

**Important:** (1) Normal maintenance and adjustments to the product is the responsibility of the customer. (2) Normal wear and tear is not covered under warranty. (3) Rubber/plastic parts and consumables such as blades, clutch and clutch-bell, spark-plugs, nylon line, air-filters, fuel-filters, oil seals etc. are not covered under the warranty.

### No Warranty On Electrical Motor / Electrical Parts / Battery Etc.

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**Limitation of Liability:** This limited warranty is in lieu of all other express warranties, obligations, or liabilities. Any implied warranties, obligations or liabilities, including, but not limited to, any implied warranty of merchantability shall be limited in duration to the applicable warranty period. Any action for breach of any warranty hereunder, including, but not limited to, any implied warranty of merchantability must be brought within the applicable warranty period.

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**KisanKraft Limited** (formerly known as KisanKraft Machine Tools P Ltd)

🌐: www.kisankraft.com

✉: info@kisankraft.com

☎: +91.80. 22178200

Product	<b>Centrifugal Water Pump For Agriculture</b>	KisanKraft Invoice Date	
Brand	<b>KisanKraft</b>	KisanKraft Invoice No.	
Model	<input type="checkbox"/> KK-WPDV-173 <input type="checkbox"/> KK-WPDV-178		
<b>WARRANTY PERIOD</b>	<b>6-MONTHS</b>	FOR THE SPECIFIED PERIOD FROM THE DATE OF SALE OR DELIVERY WHICHEVER IS EARLIER.	
Dealer's Invoice Date		Dealer's Invoice No.	
Buyer's Info (Name, Address, Phone, etc.):		Dealer's Stamp (Address, Phone, TIN, etc.):	
Buyer's Sign		Dealer's Sign	

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- ◆Engines and Water Pumps◆Hand Tools◆Garden Tools◆
- ◆Cultivators and Accessories◆Sprayers and Accessories◆
- ◆Transplanter and Post Hole Digger ◆Milking Machines◆

**KisanKraft®**

**Warranty Certificate**

(KISANKRAFT COPY)

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**KisanKraft Machine Tools Private Limited**

Customer Care Phone: 080.2233.0318, Email: kisankraft@gmail.com

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Wide Range of Products for Every Need



For more information give **MISSED CALL: 07676065555**



Many of our products have BIS: ISI certification.



# User Manual



***KisanKraft Limited***

(Formerly known as KisanKraft Machine Tools Pvt Ltd)

Sri Huchhanna Tower, #4, 1<sup>st</sup> Main, 7-A Cross, Maruthi Layout, Dasarahalli,  
HAF Post, Hebbal, Bangalore 560024, Karnataka, INDIA

- ♦ Bangalore (HO) ♦ Ahmedabad ♦ Bhopal ♦ Bhubaneswar ♦ Coimbatore ♦
- ♦ Jammu ♦ Guwahati ♦ Hubli ♦ Hyderabad ♦ Jaipur ♦
- ♦ Karnal ♦ Kolkata ♦ Lucknow ♦ Pune ♦ Raipur ♦ Shimla ♦

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KisanKraft has a large range of products to serve the farmers. A list of our products is given below:

<b>Brush Cutters and Accessories</b> Brush Cutter/Power Weeder Backpack Brush Cutter Tea Pruner Pole pruner with Engine Reaper Attachment Blades-Circular Blades (2 & 3 points) Baffle Nylon Rope Tap & Go <b>Chainsaws</b> Petrol Chainsaw Electric Chainsaw Chain Sharpening Machine <b>Engines and Water Pumps</b> Engine –Diesel-(Horizontal) Engine –Diesel(Vertical) Engine-Kerosene Water Pump with Petrol Engine Water Pump with Kerosene Engine Water Pump with Diesel Engine <b>Hand Tools</b> Secateurs Folding Saw Garden Rake Garden Shovel Hedge Shear Lopper Telescopic Hedge Shear Telescopic Lopping Shear Tree Pruner Telescopic Steel Pipe & Fruit Picker Bag Sheep Shear <b>Garden Tools</b> Electric Pressure Washer Hedge Trimmer Lawn Mower (Electric, Petrol & Manual) Leaf Blower	<b>Cultivators and Accessories</b> Petrol and Diesel <b>Sprayers and Accessories</b> Battery Sprayer Portable Power Sprayer Trolley Sprayer Manual Knapsack Sprayer Manual Pressure Sprayer Rose Cans Hose Crimping Machine HTP Sprayer HTP Delivery Hose HTP Hose Reel HTP Stand HTP Gun / Lance(Brass Rod) Knapsack Power Sprayer Mister / Duster / Granuel Spreader HTP Sprayer Set with Diesel Engine HTP Sprayer Set with Kerosene Engine Fogging Machine <b>Milking Machine</b> Wood Shredder Fodder Ensiling Chaff Cutter Fodder Grinder Chaff Cutter Fodder Mini Chaff Cutter <b>Harvester</b> Maize Sheller Maize Sheller + Dehusker Maize Combine Harvester Onion Digger Carlotti Italy Tea Leaf Harvester Sugarcane Combine Harvester Sugarcane Leaf Stripper <b>Transplanter and Post Hole Digger</b> Paddy Transplanter (2 & 8 Rows) Transplanter-Vegetable & Tobacco Post Hole Digger(4" to 14" Augers)
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Problem	Probable Cause	Trouble shooting measure
Vibration and Noise	Suction too high, there is air pocket	Check suction, lower water pump position
	Water amount is too big	Reduce water amount
	Water inlet is jammed, resistance is too big	Check and clean water inlet pipe and filter
	Rotation part is loose	Listen carefully and check source of noise, stop the machine and adjust
	There is air inside pump or pipe	Unscrew air emission cover, and exclude air
	Impeller is damaged	Stop running and change new impeller

### Technical Specifications

Self-priming water pump	Model	KK-WPDV-173	KK-WPDV-178
	Inlet	50 mm (2")	80 mm (3")
	Outlet	50 mm (2")	80 mm (3")
	Max. capacity	28 m³/h	35
	Max. Head	26 m	26 m
	Max. Suction head	7 m	6 m
Engine	Model	KK-DEV-370F	KK-DEV-378F
	Rated power	3.6/3600 kW/rpm	4.0 / 3600 kW/rpm
	Displacement	247 cc	296 cc
	Fuel tank capacity	3 L	3.5 L
Package	Net weight	37 kg	47 kg

**Note:** Technical specifications are subject to change without prior notice.

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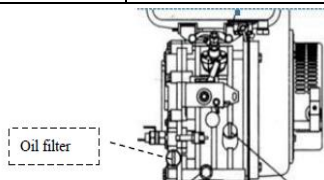
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Problem	Probable Cause	Trouble shooting measure
	Pump speed too low	Check rotation speed and find reason
	Filter jam	Check and clean filter
	Pump can't pump water	Check pump mounting position
	Seal damage leaks air	Change mechanical seal components
No enough flow	Filter, pipe and impeller jam	Clean jam place
	Rotation speed too low	Adjust the rotation speed to be higher
	Serious abrasion of the oil seal impeller	Clear up abrasion slice, or change impeller and mechanical seal
	Water inlet pipe crack	Check water inlet pipe and connector, change pipe or bolt
	Impeller damage and leaks	Change impeller
	Lift is too high, water gets into water pump or inlet pipe, seal leaks air	Find reason and clear up. Unscrew bolt which leaks air, and exclude air. Check pipe or change seal.
	Engine speed not stable	Adjust speed
Pump consumes too much power	There is friction between impeller and pipe connector	Listen carefully to the sound, and see if the impeller has been collided and needs adjustment.
	Impeller has been jammed by impurities	Check and clean impeller
No water output	Water inlet pipe connection is loose or leakage	Check water inlet pipe
	Suction too high, there is air pocket	Check suction, lower water pump position

Temperature	Oil spec.	Grade of Oil
Above 20°C (Summer)	Above CC grade	SAE30
10°C-10°C (Spring, autumn)		SAE20
Below 10°C (winter)		SAE10W-30

### 2. Clean oil filter:

Unscrew bolt and take out oil filter to clean

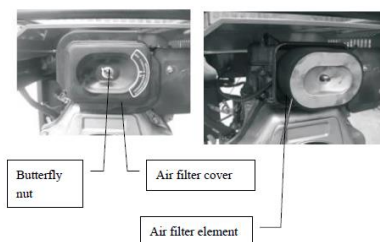


### 3. Change air filter element

If air filter element is too dirty, it can cause starting difficulty, lack of output power or emission deterioration. Do not run engine when the filter element is damaged or when there is no air filter, otherwise, it can faster abrasion of the engine.

#### Change method:

- Unscrew butterfly nut, take off air filter cover and element.
- If the element is dirty, clean it by patting it lightly or blow it by compressed air from inside to outside.
- If it is damaged and too dirty, change a new one.



## Troubleshooting

Problem	Probable Cause	Trouble shooting measure
Can't pump water	Lack of water	Fill in water again
	Water inlet pipe entrance leakage	Check water inlet entrance and connector, change pipe or tighten screw

## Before Getting Started

Thank you for your purchase and use of our products. In order to avoid accidents or injury, please read this manual carefully before using the machine. After reading, preserve it for further reference.

Our centrifugal water pump is self-priming in nature and is characterized by light weight, simple structure high efficiency, convenient use and flexible movement. It can be used for agricultural irrigation, drainage construction and pumping, especially widely used in recurrent irrigation of small area for agricultural production at present. The water pump has wide application in different areas like agriculture, industry, fire control, construction fishery and gardening.

Please note that due to the continuous improvements, the actual product may vary from the product shown in this manual.

## Safety Instructions

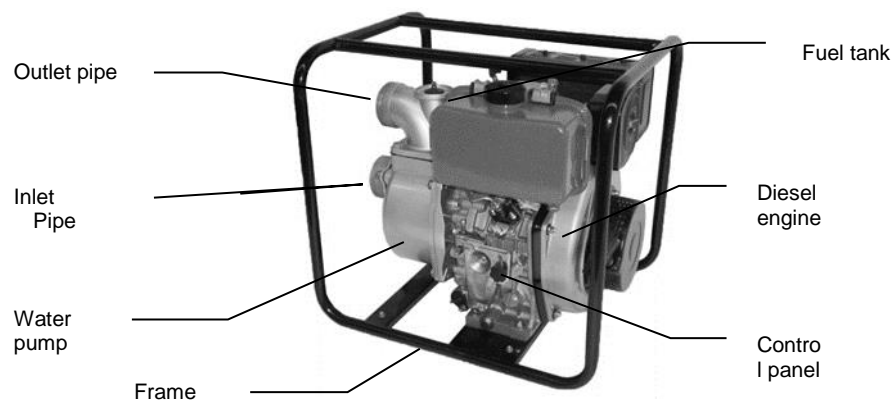
1. Read the operation manual carefully before starting the engine in order to avoid any accident and damage.
2. Before starting the engine, make sure to do pre-check so as to avoid injury or damage to machine.
3. Please do not use this engine inside an enclosed area. Ensure adequate ventilation while Engine is in operation.
4. To prevent fire hazard, please keep the Engine in operation at least 1-meter (3 feet) away from Combustible or Inflammable materials, buildings and equipment.
5. For safety's sake, do not pump inflammable or corrosive fluid, such as acid. Likewise, do not pump dusty water, sea water, chemical or alkalescent fluid, such as used oil, wine, or milk product.
6. When refueling you must STOP the Engine. Please do not smoke near Engine. Wipe the spilled fuel after refueling.  
**CAUTION:** Spilled fuel is a fire hazard.
7. Always place the engine horizontally. Do NOT tilt the Engine more than 21 degrees. Overturning or inclining the engine may cause oil spillage and result in fire hazard.
8. Do NOT cover the Engine when in operation.
9. Children are strictly not allowed near the engine operation area.
10. Learn how to stop water pump immediately. It is prohibited to operate it without understanding user manual.

### To Ensure Safe Operation:

- When adding fuel to water pump, make sure it is far away from inflammables. Do not fill too much full in the fuel tank, i.e., till the neck of the fuel tank filling place. Put water pump on a level ground, so as to avoid diesel from spilling.
- Use clean fuel. Before usage, filter fuel or keep it for more than 24 hours. When machine is running, do not add fuel into fuel tank or add oil into crankcase.

- There is poisonous carbon monoxide in the emission gas, therefore, make sure use it in well-ventilated place, so as to avoid its influence on people or livestock.
- When the machine is in operation or had just finished operation and it is still hot, please do not touch the muffler and its cover.
- During the first 20 hours of usage and maintenance for the new machine, please run it with low speed and low load, rather than high speed and full load.

### Diesel Water Pump- Structure & introduction



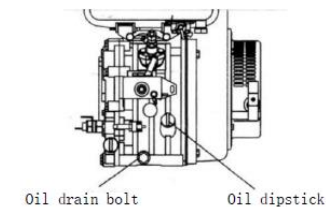
Interval time Items	Daily	20h	100h	200h	500h	1000h
Change oil		√ First time	√ Second time			
Clean oil filter		√	√			
Change air filter element				√		
Fuel injection nozzle check					■	
Fuel injection pump check					■	
Intake valve, exhaust valve distance check					■	
Intake valve seat, exhaust valve seat check						■
Change piston ring						■
Impeller gap						■

**Note:** Items with this ■ mark should be done by authorized technical person only. Please contact your dealer for the same.

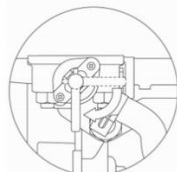
### Method of Maintenance:

#### 1. Change oil:

When diesel engine is still hot, take down oil-drain bolt to drain old oil, and then fill in the kind of new oil as shown below:







3. Put fuel cock back to close position

4. Pull slightly recoil starter handle bar until pressure is felt. When engine stops, reduce its load gradually, do not stop engine suddenly, otherwise it will cause temperature to rise abnormally.

### Points to remember during operation

1. Theoretically, pressure and water pump suction will decrease proportionally to the increase of altitude. Decrease value can be estimated through the decrease of local atmospheric pressure (1 atmospheric pressure equals about 10 meters water column).
2. Straight and short pipe can reduce unnecessary resistance loss. Pipe must be reasonably fixed so as to avoid vibration and damage to the water pump. Before operation, operator must check and see if the hoop which connects water pump and pipe is loose. Specially pay attention to water inlet pipe and see if it leaks.
3. Water inlet filter and water surface, river and riverbank must be kept apart at certain distance, so as to avoid air getting into it. The distance between filter and water surface should not be less than 0.3m, so as to avoid small stone or dust to get into it. The distance between filter and river bank and river surface should not be less than 1.2m.
4. When machine stops running, unscrew water drainage plug at the pump bottom, drain all water inside the pump, so as to prevent the water pump from freezing.

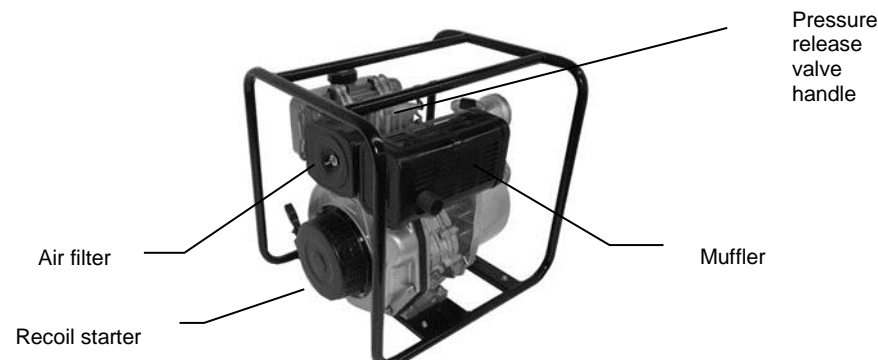
### Maintenance

Regular maintenance can prolong the life of machine. Please maintain according to below chart.

**Warning:** Please do not do maintenance work when machine is running.

Items for maintenance:

Interval time	Daily	20h	100h	200h	500h	1000h
Items						
Bolt and nuts check	√					
Fuel and oil check	√					



- Diesel water pump is composed of diesel engine and water pump parts. Water pump is fixed at a frame with vibration rubber cushion.
- Self-priming water pump is composed of pump body, pump cover, impeller, impeller cover, seal etc. Shaft seal adopts mechanical seal. Pump inlet is at the center of the impeller rotation. Due to the negative pressure caused by the impeller rotation, the water is sucked into pump body. Impeller rotation generates negative pressure which can cause water to get into pump body, therefore, it can have self-priming effect. Users only need to fill pump body with water first. At the inlet of the water pump, there is a one-way valve. After the machine stops operation, it can prevent water in the pump body from being siphoned into water pool, thus pump body can store enough water to be used in next time starting.
- Self-priming pump impeller cover and impeller are made of high strength cast iron. Therefore, it has wide application area

### Operation

1. Soft pipe connects with water inlet and outlet pipe must be tight and reliable without any leakage. Water inlet pipe must not have distortion during work. Note: Soft pipe should cover all screw thread and tighten it with hoop as shown in the picture below.



2. Water inlet pipe should have a filter to avoid dust getting into water pump and stick to or damage impeller.

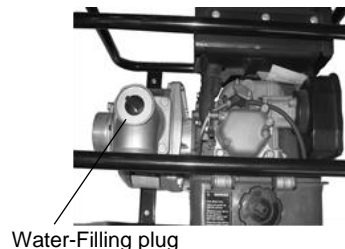
3. Fill water into water pump until it spills out.
4. Please do not operate the water pump without water.
5. Remove the dust present inside water pump.

### Starting

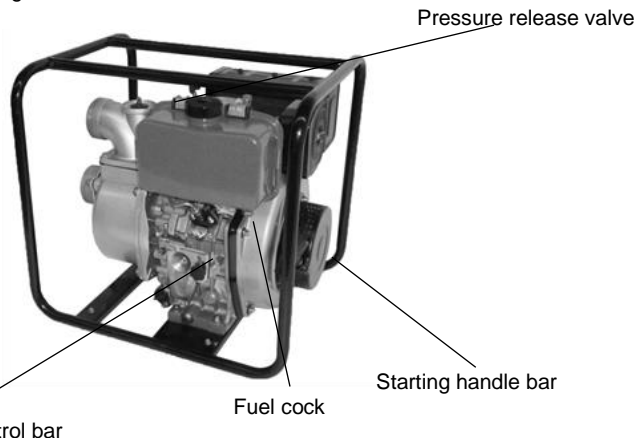
#### 1. Add water

When starting water pump, add enough water inside pump body as shown in the picture.

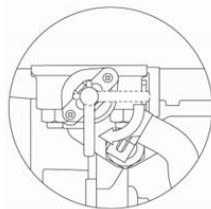
- a. Unscrew "Water -filling plug";
- b. Add water until water spills out at outlet.
- c. Tighten the "Water-filling plug"



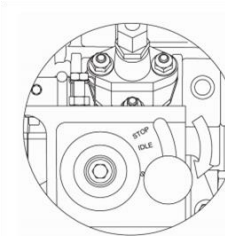
#### 2. Start the engine



#### 2.1 Open fuel cock.



2.2 Adjust governor control handle bar to position of "START", and tighten it.



3. Press down pressure release valve, and pull recoil starter.

- a. Pull recoil starter until the resistance is felt, and then put the hand back to previous position.
- b. Put the pressure release valve to the position where has no compression. After the start of diesel engine, pressure release valve will restore to its previous position automatically.



c. Start: Hold recoil starter handle bar and pull it until resistance is felt and then pull the rope rapidly



d. If the engine is not started, start from action "③" and repeat it again. After start, put recoil handle bar back lightly, and do not let it spring back suddenly.

### Stopping

1. Before the engine stops, move the engine governor handle bar to its lowest rotation speed position, and then run the engine without load for 3 minutes.

2. Adjust governor handle bar to "STOP" position

