

# INSTRUCTION MANUAL

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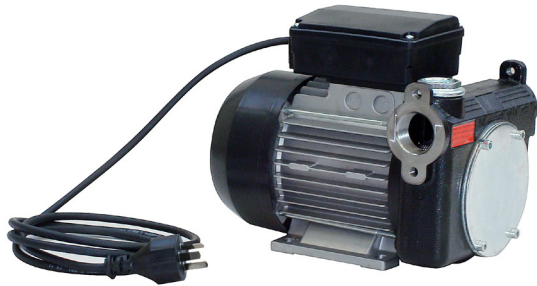
## HIGH FLOW DIESEL PUMP

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AHFP70LPM (70LPM) | AHFP100LPM (100LPM) | AHFP150LPM (150LPM)



AHFP70LPM



AHFP100LPM



AHFP150LPM

# HIGH FLOW DIESEL PUMP

**AHFP70LPM (70LPM) | AHFP100LPM (100LPM) | AHFP150LPM (150LPM)**

## INTRODUCTION

Thank you for purchasing a Macnaught 240 volt electric diesel fuel pump

The Macnaught range of 240 volt electric diesel pumps have been designed to reliably pump and transfer Diesel from a wide range of containers and tanks.

Macnaught also have a complete range of retractable hose reels, fuel nozzles, fuel meters, air operated or manual oil pumps and a full range of greasing equipment available to suit all of your fluid handling requirements.

## GENERAL INFORMATION

This manual assists you in operating and maintaining your electric diesel fuel pump. The information contained will help ensure many years of dependable trouble free operation.

Please read and retain this instruction manual to assist you in the operation and maintenance of this quality product. If you require any further assistance please contact your local Macnaught distributor.

## DESCRIPTION

The Macnaught 240V AC electric diesel pumps are self priming, positive displacement, rotary vane pumps with built-in bypass valves that automatically open when the dispensing nozzle is closed

The AHFP70LPM has a continuous duty cycle.

The AHFP100LPM and AHFP150LPM have a 30 minute duty cycle

### CAUTION

**ONLY USE this pump with Diesel, Kerosene or Antifreeze failure to do so may cause personal injury, damage the pump and would also void pump warranty.**

## ASSEMBLY

Use oil resistant pipe sealant or similar on all pipe threads.

**NOTE:** Refer to the direction of flow as cast to the front of the pump.

1. Select a 1" I/D suction hose or suction tube which is compatible with Diesel
2. Fit the Pump unit securely to the desired location.
3. Select the correct size and length of delivery hose to the pump outlet.



4. Connect remaining end of the delivery hose a suitable Diesel nozzle.

**NOTE:** Macnaught recommends that you use a Macnaught HA1S fuel filter (if required).

## PUMP INSTALLATION OPERATION

**NOTE:** Avoid sparks that could cause a fire: **DO NOT** use a patch cord to extend the power cables.

### IMPORTANT

**The pump should be fitted with a 30mA safety minimum Din standard safety device.**

**Wait at least 5 seconds before restarting the pump motor.**

**DO NOT** let the pump run dry for more than 3 minutes or damage may occur

1. Before use, wipe off any dirt or moisture that may have accumulated on the nozzle or hoses.
2. Insert nozzle into the container to be filled. Insert suction hose (if applicable) into the diesel storage tank.
3. Switch the motor on.
4. Operate the nozzle lever to dispense fluid.



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5. When the desired amount of fluid has been dispensed, release nozzle lever to stop flow.
6. Immediately switch motor off.
7. Nozzle and hoses should be kept clean and dry when not in use.

**NOTE:** Please refer to the information as listed on the identification plate on the pump. This information may be required when you contact Macnaught for any assistance.

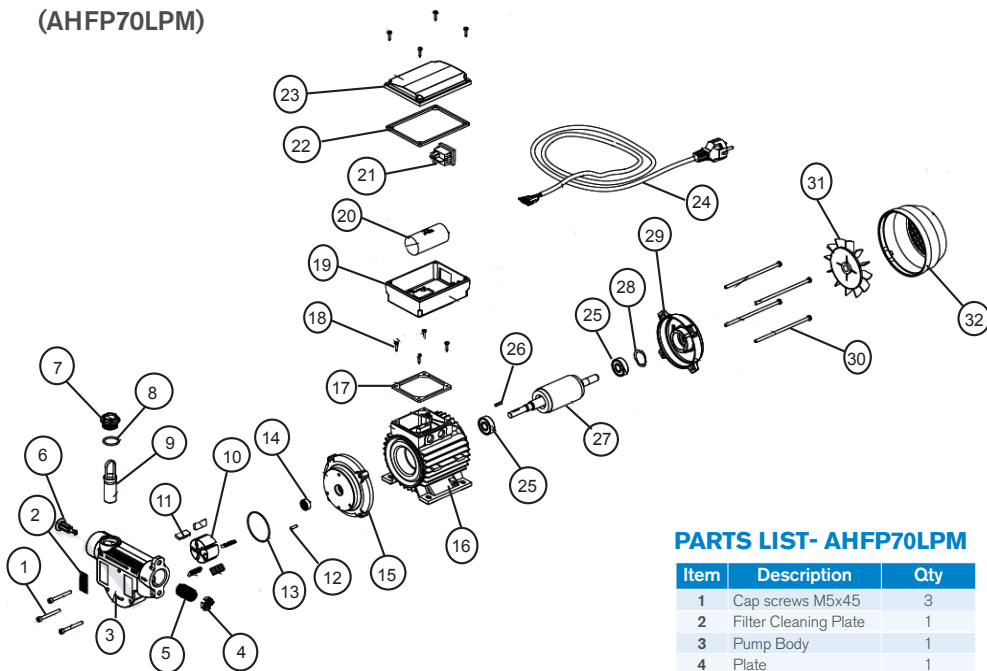
## MAINTENANCE

### IMPORTANT:

Do not modify any part of the pump or any warranty on the product will be automatically void.

1. Inspect and clean the strainer on the suction hose / pipe regularly.
2. Always relieve the line pressure by opening the nozzle, draining hose, and disconnect power before starting any pump maintenance
3. Hoses should be inspected regularly.  
(Replace if found to be cracked or worn)
4. The rotor and vanes will eventually wear, and should be replaced if pump performance degrades.  
(Refer to trouble shooting guide)

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**AHFP70LPM (70LPM) | AHFP100LPM (100LPM) | AHFP150LPM (150LPM)**
**(AHFP70LPM)**

**PARTS LIST- AHFP70LPM**

Item	Description	Qty
1	Cap screws M5x45	3
2	Filter Cleaning Plate	1
3	Pump Body	1
4	Plate	1
5	By pass spring	1
6	By pass valve	1
7	3/4" BSP Cap	1
8	O'ring	1
9	Filter	1
10	Rotor	1
11	Vane Set	5
12	Key	1
13	O'ring	1
14	Seal	1
15	Motor Flange	1
16	Motor housing	1
17	Gasket	1
18	Screws	10
19	Capacitor housing	1
20	Capacitor	1
21	Switch	1
22	Gasket	1
23	Capacitor housing cover	1
24	Cable assembly	1
25	Bearing	2
26	Key	1
27	Motor shaft	1
28	Compensation ring	1
29	Motor end cover	1
30	Tie rod screws	4
31	Fan blade	1
32	Fan Cover	1

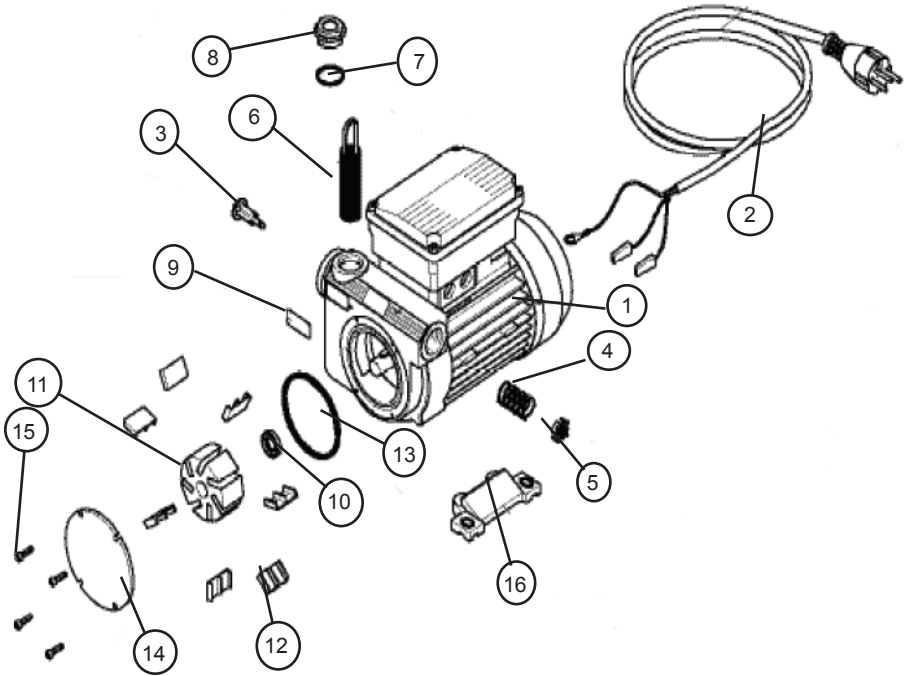
**AVAILABLE ACCESSORIES**

Manual nozzle
Automatic nozzle
For wet seal kit order AHFP70LPM-1K
For poppet valve set order AHFP70LPM-2k

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AHFP70LPM (70LPM) | AHFP100LPM (100LPM) | AHFP150LPM (150LPM)

(AHFP100LPM)



## PARTS LIST- AHFP70LPM

Item	Description	Qty
1	Motor Assembly	1
2	Cable Assembly	1
3	By Pass Valve	1
4	By Pass Spring	1
5	Plate	1
6	Filter	1
7	O'ring	1
8	1\"/>	
9	Filter cleaning plate	1
10	Seal	1
11	Rotor	1
12	Vane Set	7
13	O'ring	1
14	Face plate	1
15	Screws M5x16	4
16	Motor foot	1

## AVAILABLE ACCESSORIES

Manual nozzle

Automatic nozzle

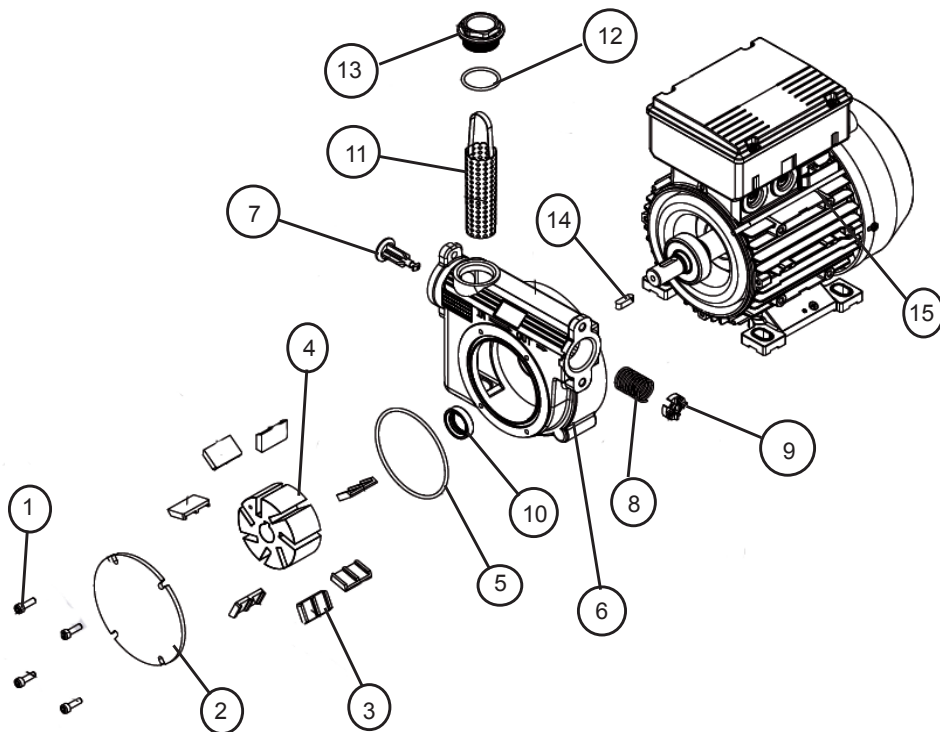
For seal kit order AHFP100LPM-1K

Rotor set- ARPRS-100L

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AHFP70LPM (70LPM) | AHFP100LPM (100LPM) | AHFP150LPM (150LPM)

(AHFP150LPM)



## PARTS LIST- AHFP150LPM

Item	Description	Qty
1	Screws M5x16	4
2	Cover plate	1
3	Vane Set	6
4	Rotor	1
5	O'ring	1
6	Pump body	1
7	By pass valve	1
8	By pass spring	1
9	Plate	1
10	Seal	1
11	Filter	1
12	O'ring	1
13	1\"/>	
14	Key	1
15	Motor assembly	1

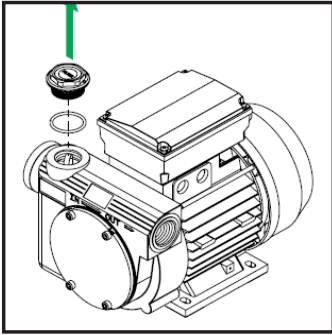
## AVAILABLE ACCESSORIES

Manual nozzle
Automatic nozzle
For seal kit order AHFP150LPM-1K
Rotor set- ARPRS-150L

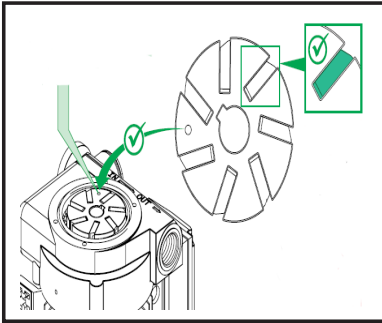
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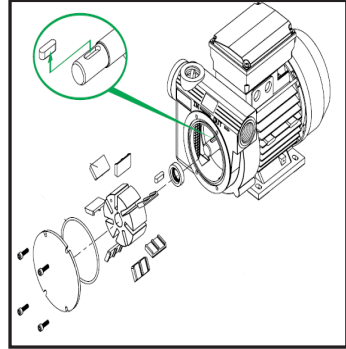
1. Remove plug and strainer



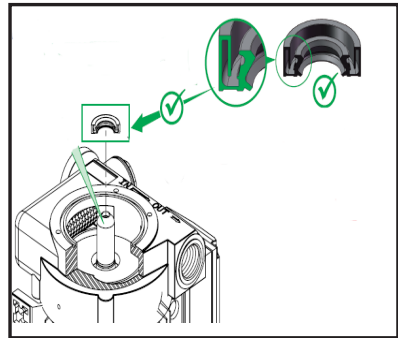
2. Ensure the correct orientation for rotor and vanes



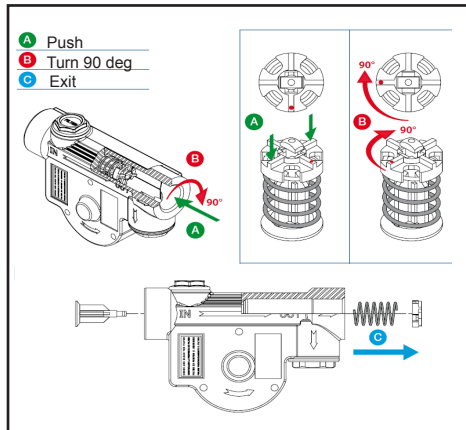
3. Removal / replace drive key



4. Correct orientation for seal



(Poppet valve assembly / disassembly)



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## TROUBLE SHOOTING GUIDE

Problem	Cause	Solution
<b>Pump fails to start</b>	1) Suction hose/tube has a blockage	1) Clear blockage from suction hose/tube
	2) Outlet is blocked	2) Check outlet hose and nozzle for blockage and correct operation
	3) Bypass poppet not closing	3) Check bypass valve is closing correctly
	4) Vanes sticking	4) Check vanes are sliding freely in the slots (remove burrs or replace vanes if required)
	5) Excessive vane or rotor wear	5) Replace rotor and/or vanes
	6) Leak from front o'ring	6) Check o'ring for correct sealing, replace if required
<b>Pump vibrates but does not turn on</b>	1) Dirt jammed inside the pump	1) Clean pump chamber
	2) Faulty motor	2) Replace pump
	3) Broken rotor key	3) Replace rotor key
<b>Low Flow</b>	1) Blocked strainer	1) Clean or replace strainer
	2) Restriction on the inlet or outlet	2) Incorrect size hoses used on inlet or outlet
	3) Excessive rotor or vane wear	3) Replace worn or damaged components
	4) By pass poppet blocked	4) Check poppet valve for correct operation
	5) Low fluid level in tank	5) Fill tank
<b>Motor overheating</b>	1) Fluid too thick (viscous) [NOTE: Not applicable to AHFP70LPM]	1) Fluid to be no thicker than Diesel
	2) Motor running longer than 30 minutes [NOTE: Not applicable to AHFP70LPM]	2) Pump must only run for 30 minutes before cooling
	3) Blocked suction hose	3) Clean blockage from suction hose
	4) Blocked strainer	4) Clean strainer
<b>Motor not turning on</b>	1) Poor electrical connection	1) Check for any signs of damage on electrical connection
	3) Faulty switch or power point	3) Replace switch or power point
<b>Pump leaking out of weep hole</b>	1) Worn or damaged shaft seal	1) Replace seal
	2) Fluid compatibility	2) Only use compatible fluid



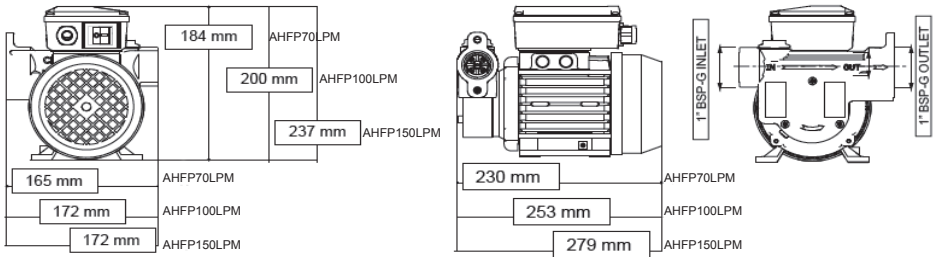
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## SPECIFICATIONS

	AHFP70LPM	AHFP100LPM	AHFP150LPM
Maximum Flow	70LPM	100LPM	150LPM
Voltage	240 volt	240 volt	240 volt
Max Current	2.3 amp	4.1 amp	14.5 amp
Duty cycle	Continuous	30 minutes	30 minutes
Inlet / Outlet	1" BSP (F)	1" BSP (F)	1" BSP (F)
Motor protection rating	IP55	IP55	IP55
Maximum prime height	2m	2m	2m

## PUMP DIMENSIONS





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## NOTES:



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AHFP70LPM (70LPM) | AHFP100LPM (100LPM) | AHFP150LPM (150LPM)

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## NOTES:

Note:

This product should be disposed of according to all applicable local and national government environment regulations and guidelines.



**macnaught**

Built to last since 1948.

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For Warranty Terms and Conditions see [www.macnaught.com.au](http://www.macnaught.com.au)

For a list of Australian Service Centres see [www.macnaught.com.au](http://www.macnaught.com.au)