

INSTRUCTION MANUAL

240V UREA/DEF IBC DISPENSING KIT

AUP240



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INTRODUCTION

Thank you for purchasing a Macnaught 240 volt Electric Urea (DEF) IBC dispensing kit.

The Macnaught Electric Urea / DEF dispensing kit is supplied, complete with IBC Mounting plate, Manual Nozzle, Drip Tray, 8m x 3/4" hose and 2m x electric cable with plug, with fittings and hose clamps.

Macnaught also has 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 Urea / DEF 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

This transfer pump is designed to reliably transfer Urea/DEF. The pump is a self priming, positive displacement, rotary vane pump operating on 240 volts. The pump delivers up to 40 litres per minute, has a built-in bypass valve that keeps the operating pressure below 1.3 Bar (18 psi) and the motor has a 30 minute duty cycle.

If you require a meter for your pump, Macnaught recommends the Macnaught ADTUM Urea turbine meter.



CAUTION

ONLY USE this pump with UREA / DEF and water, failure to do so may cause personal injury or damage the pump which void pump warranty.

ASSEMBLY

Use a suitable pipe sealant or Teflon® tape on all pipe threads.

1. Securely attach the mounting plate to the IBC
2. Cut hose as required. Use one length of hose as the suction hose, and the remaining hose as the delivery hose
3. Connect the nozzle to the end of the outlet hose.
4. Connect the remaining end of the outlet hose to the outlet on the pump.
5. Connect the inlet fitting (supplied) to the end of the inlet hose.
6. Connect the remaining end of the inlet hose to the inlet on the pump.

PUMP INSTALLATION

1. Connect the remaining end of the suction hose (fitting) to the outlet on the IBC.
2. Connect the plug on the power cord to a 240 volt power connection.



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OPERATION

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

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

1. Ensure that all hoses and fittings are tight and secure.
2. Switch on pump to prime, checking that all connections are leak free.
3. Your pump is now ready for use
4. When the desired amount of fluid has been dispensed, release nozzle lever to stop flow.
5. Immediately switch motor off.

MAINTENANCE

Important:

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

1. Always clean and check the condition of the electric plug and wire, replace if required.
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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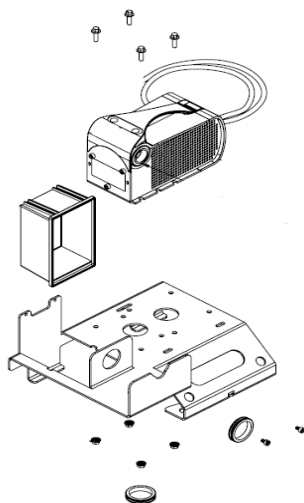
PARTS LIST

Item	Description	Qty
1	Pump Body	1
2	Motor	1
3	Base plate	1
4	By pass cap	1
5	By pass spring	1
6	By pass valve	1
7	Pump seal	1
8	O'ring	1
9	Drive key	1
10	Rotor	1
11	Vane Set	5
12	Tie rod screws	2
13	Face plate screws	3
14	Switch	1

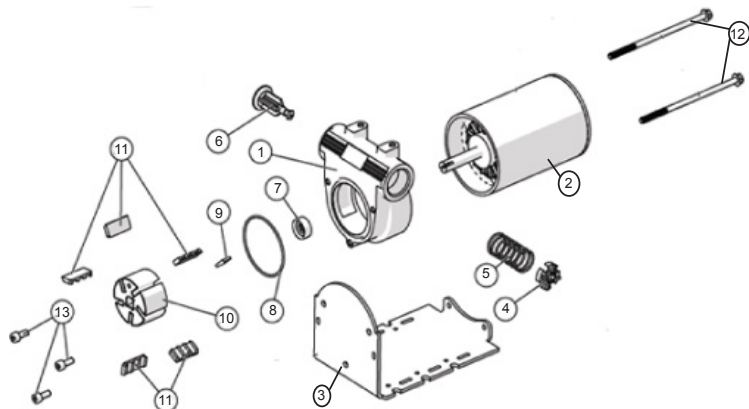
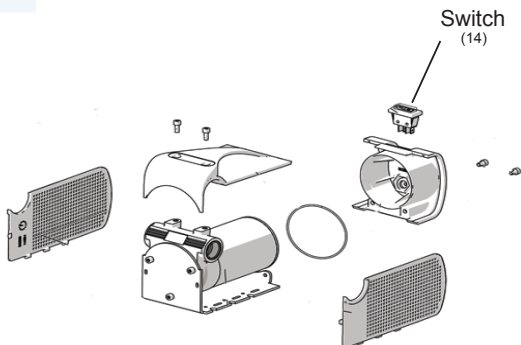
AVAILABLE ACCESSORIES

For wet seal kit order AUP240-1K

For poppet valve set order AFP240-2K



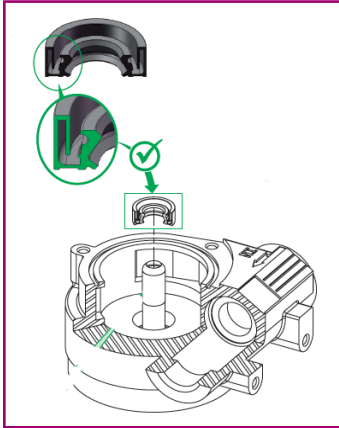
Switch
(14)



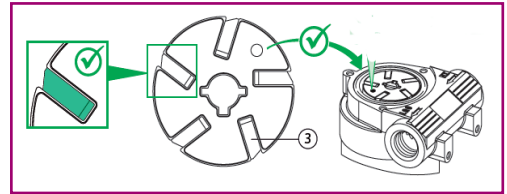
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(Correct seal orientation)

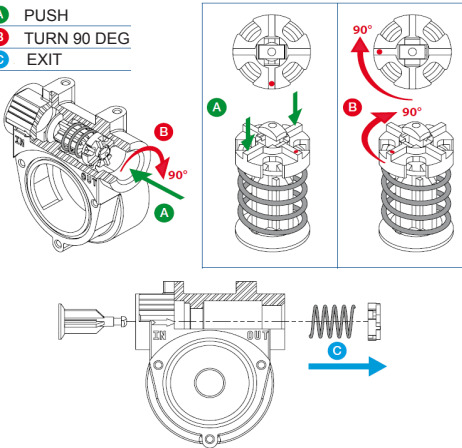


(Correct vane / rotor orientation)



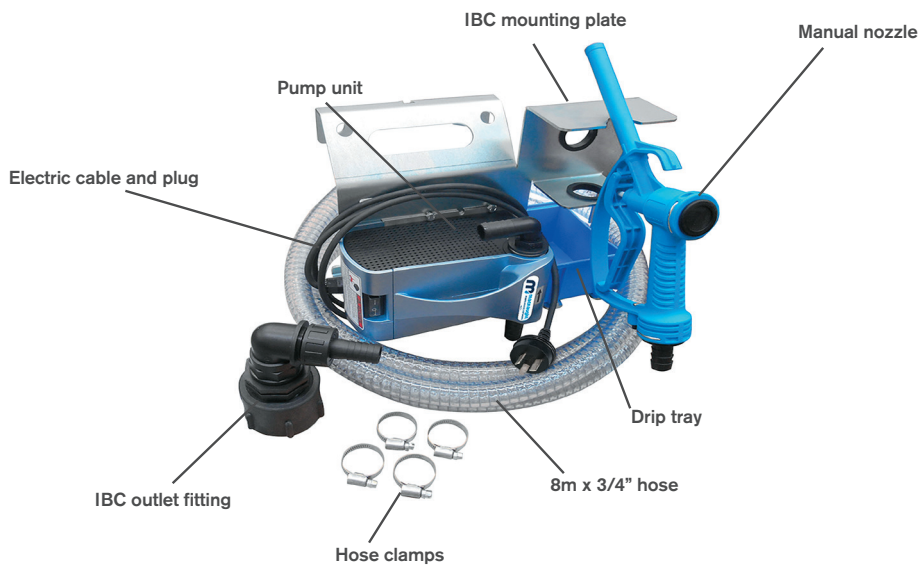
(Poppet valve assembly / disassembly)

- A** PUSH
- B** TURN 90 DEG
- C** EXIT

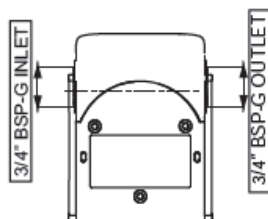
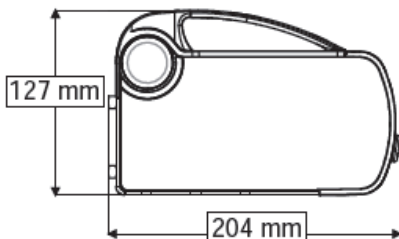
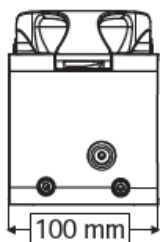


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PUMP DIMENSIONS





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TROUBLE SHOOTING GUIDE

Problem	Cause	Solution
Pump fails to start	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
Pump vibrates but does not turn on	1) Dirt jammed inside the pump	1) Clean pump chamber
	2) Faulty motor	2) Replace pump
	3) Broken rotor key	3) Replace rotor key
Low flow	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
Motor overheating	1) Fluid too thick (viscous)	1) Fluid to be no thicker than Urea/DEF and Water
	2) Motor running longer than 30 minutes	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
Motor not turning on	1) Poor electrical connection	1) Check if plug or cable is damaged
	2) Faulty switch	2) Replace switch
Pump leaking out of weep hole	1) Worn or damaged shaft seal	1) Replace seal
	2) Fluid compatibility	2) Only use compatible fluid

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SPECIFICATIONS

	AUP240
Maximum Flow	40ltr/min
Maximum pressure	1.3bar
Voltage	240 Volt
Current	1.4 amp
Duty cycle	30 min
Inlet / Outlet	3/4" BSP (F)
Temperature	-20 deg C / +50 deg C
Wetted materials	INOX AIS1302, POM, HNBR
Maximum prime height	2m
Motor protection rating	IP55



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NOTES



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Built to last since 1948.

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For Warranty Terms and Conditions see www.macnaught.com.au

For a list of Australian Service Centres see www.macnaught.com.au