

IDEAL

GASOLINE WATER PUMP ID PW38

Part No.: 26326

OPERATION INSTRUCTIONS



Read through carefully and understand these instructions before use.

User's Manual of IDEAL PW Series Gasoline Engine Water Pump

Foreword

Thank you for choosing this brand water pump. Before using this pump, please read the manual carefully and understand all the contents in the manual. Pay particular attention that don't operate the pump without reading this manual, otherwise, any personal injury or mechanical failure because of the work in a risky way in violation of rules, our company will be irresponsible for it.

This manual describes the basic operation and maintenance regulations of IDEAL PW series pump and it based on the ID PW80 pump. If you have anything unclear, or want to know the other situation about the pump set, please contact with the local dealer.

This manual will be delivered with pump set. The data, instructions and specifications in this manual is collected based on the latest designing, ie. It is the newest information. Our company has the right of explanation. If any changes, we will not inform you in advance.

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1. safety

- Neither this pump to suck the inflammable liquid or corrosive liquid such as gasoline oil and acids, nor the sea water ,engine oil, alky and honey and so on.

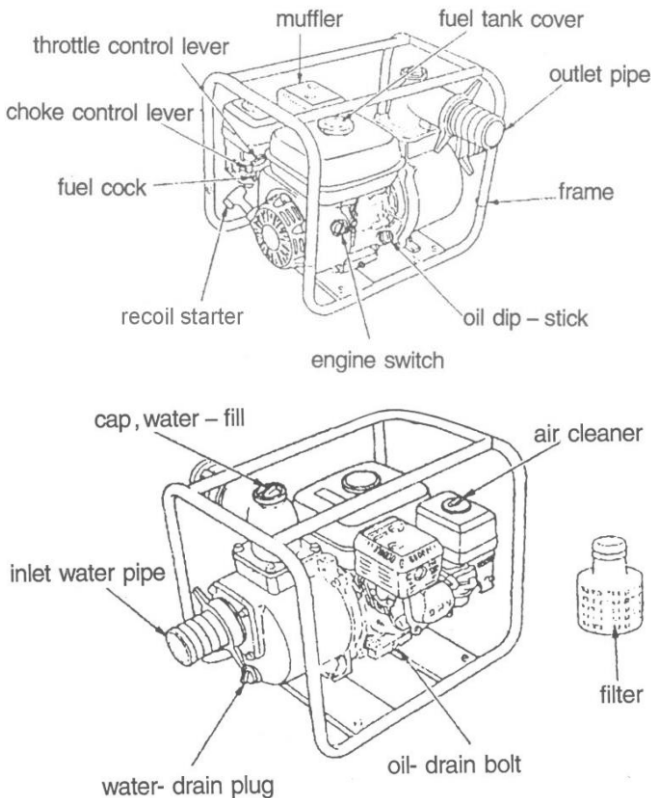
- Place the pump set on the firm and plane ground to avoid the pump tilt or turnover .. Keep the pump away from building wall at least 1m, and do not let the inflammable close to the pump.

- Must know how to stop the engine and how to operate all the control device. Do not use the pump in a risky way in violation of rules.

- Adding the gasoline oil must be at the place where the ventilation is in good condition and do not smoke when adding.

- Do not let the gasoline oil overbrimming and tight the tank cover firmly after adding.

2. Description of components



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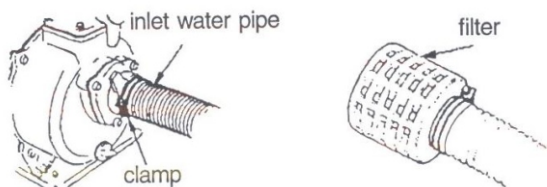
3. Preparation

a. Connect the inlet water pipe

- Use the general water pipe, joints and clamp.

The inlet water pipe must be continuous and unfolded structure. The length of water pipe must not be exceeded required length. The pump will has the optimum performance when the distance between the pump and water source is not far. The self suction time is proportional to the inlet water pipe length directly.

• The filter should be fitted on the end of inlet water pipe with the clamp, as shown on figure below.



Attention:

a. Before pumping, fit the filter.

b. Tighten the joint and clamp, ensure there is no air leakage and inlet pipe tight.

b. Connect the outlet water pipe

• Use the general water pipe, joints and clamp to connect the outlet water pipe and ensure the clamp been tightened firmly.

c. Check the level of Lub oil

Attention:

• The gasoline engine of pump set is free of the Lub oil when ex-factory. Please fill the engine with the 10W-SAE or equivalent one, before the first time use. The dirt oil or other Lub oil is not allowed.

• When checking the oil level, the engine should be stopped and in horizontal.

• Remove the oil dipstick, clean it and insert it into oil filling hole, but do not to screw it.

• If oil level is too low, add the oil to the top of filling hole.

Warning: If the Lub oil is not enough, the engine will be damaged seriously.

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d. Check the level of fuel oil

- Remove the fuel oil tank cover and check the fuel oil level, If the level is too low, add 90# gasoline.

- Do not use mixture oil of Lub oil and gasoline.

Avoid the dirty material and water entering into the fuel oil tank.

Attention:

- Do not allow the fuel oil overflow the oil tank. After adding, tighten the cover firmly.

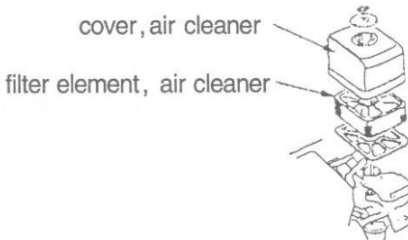
- Do not allow the fuel oil sprayed out, if it is so, clean and wipe it up before starting the engine.

- Avoiding your skin contact with gasoline for a long time and should put it on the place where the children can not reach.

e. Check air cleaner filter element

- Remove butterfly nut, washer and air cleaner cover.

- Check the filter element, if necessary, clean it.



Cautions:

- When the air cleaner is not mounted on the engine, the engine must not be started, otherwise, the dirt will be sucked into engine through the carburetor, then the engine will be worn out increasingly.

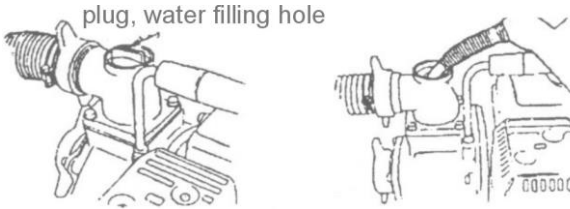
f. Check the pump

- Before working, the pump must be filled up with water.

Cautions:

- Don't pumping when the pump without water, Otherwise, the pump will overheat to damage. The seal would be broken if the pump work for a long time with-out water. When the water has been sucked over in pump body, stop pumping immediately and add water into pump body when it cooling.

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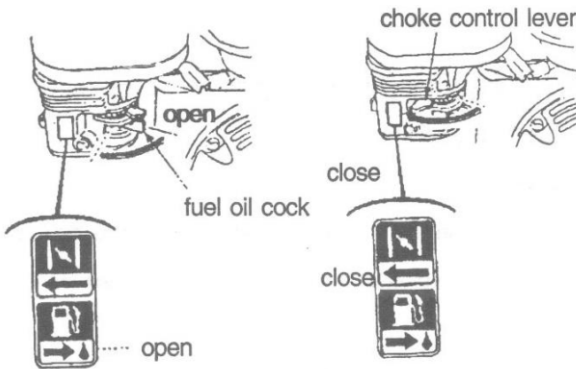


4. Operation

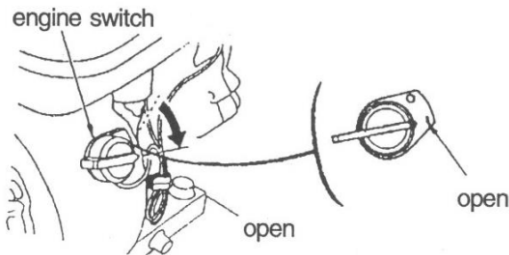
- a. Open the fuel oil cock.
- b. Close the choke.

Attention:

When engine is in hot condition or the surrounding temperature is very high, it's unnecessary to use the choke (that means do not close the choke before start).

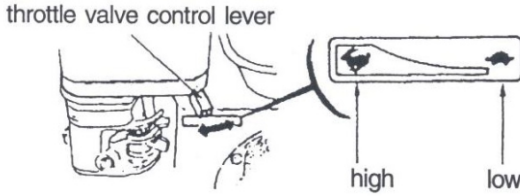


- c. Put the engine switch to "ON" position.



- d. Move the choke control lever to left side slowly.

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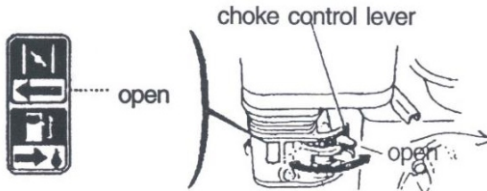


- e. Pull the starting handle slightly till the resistance force is felt, then, Pull it up quickly.

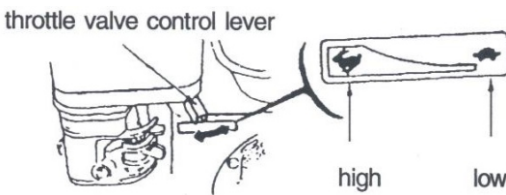
Cautions:

Slightly release the starting handle when engine has been started, to avoid suddenly release it lest damage the starter.

- f. After the engine warm up, open the choke gradually.

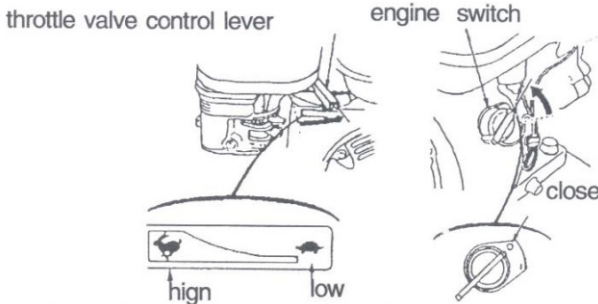


- g. Put the throttle valve at the preset speed position.



5. Stop the engine

- a. Move the throttle valve control lever to the right end.
- b. Put the engine switch to the "OFF" position.



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c. Put the fuel oil cock to “OFF” position.

Attention

Stop the engine at the event of emergency. Directly put the engine switch to “OFF” position.

6. Maintenance

• In order to keep this water pump in good performance. It is necessary to check and adjust it periodically. The periodical maintenance also prolong the pump's service life.

Attention

Before maintenance, stop the engine. If the maintenance must be carried out in a running engine, make sure the engine in a ventilated place. The Co in exhaust is very harmful for your health.

• If this pump has to be used for pumping sea water, After working, please pumping the fresh water immediately to reduce the corrosion and flush out the deposit.

6.1. Change the engine oil (Lub. oil)

When the pump set is used at first time, after one month or 20 hours, the engine oil should be changed, afterward, every six months or every 300 hours, change the oil regularly.

Change the engine oil should be carried out under the condition of hot engine, it will ensure the used oil draining out thoroughly.

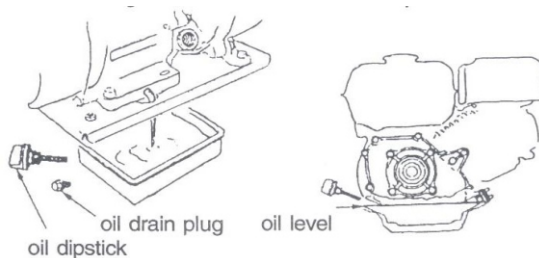
a. Remove the oil dipstick and drain plug, then start draining the used oil.

b. Refit the oil drain plug and tighten it firmly.

c. Add the new engine oil up to required level.

The oil volume is 0.6L

If contact engine oil, wash hands with soap and clean water.



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6.2. Maintain the air cleaner:

A dirt air cleaner will reduce the air flow entering the carburetor. In order to avoid the carburetor failure, Please maintain the air cleaner periodically. If the working environment is heavy dirty, the maintenance frequency for air cleaner should be increased.

Cautions:

When the air cleaner is not mounted on the engine, do not operate the engine, otherwise, the dirt will be sucked into engine, It will speed up the engine's weariness.

- a. Remove butterfly Nut and then take off the cover of cleaner and take out the filter element.
- b. Clean the filter element with unflammable or high flame point solution, then let it dry thoroughly.
- c. Put the filter element into the clean engine oil, press out the surplus engine oil thoroughly.
- d. reassemble the filter element and cleaner cover.

6.3. Maintain the spark plug:

In order to ensure the engine keeping on working, there must be proper clearance or gaps of the spark plug and there must not be carbon laydown.

- a. Remove the cap of spark plug.

Warning

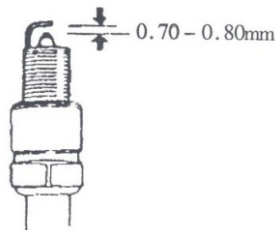
- When engine is running, the muffler will be very hot, Do not contact the muffler.

- b. Inspect the spark plug by eyeballing. If there is wear obviously on the spark plug or damage or crack on the isolating ring, Please replace it with a new one, before fixing, clean it first with brush.

- c. Measure the clearance of spark plug with feeler.

- d. Correct the clearance by moving the side electrode.

The spark plug clearance is about 0.7-0.8 mm.



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e. Check the spark plug seal-ring, screw in the spark plug with special spanner so as to protect its threads.



Attention:

- When fitting the new spark plug, after pressing against the seal-ring, the spark plug should be screwed 1/2 turn more. If the spark plug is a used one, 1/2~1/4 turn move.

Caution:

Ensure that the spark plug must be tighten firmly, if it is not so, it will be overheating and thus the engine will be damaged. Do not use the spark plug with unsuitable calorific value range.

7. Transportation and storage

- Before handling and storage should let the engine cool down.
- When handling water pump, put the fuel cock to “OFF” position and place the pump set in horizontal to avoid the fuel oil spraying out.

Before long period storage:

7.1. Ensure the storage area is dry and clean.

7.2. Clean the internal of the pump set to remove the deposits. And flush it with clean water. Then unscrew the water drain plug to drain out the water inside thoroughly. Finally, refit the plug.

7.3. Drain out the fuel oil:

a. Put the fuel cock to “OFF” position, remove the drain screw of the float chamber of the Carburetor.

b. Put the fuel cock to “ON” position, drain out the fuel oil in tank.

c. Refit the drain screw of the Carburetor.

7.4. Change the engine oil.

7.5. Remove the spark plug, add a little clean engine oil in cylinder, turn the crankshaft several cycle to lubricate the cylinder and piston, then

refit the spark plug.

7.6. Cover the pump set to avoid the dust.

8. Troubleshooting

The engine can not be started, check whether:

8.1. The fuel oil is not enough.

8.2. The fuel cock is not open.

8.3. The oil is not reached carburetor.

After putting the fuel cock to “ON” position, remove the drain oil plug at the bottom of carburetor to check the fuel whether or not reach to the carburetor.

Attention:

If the oil spray out, clean and wipe it before testing the spark plug and starting the engine.

8.4. The engine switch is in “ON” position.

8.5. The engine oil in crankcase is enough.

8.6. The spark plug is in good condition.

a. Remove the spark plug cap, clean it, then remove the plug.

b. Fit the spark plug into the cap.

c. Put the engine switch to ON position.

d. Earth the spark plug side electrode to engine.

Pull up kick starter, check the spark.

e. If there is no spark, change the spark plug.

8.7. If the engine can not be started yet please sent the pump set to the service station for repairing.

8.8 The pump can not be pumping water, check whether.

a. The adding water is enough.

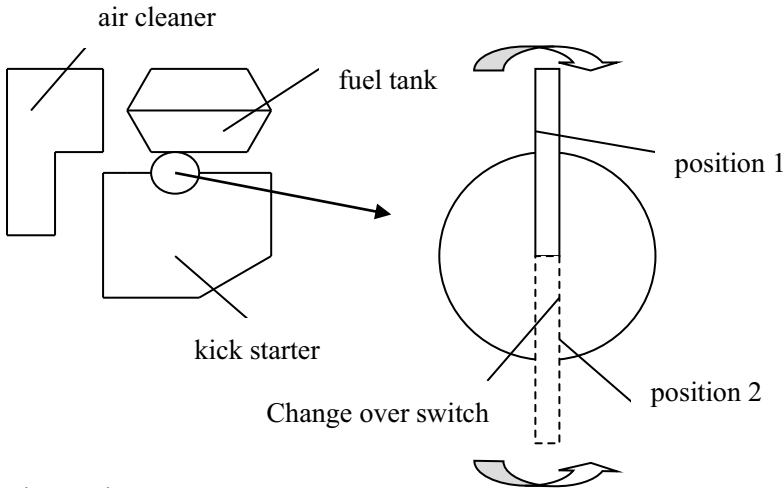
b. The filter is blocked.

c. The pipe clamp is fixed firmly.

d. The water pipe is damaged.

e. The suck distance is too high.

9. Gasoline Kerosene Engine Series



Picture shows:

Change over switch has two positions. Position 1 is for gasoline, and position 2 is for kerosene.

Attention:

1. Replace Change over switch to position 1 five minutes earlier when stopping machine. This is for the next start. Because machine can not be started easily by kerosene.
2. If not place the Change over switch to position 1 when stop machine, please open oil switch of carburetor (for discharging kerosene), then replace the Change over switch to position 1 for 5 seconds, then close the oil switch of carburetor to start the machine.
3. During the running of machine, Switch position 1 and position 2 can be replaced at any time.

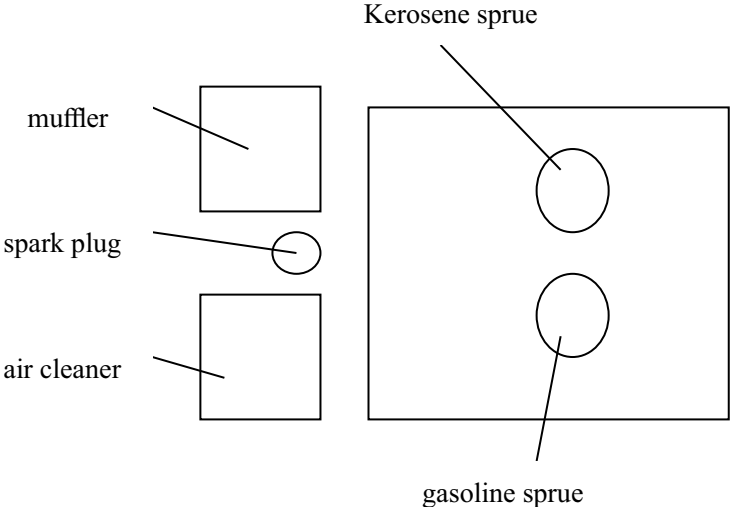
Attention:

1. Starting machine after reading the instruction.
2. Replace the Change over switch to position 2 after machine runs normally.
3. Replace the Change over switch to position 1 ,five minutes earlier when stop machine.

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Special explain:

For both Gasoline and Kerosene in one tank in this machine. Please be careful when put these two fuels in it.



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Technology parameter:

Type	ID PW80	ID PW50	ID PW38
Size(mm)	535×415×445	485×390×425	485×390×425
In water pipe dia	80mm	50mm	38mm
Out water pipe dia	80mm	50mm	38mm
Engine type	168FB		
Power	4.8kW		
Speed	3600r/min		
Lift	24m	26m	26m
Suction distance	8m	8m	8m
Flow	60m ³ /h	36 m ³ /h	36 m ³ /h
Continuouse working time	2.5h		