# GASOLINE WATER PUMP FIGURE



GASOLINE H





### INTRODUCTION

Thank you for purchasing the products of our company.

Our company's Gasoline Water (High Pressure)Pump applies the high quality self-priming pump.

The engine is air-cooled, direct injection, 4-stroke, gasoline engine or air-cooled, single cylinder, 4-stroke gasoline engine. It possesses many good features such as: small in dimensions, light weight, simple structure, convenient to use etc. It is an ideal tool of irrigation and drainage.

Our company's Water (High Pressure)Pump series widely serve agriculture field, industrial and fire fighting, construction, fishery, garden etc.

The operation manual tells you how to operate and maintain your new Water (High pressure) Pump. Please read it before use to ensure the proper handling and operation. Follow the introduction carefully to keep your machine in the best running condition, which is helpful to prolong the lift span of the Water (High pressure) Pump.

With the improvement of our products, the descriptions of this manual may differ from practical products. So user should pay attention to it.

#### Intended Use / not intended Use:

The maximum suction moments, and the flow rate in liters This Gasoline engine-powered water pump is designed exclusively for pumping clean water for the agriculture, forestry or garden area. The maximum suction moments, and the flow rate in liters per minute can be find on the chapter main technical characteristics. These specifications must be observed during the operation.

Before each use, this manual is carefully read and comply with all safety instructions are listed. Only the original respectively accessories that are approved by the manufacturer of the engine / pump can be used.

When using not original or not released accessories, resultant persons, property damage is the operator's liability and not the manufacturer's.

This gasoline-powered water pump should be operated only in the open garden-agriculture sector.

Any other use / use as o.g. is not as intended use. It should be pumped no flammable liquids.

#### Residual risks

Even when properly used the machine is always some residual risk that can not be ruled out. Because of o.g. Use, construction of the machine can be derived during the use if the following potential hazards.

- Inhalation of fumes (poisoning danger)
- Avoid contact with hot surfaces / exhaust system (burns)
- Impairment of hearing for non-adherence to the prescribed hearing protection
- Contact with petrol / oil and the skin
- Inhalation of gasoline fumes
- Contact with the coming-promoting medium

Gasoline Water Pump Overall Figure(1)
Gasoline High Pressure Pump Overall Figure(1)
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# CHAPTER 1 MAIN TECHNICAL SPECIFICATIONS AND PARAMETER

1. Gasoline Water Pump specifications and parameter

	ТҮРЕ	P40C	P50C	P80C	P100C
dw	Suction port dia(mm)	40(1.5inch)	50(2inch)	80(3inch)	100(4inch)
Self-priming water pump	Rated displacement (m³/h)	12	21	50	85
im:	max.head(m)	22	26	25	25
Self-pr	Self-priming time(s/4m)	80	70	120	180
	max.suction head (m)	6	8	8	8
	Model	154P	160P	160P	270P
Engine	Rated power(kw/rpm)	1.38/3000	2.76/3000	2.76/3000	4.6/3000
Eng	Displacement(CC)	87	163	163	242
	Fuel tank capacity(L)	1.7	3.6	3.6	6.0
Unit	G.W.(kg)	12	24	25	41.7
Ü	Outline	435X330X315	475X375X375	510X375X435	610X480X535

dimensions		
$(L\times W\times H)(mm)$		

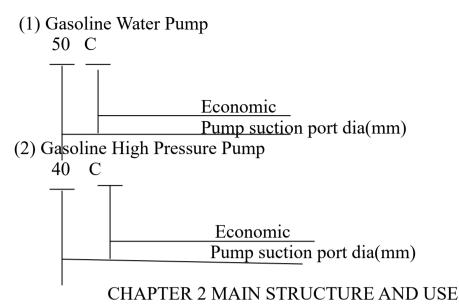
	P50C, P80C, P100C, F40C, F40C-2, F50C
Model:	
Measure sound pressure level:	86,06dB (A)
Guaranted sound power level:	105dB(A)
Uncertainty K	3,0dB(A)

2. High Pressure Pump specifications and parameter

Gasoline

High	TYPE	F40C(L)		F40C(L)-2	F50C(L)
H	Suction port dia(mm)	40		40	50
	Discharge port dia(mm)		25x2	;40x1	50x1
	Capacity(m³/hr)	17(at 35 m Hea	ad)	15(at50 m Head)	23(at 30m Head)
	Max.head(m)	55		110	55
	Self-priming time(S/4m)	30		30	30
	Max.suction head(m)	6.0		6.0	6.0
Engine	Model	200P			
ngi	Rated power(kw)		3.66 196		
山	Displacement(cc)				
	Fuel tank capacity(1)			3.6	
Unit	Gross weight(kg)	23		24.2	26.5
Ω	Outline dimension (LxWxH)(mm)	490x400x422(L:570x470x535)			x535)
High	TYPE	F80C			
Hi	Suction port dia(mm)	80			
	Discharge port dia(mm)	80×1			
	Capacity(m³/hr)	40			
	Max.head(m)	80			
-	Self-priming time(S/4m	30			

Hiji	Suction port dia(mm)	80
	Discharge port dia(mm)	80×1
	Capacity(m³/hr)	40
	Max.head(m)	80
	Self-priming time(S/4m)	30
	Max.suction head(m)	65
ne	Model	390
Engine	Rated power(kw)	7.3
□□	Displacement(cc)	389
	Fuel tank capacity(1)	6.0
Unit	Gross weight(kg)	52
	Outline dimension (LxWxH)(mm)	610*4
		80*53
		5



#### 1. Main Structure.

Water Pump and High Pressure Pump consists of Gasoline engine and pump kit. The pump is fixed on a frame with shock absorbers.

The self-priming pump consists of pump body, pump cover, flow guidance, impeller and seals, etc. Shaft sealing is machinery type sealing and the inlet of pump is higher than the inlet of impeller so that is can self prime and you only need to fill water into the body of the pump. The inlet of pump is fixed with a one-way valve to prevent liquid from being drained into water pool from the pump body by siphon after stopping the machine. It must guarantee store enough liquid in the pump body for next start.

The self-priming pump's flow guidance and impeller are made from high strength cast iron, high pressure pump's flow guidance and impeller are made from high quality die casting of aluminum alloy. To meet different use, high-pressure pump can equip with different accessories.

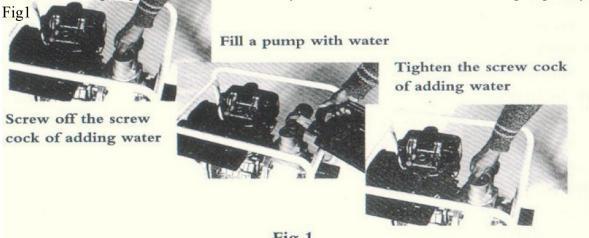
### 2. Main point of use

- **(1)** The coupling of suction pipe to the pump must be tight, reliable without any leakage.
- (2) A filter net must be added into the inlet of suction pipe as a protection to avoid impurity be sucked into the pump and stick or damage the impeller.
- (3) Prime the pump until the water overflow.
- **(4)** Do not run it at high speed unless you prime it.
- (5) Drain off the pump lor storage

#### 3. Procedure of use

(1)Adding water

When start the pump for the first time, it only need to add a few water into the pump body. Please see



### (2)Start the engine

Please refer to manual of engine.

### 4. Caution

- (1) The fuel of the pump is Gasoline fuel, not allow mixing of them. Keep fire and other explosives and inflammables away from the pump. Operate the pump on a level surface to prevent fuel spilling.
- (2) Keep the fuel clean. The fuel must be filtered or settled for 24 hours before used. Do not add fuel into fuel tank or crank case when the machine is running.
- (3) Exhaust gas contains poisonous carbon monoxide. Never use the machine in poorly ventilated locations, so that people and cattle will not be affected.
- (4) Do not touch muffler and muffler cover while the machine is running or hot.
- (5) Run new or newly maintained machine at low speed with low load for the first 20 hours of test period. Do not run it at high speed with full load.

#### 5. Use and Maintenance

- (1) Theoretically, air pressure and the suction head of pump will decrease with the altitude increasing. The value of decrease can be estimated by minus local atmosohere value from 10m(metre water column).
- (2) Short and straight pipe is preferred as it can reduce unnecessary loss of pipeline. The pipeline must be supported to avoid from vibrating and damaging the pump by oppressive. Before operation you must check connection part between pump and pipeline whether there is loose phenomenon and pay special attention to leakage of inlet pipeline.
- (3) The filter net must keep a certain distance between river surface, river bottom and river bank ,the net must dip into water not less than 0.3m to avoid suction air and to keep a distance which is not less than 1.2m from river bottom, river bank to avoid suction stone or weeds.
- (4) When the pump is used in winter, to screw off the drain cock under the pump and draw off water thoroughly after stopping the machine to prevent from being broken by ice of freeze.
- (5) If the gap between impeller and the surface of flow guidance is over 1mm, so that it can be continuous to be used after adding an adjustment shim on the shaft shoulder.
- (6) When change self-priming pumps machinery seal, be sure to apply adhesive to the connection between steel nort "#7" and nump cover. When fixed it do not hit by force to prevent wear slice fracture. Please

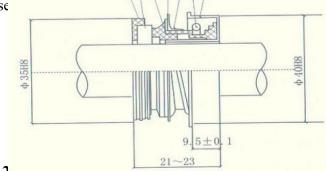
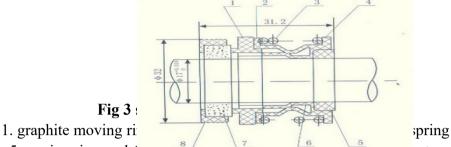


Fig 2 stucture diagram of machinery sear

1. seal ring 2.ceramics moving ring 3. graphite static ring 4.corrugated pipe 5.washer 6.spring 7.steel part

- (7) According to High Pressure Pump, the clearance between impeller and regulator is 1mm, when remove or install, can adjust the clearance through adding or reduce the gasket in long shaft screw.
- (8) When change machinery seal, silent ring set (NO.7 、8)install in the pump cover, movable ring set(NO.1-6)install in the diesel output shaft. Do not knock heavily when installing to prevent breaking the grind piece. See Fig3



- 5.moving ring seal 6.0000011 seat 7.001a11100 state 1111g 0.assistant seal
- 6. Installation of connective soft pipe

Set the rubber soft pipe on the connector of inlet pipe. Pay attention to, it must be seted over the thread, and then tighten it with clipper joint.

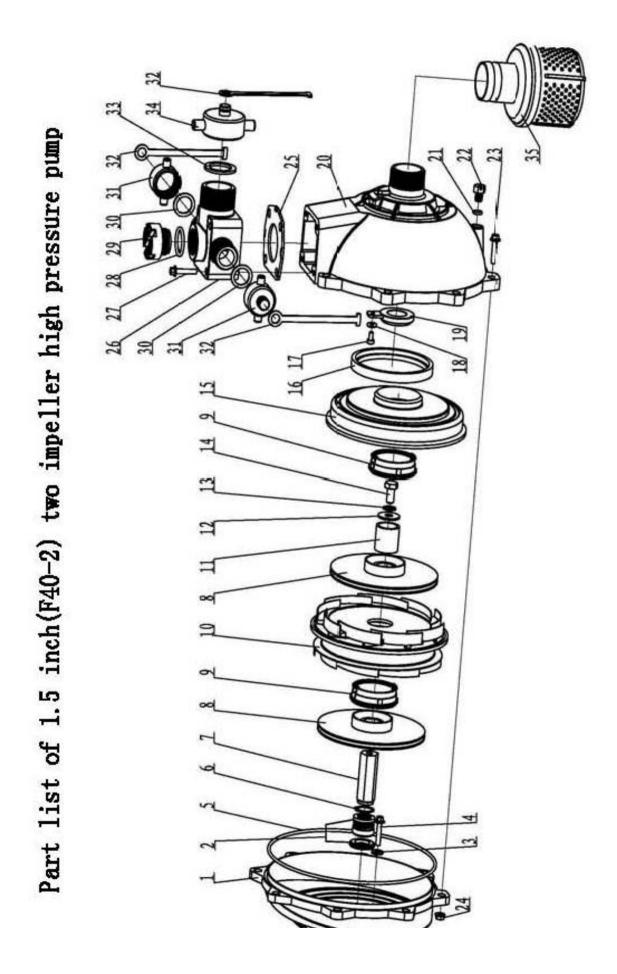
### CHAPTER 3 ANALYSIS OF MALFUNCTION AND REMEDY

Malfunction	Cause	Remedy
<b>b</b> 0	Fill water is not enough	Refill water into the pump
guidmn	Inlet pipe leakage	Check inlet pipe and connector of pipe change Pipe or tighten the screw
t do p	Speed of pump is too low	Check speed and find cause for remedy
an no	The filter net is obstructed	Check the position of installation
The pump can not do pumping	It is over the capacity of pump	Check the position of installation
The	The seal was abrased and air leak	Change the machinery seal set
	The filter net, pipeline or impeller is Choked	Clean up the obstruction
	Speed is low	Increase speed
	Impeller of seal is wore	Adjust the gap or change impeller and
	seriously	machinery seal
	Inlet pipe leakage	Check inlet pipe and connector of pipe, change the pipe or screw down the bolt

	Impeller damage and leakage seriously	Change impeller into a new one
gh Sh	Total head is too high There is air in the pump or inlet, air leak into the seal	Check the reason, adjust it Screw off air drain screw cock, and eliminate the air. Check the pipeline or change machinery seal
ter is not enough	Speed of engine is not stability	Adjust the speed of engine

bte Malfu∰ction Remedy Cause Power consumption of pump is too l 事態 Listen to the sound carefully, There is a rub between impeller whether the impeller is clashed and flow guidance with the case and then to adjust The impeller is obstructed by Check and clean up weeds or eyewinker. The connector of inlet pipe is No flow suddenly Check inlet pipeline and remedy loosed or leakage Suction bead is too high and Check suction head and lower the cause cavitations position of pump Suction head is too high and Check suction head and lower the Cause vibration or cause cavitations position of pump Output of water is too large Decrease the output of water Inlet pipe is obstructed by foreign Check inlet pipe and filter net to body so the resistance is too large clean up

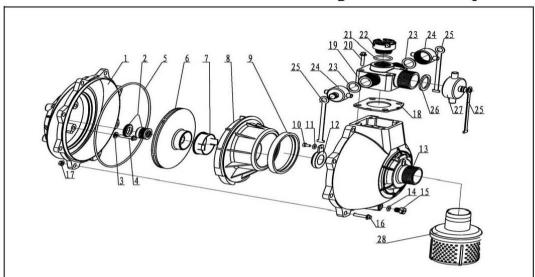
Rotary part is loosed	Listen carefully and inspect the part which cause the noise and stop the machine to adjust
Installing for pump unit is not stability	Stop the machine for checking and adjusting
There is air lay up in the pump or pipeline	Screw off air drain screw cock and expel the air
Impeller damage	Stop the machine for checking and change the impeller with a new one



# Part list of 1.5 inch(F40-2) two impeller high pressure pump

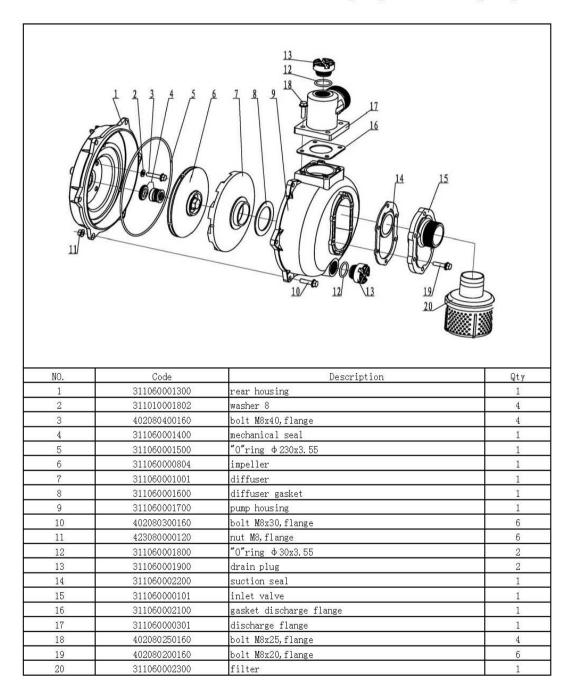
NO.	Code	Description	Qty
1	311050007902	rear housing	1
2	311050007701	mechanical seal	1
3	311010001802	washer 8	4
4	402080400160	hex bolt M8x40	4
5	311050007801	Oring Φ230x3.55	1
6	311050008100	ring	1
7	311050007601	shaft couping	1
8	311050005102	impeller	2
9	311050007301	bush-diffuser	2
10	311050007201	diffuser	1.
11	311050008200	slevee	1.
12	431100001100	gasket 10x30	1
13	431100000100	gasket 10	1
14	401100200160	hex bolt M10x18	1
15	311050005201	diffuser housing	1
16	311050007001	diffuser gasket	1
17	411050080120	screw M5x8	1
18	431050000100	gasket 5x10	1
19	311050005901	return valve	1
20	311050003901	pump housing	1
21	461008002650	"0"ring Φ8x2.65	1
22	311050008600	copper plug M10	1
23	402080300160	hex bolt M8x30	8
24	423080000120	hex nut M8	8
25	311050006801	gasket discharge flange	1.
26	311050006701	discharge flange	1
27	402080550160	hex bolt M8x55	4
28	311050003601	"0"ring Φ30x3.55	1.
29	311050003401	drain plug	1
30	311050006601	gasket(1")	2
31	311050006501	cap(1")	2
32	311050006901	link	3
33	311050006401	gasket(1.5")	1
34	311050006301	cap(1.5")	1
35	311050008300	filter	1

Part list of 1.5 inch (F40) high Pressure Pump

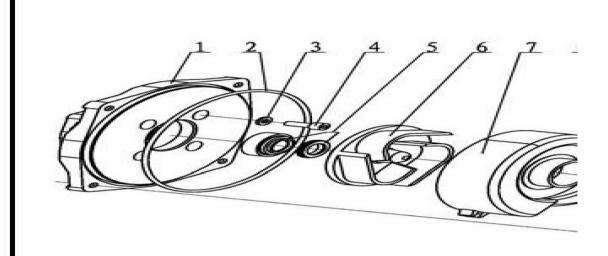


NO.	Code	Description	Qty
1	311050004702	rear housing	1
2	311050008400	mechanical seal	1
3	311010001802	washer 8	4
4	402080400160	bolt M8x40	4
5	311050008500	"0"ring Φ230x3.55	1
6	311050004504	impeller	1
7	311050006001	bush-diffuser	1
8	311050006101	diffuser	1
9	311050007001	diffuser gasket	1
10	411050080120	screw M5x8	1
11	431050000100	gasket 5x10	1
12	311050005901	return valve	1
13	311050004801	pump housing	1
14	461008002650	"0"ring Φ8x2.65	1
15	311050008600	copper plug	1
16	402080300160	bolt M8x30, flange	8
17	423080000120	nut M8, flange	8
18	311050006801	gasket discharge flange	1
19	311050006701	discharge flange	1
20	402080550160	hex bolt M8x55	4
21	311050003601	"0"ring φ30x3.55	1
22	311050003401	drain plug	Ĩ
23	311050006601	gasket (1")	2
24	311050006501	cap(1")	2
25	311050006801	link	3
26	311050006401	gasket(1.5")	1
27	311050006301	cap(1.5")	Ĭ
28	311050008300	filter	Ĭ

# Part list of 2 inch(F50) high pressure pump

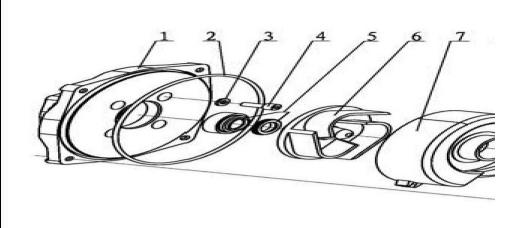


# Parts list of



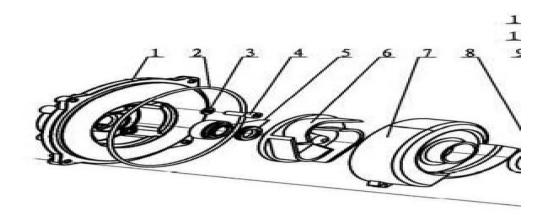
NO.	Code	
1	311010000202	Pun
2	311010001501	Pum
3	311010001802	Bo1
4	402080450180	Bo1
5	311010001901	Me
6	311010000604	Imp
7	311010000801	Vol
8	311010001601	Vo1
9	311010000101	Pun
10	311010001301	Dis
11	431080000100	Was
12	401080250160	Bo1
13	311010001701	Prin
14	311010001101	Pri
15	311010000505	Con
16	311010000901	Pip
17	311010001401	Inle
18	311010000303	Dis
19	311010000403	Inle
20	311010001202	Ret
21	401080200160	Bo1
22	401080250160	Bo1
23	431080000100	Was
24	311010002000	Clip
25	311010001003	Filt

# Parts list c



NO.	Code
110	311020000202
2	311020001401
3	311010001802
4	402080450180
5	311010001901
6	311020000604
7	311020000801
8	311020001501
9	311020000101
10	311020001201
11	431100000100
12	402100250160
13	311010001701
14	311010001101
15	311020000505
16	311020000901
17	311020001301
18	311020000303
19	311020000403
20	311020001102
21	401100200160
22	402100250160
23	431100000100
24	311020001700
25	311020001003

# Parts list



NO.	Code				
<b>1</b>	311030001001				
2	311030002901				
3	311010001802				
4	402080450260				
5	311030003901				
6	311030002500				
7	311030001301				
8	311030001201				
9	311030000801				
10	311030003401				
11	431100000200				
12	401100300260				
13	311030003801				
14	311030003601				
15	311030002101				
16	311030003701				
17	311030003301				
18	311030001501				
19	311030001801				
20	311030003502				
21	401100250260				
22	401100300260				
23	431100000200				
24	311030003201				
25	311030004100				

## EC Declaration of Conformity

We herewith declare, Fuzhou Launtop M&E Co., Ltd.

No. 56, Jinshan Road, Jinshan Industrial Park, Fuzhou, China

We declare that the following Appliance complies with the appropriate basic safety and health requirements of the EC Directives (see item 3) based on its design and type, as brought into circulation by us.

This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user.

1. Designation / Function: Gasoline Engine Powered Water Pumps / pump clean water and

farming water

2. Type: P50C, P80C, P100C, F40C, F40C-2, F50C

3. Serialnumber:

4. Applicable EC Directives: - Machinery Directive 98/37/EC

Additional used EC Directives: - EMC Directive 2004/108/EC

5. *Used harmonized Standards:* - EN809: 1998+AC: 02+A1: 2009

6. Responsible for documentation: [Name + address in EU]

Additional used EC Directives:

- Directive 2002/88/EC against the emission of gaseous

and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery

- EMC Directive 2004/108/EC

- Outdoor- Noise- Directive 2000/14/EC

	P50C	P80C	P100C	F40C	F40C-2	F50C	
Model							
measured sound power level	99.4dB(A)						
guaranteed sound power	105dB(A)						
level							

Conformity assessment method to Annex V/ Directive 2000/14/EC

7. Date / Place/Authorized Signature: 2010-2-12/Fuzhou, China/Benjaminzhuo

8. *Title of Sinatory:* General Manager

#### Note:

The person importing the products becomes responsible for ensuring that they comply with the directives which apply to them. At very least, it is recommended that the importer obtain a copy of the original Declaration of conformity from manufacture.