b>Engine Type</b>	Hyundai IC160 -	Hyundai IC 200	Hyundai IC 200	Hyundai IC 210
<b>Engine Size cc</b>	163	196	196	212
<b>Fuel Tank - L</b>	3.6	3.6	3.6	3.6
<b>Fuel type</b>	Unleaded Petrol	Unleaded Petrol	Unleaded Petrol	Unleaded Petrol
<b>Oil Capacity - L</b>	0.6	0.6	0.6	0.6
<b>Oil type</b>	SAE15w 40	SAE15w 40	SAE15w 40	SAE15w 40
<b>Noise Level dB (A)</b>	104	104	104	104
<b>Idle Speed - rpm</b>	3600	3600	3600	3600
<b>Maximum Power @ 3600rpm- hp/kw</b>	5.5/4.2	6.5/4.85	6.5/4.85	7/5.2
<b>Drive Type</b>	Direct drive	Direct drive	Direct drive	Direct drive
<b>Start Method</b>	Recoil	Recoil	Recoil	Recoil
<b>Intake - "/mm</b>	2/50	2/50	3/80	3/80
<b>Outlet - "/inch</b>	2/50	2/50	3/80	3/80
<b>Maximum Flow Rate - L/min</b>	500	500	750	917
<b>Impeller Type</b>	Cast Iron	Nylon Fiberglass	Cast Iron	Cast Iron
<b>Pump Type</b>	Aluminum housing	Nylon Fiberglass	Aluminum housing	Aluminum housing
<b>Total Lift - m</b>	30	30	25	25
<b>Suction Lift - m</b>	8	8	6	6
<b>Maximum solids - mm</b>	7	9	9	35
<b>Gross Weight - kg</b>	25.5	27	31	37
<b>Box Dimensions L x W x H - mm</b>	520 X 410 X 430	550 X 450 X 450	540 X 450 X 450	570 x 470 x 440
<b>Fully Assembled Dimensions L x W x H - mm</b>	510 X 400 X 420	540 X 460 X 440	530 X 440 X 440	580 x 480 x 450

## 11. DECLARATION OF CONFORMITY

11.1. Genpower Ltd confirms that the Hyundai water pumps conform to the following CE directives:

- 2006/42/EC Machinery directive
- 2004/108/EC EMC directive
- 73/23/EC The low voltage directive
- 97/68/EC NRMM emissions directive

11.2. 2000/14/EC Noise emissions directive.

### EC DECLARATION OF CONFORMITY

The undersigned, as authorised by: **Genpower Ltd**

Declares that the following equipment manufactured under licence by Hyundai Korea

Conforms to the Directive: -  
**2000/14/EC (as amended)**

of the European Parliament and of the council on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors.

Equipment Category: **Water Pumps**

Product Name/Model: **Hyundai HY50/HY80/HYC50/HYT80**

Type/Serial No: **Petrol Water Pump**

Net installed power: **3.3 kW/3.8kW/3.3kW/3.8kW**

The technical documentation is kept by: **Kevin Stanley, Genpower Ltd,  
Isaac Way, Pembroke Dock,  
Pembrokeshire, SA72 4RW.**

The conformity assessment procedure followed was in accordance with annex V of the Directive.

Notified Body: **TÜV SÜD Industrie Service GmbH  
80686 München  
Westendstraße 199**

**Test Report N°70.403.07.516.16-02**

Measured Sound Power Level: **101 dB (A)**

Guaranteed Sound Power Level: **104 dB (A)**

A copy of this certificate has been submitted to the European Commission and to EU Member State United Kingdom.

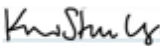
Place of Declaration: **Pembroke Dock, SA72 4RW**

Date: **6<sup>th</sup> August 2014**

Signed by: **Kevin Stanley**

Position in Company: **Product Manager**

Name and address of manufacturer or Authorised representative:  
**Genpower Ltd,  
Isaac Way, Pembroke Dock,  
Pembrokeshire, SA72 4RW.**



## 12. CONTACT DETAILS

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[www.hyundaipowerequipment.co.uk](http://www.hyundaipowerequipment.co.uk)