SIP Industrial Products Limited

Gelders Hall Road Shepshed Loughborough

Leicestershire LE12 9NH United Kingdom



# SIP 3" Diesel Water Pump

SIP Code 04909

For help or advice please contact your distributor, or sip directly on:

Tel.: 01509 500400

Email:

sales@sip-group.com

or

customerservice@sip-group.com

Please read and fully understand the instructions in this manual before operation. Keep this manual safe for future reference.

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#### SAFETY INSTRUCTIONS

- Before starting or servicing this water pump, read and understand all instructions. Failure to follow safety precautions or instructions can cause equipment damage and/or serious personal injury. Retain all manuals for future reference.
- Never use this water pump for any application other than that specified by the manufacturer. Never operate this water pump under conditions not approved by the manufacturer.
- Never attempt to modify this water pump to perform in any manner not intended by the manufacturer.
- Use only products and parts recommended by the manufacturer for maintenance and repairs.
- Be sure that the water pump is operated only by persons who have read and who understand these instructions.
- Ensure that the water pump is placed on a flat level surface prior to and during op -eration. The water pump must not slide or shift during operation.
- Keep all untrained persons away from the water pump during operation.
- Do not allow persons wearing loose clothing or jewellery to start or operate the
  water pump. Loose clothing or jewellery may become entangled in moving compo
  -nents, causing equipment damage and/or personal injury.
- Be aware of moving parts and hot surfaces that occur during normal operation of this water pump.
- Never operate the water pump with damaged, broken or missing parts, or with any guards or covers removed.
- Do not refill the fuel tank while the engine is running.
- Be careful to prevent fuel spillage during refills.
- Be sure the fuel tank cap is securely in place before starting the engine.
- Allow the engine to cool before refuelling etc.
- Never refuel whilst smoking or in the vicinity of a naked flame, or any ignition source.
- Take care not to spill any fuel on the engine, exhaust or any part of the water pump.
- Should any fuel make contact with your clothes; change and wash them immediately.

#### SAFETY INSTRUCTIONS Cont...

- If any fuel makes contact with your skin wash with soap and water immediately.
- If you swallow any fuel, inhale any vapour or allow contact with your eyes, seek medical advice immediately.
- Be sure to store diesel in clean containers that do not contain water, dirt or rust be-cause this will reduce the life of the engine; ensure that all local fuel storage laws are followed.
- Never operate this water pump in an explosive atmosphere or near any flammable sources.
- Always operate this water pump in a well ventilated area to reduce the risk of suffocation.
- Turn off the engine before performing any service or maintenance to the unit.
- Never drag the water pump with hoses etc. to move it; only move the water pump with the carrying handles.
- Never cover the water pump or restrict the exhaust or air flow in any way.
- Always ensure that the water pump is at least 1m (3ft) away from any walls or buildings to allow correct air flow.
- Avoid inserting hands or other objects into the inlet or the outlet of the pump.
- Always check the pump regularly, and take it out of service if the water is likely to freeze
- When not in use, always ensure that the pump is fully drained of any water and store it in a warm environment to protect it from frost damage.
- Understand the operating environment; Before each use the operator should assess, understand and where possible reduce the specific risks and dangers associated with the operating environment. Bystanders should also be made aware of any risks associated with the operating environment.

## **SAFETY INSTRUCTIONS Cont...**

## **Safety Symbols Used Within This Manual**



**Danger / Caution:** Indicates risk of personal injury and / or the possibility of damage



Warning: Risk of Combustion and/or damage



Note: Supplementary Information



*Important:* Please read the following instructions carefully, failure to do so could lead to serious injury or damage to the product.

# **TECHNICAL SPECIFICATION**

Model	04909	
Engine Type	EURO V 4-stroke 1-cylinder OHV	
Fuel Type	Diesel	
Ignition Type	Electric	
Max Engine Output (kW)	4.4	
Rated Engine Output (kW)	4.0	
Engine Speed (RpM)	3600	
Fuel Tank Capacity (L)	3.5	
Water Flow Rate (LpM)	1000	
Outlet Diameter	3" / 76mm	
Max Pumping Head (M)	30	
Max Suction Head (M)	8	
Gross Weight	65kg	
Net Weight	62kg	
Product Dimensions	615 x 515 x 555mm	
Packaged Dimensions	625 x 525 x 570mm	

#### **GUARANTEE**

This item is covered by a 24 month parts and labour warranty covering failure due to manufacturers defects.

Please register your product online at www.sip-group.com within 28 days to qualify for the full 24 month warranty. Failure to register will result to a limited 12 month warranty period.

This does not cover failure due to misuse or operating the item outside the scope of this manual - any claims deemed to be outside the scope of the warranty may be subject to charges Including, but not limited to parts, labour and carriage costs.

Consumable items such as Handles, Wheels Keys etc are not covered by the warranty.



**Note:** Proof of purchase will be required before any warranty can be honoured.

#### **OPERATING INSTRUCTIONS**

## **Connecting The Battery**



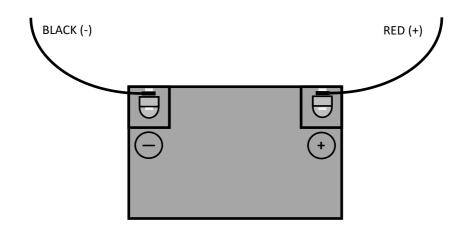
*Important:* Please read the following instructions carefully, failure to do so could lead to serious injury, or damage to the product.

The product will arrive fitted with a 12V battery, the leads will come disconnected from the battery for safety during transport, these will need to be reconnected before use. Please follow the below instructions;

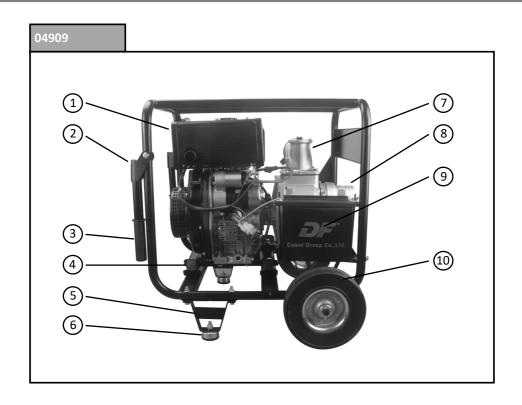
- 1) Remove the plastic protective covers from the battery leads
- 2) Using the M6 bolts provided connect the positive battery lead (Red) to the positive terminal of the battery, and tighten securely.
- 3) Only when the positive terminal is secured, connect the Negative battery Lead



**Danger / Caution:** Connecting the leads in the incorrect order could lead to damage, or injury.

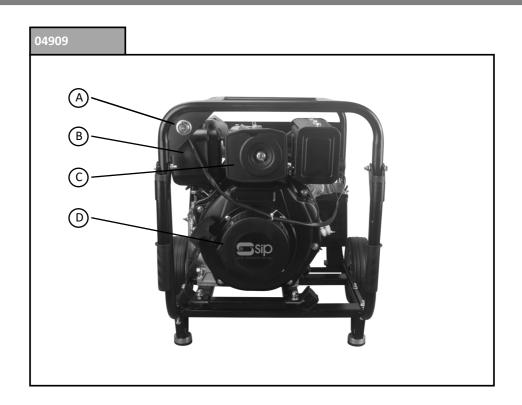


## **GETTING TO KNOW YOUR DIESEL WATER PUMP**



Item	Description	Item	Description
1	Exhaust	6	Rear Leg Anti Vibration Mount
2	Folding Handle	7	Pump Outlet
3	Grip	8	Pump Inlet
4	Engine Anti Vibration Mount	9	Battery
5	Rear Leg	10	Wheel

# **GETTING TO KNOW YOUR DIESEL WATER PUMP Cont...**



Item	Description	Item	Description
A	Ignition Barrell	С	Air Filter
В	Fuel Tank	D	Recoil Starter

## **ASSEMBLY INSTRUCTIONS**

# Fitting The axle

- 1) Lifting the pump end of the water pump, offer up the axle with the 4 predrilled holes in the frame.
- 2) Insert the 2 x U-Bolts ensuring they sit in the machined recess of the axle.
- 3) Install the 4 x nuts and washers, and tighten securely.



## Fitting The Wheels

Install the wheels as shown below, and insert the split pin to securely retain the wheel onto the axle.

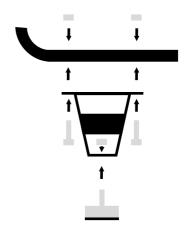
Repeat this step for both sides



## **ASSEMBLY INSTRUCTIONS Cont...**

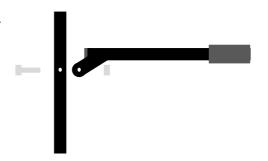
## **Fitting The Legs**

To install the rear legs and antivibration mounts to the product, follow the diagram shown right.



# **Installing the Handles**

- Align the holes in the folding handle with the holes in the uprights of the water pump frame.
- 2) Install the two bolts through the frame, and tighten them.





**Note:** If the handle does not pivot after tightening, slightly loosen the two retaining bolts until the handle pivots with slight resistance.

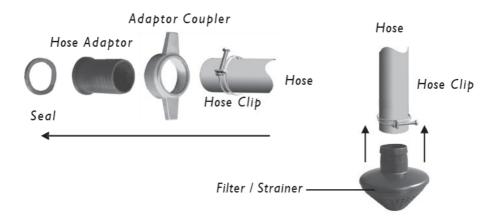
#### **ASSEMBLY INSTRUCTIONS Cont...**

## **Connecting The Hoses**



**Note:** The hose can be fitted directly to the pump if the hose has the correct female fitting, alternatively; follow the instructions below to fit the hose by means of a hose adaptors.

- 1. Fit the 3" inlet and outlet adaptors to the pump.
- 2. Slide the hose clips over the hose.
- 3. Fit the inlet and outlet hoses over the adaptors and secure with the hose clips.
- 4. Fit the filter / strainer at the opposite end of the suction hose.
- 5. Sit the end of the suction hose into the area / water to be cleared and the end of the outlet hose to where the water is to be pumped.





**Note:** Solid wall / super tough hose should be used instead of lay flat to ensure the pump will work to its capacity.

## Filling the crankcase with oil / Checking The oil level



**Danger / Caution:** The product will arrived drained of oil, however there may still be residual oil in the crankcase. Due to this quantities are given as a guideline ONLY



**Note:** When checking the oil level; Always ensure the water pump is on a flat and level surface

- 1) Remove the oil filler cap / dipstick by turning it counter clockwise.
- 2) Slowly pour the oil into the crankcase.
- 3) Check the oil level by resting the oil filler into the hole up to the bottom of the threads (do not screw the cap in).
- 4) Once the oil level is between the upper and the lower marks on the oil filler cap / dipstick (see below), refit it and turn clockwise to fully tighten.

The oil level should be checked every 8 hours or daily.

The oil should be changed after the first 20 hours of operation; thereafter change the oil after 100 hours of operation or less if the water pump is operated under constant heavy loads or in high ambient temperatures.





**Danger / Caution:** Ensure the oil level is maintained; Failure to do so will invalidate any warranty you may have.

## Filling The Water Pump With Fuel



**Warning:** The fuel used to run this water pump (diesel) is highly flammable. Never re-fuel the water pump whilst it is running. Do not re-fuel near naked flames or other possible ignition sources.

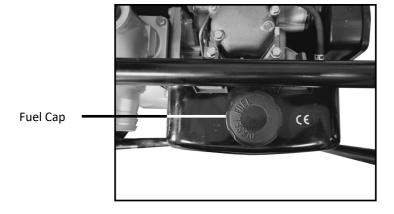


**Note:** Never overfill the fuel tank; leave a small air gap at the top. Fuel capacity: 3.5 Litres.



**Note:** fuel filter (supplied) is in place under the filler cap, as foreign matter or debris will cause damage to the engine and greatly reduce the life of the water pump.

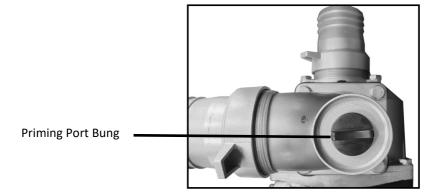
- 1) Remove the fuel cap.
- 2) Carefully pour the diesel into the tank to the desired level (make sure the fuel filter is fitted), refit the fuel cap
- 3) Remove any spilt fuel from the water pump and surrounding area to avoid any risk of fire.



## **Priming The Pump**

Prior to use, the pump will need to be primed;

- 1) Remove the priming port bung.
- 2) Pour water through the port until it is full.
- 3) The amount of water needed will depend on different factors such as length of hose etc.
- 4) Once full, refit the priming port bung.





**Note:** The pump may need to be primed every time the pump is stopped (depending on different factors). The use of an NRV (non return valve) on the suction hose will reduce this issue.

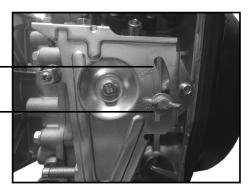


**Note:** The pump should not be run without water in the pumping chamber / impellor housing as this could cause damage.

## **Starting The Engine**

1) Push the Start/Stop lever downwards to the start position and turn the Wing Nut clockwise Start to lock into place.

Stop





2) Turn the fuel tap to the 'ON' position.

**Fuel Tap** 

## **Electric Start**;

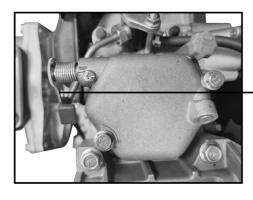
Turn the ignition key to the 'Start' position, the starter motor will engage and the engine will start. Once the engine has started release the key, and allow it to return to the 'ON' position immediately



Danger / Caution: Failure to return the ignition key to the 'ON' position immediately after start could cause damage to the engine.

#### Recoil Start;

- 1) Hold the water pump firmly with one hand, grip the recoil handle and slowly pull the recoil until it engages.
- 2) Return the recoil slowly back in
- 3) Move the decompression lever to the down position
- 4) Pull back sharply on the recoil handle, DO NOT let go of the handle. Instead, let it return slowly.



Decompression lever



**Note:** The Decompression lever will automatically return once the engine has started



**Note:** It may take a few attempts to get the engine started, if it does not start the first time, please repeat the starting instructions.

# **Stopping The Water Pump**

## In Normal Conditions;

- 1) Turn the Start/Stop lever knob counter clockwise to the 'OFF' position
- 2) Turn the ignition key to the 'OFF' position
- 3) Turn the fuel tap 'OFF'

#### In An Emergency;

1) Turn the Start/Stop lever knob counter clockwise to the 'OFF' position

#### **MAINTENANCE**

## **Changing The Oil**

#### Change The Engine Oil (After 20 hours - first use, then every 100 hours of use).

- 1) Turn the oil filler cap counter clockwise and remove from the crankcase.
- 2) Loosen and remove the oil drain bung and allow the oil to drain into a suitable container.
- 3) Refit and tighten the oil drain bung once all of the oil has drained.
- 4) Fill the crankcase to the max level with fresh oil (see page 12); we recommend the use of SAE 10W-30 oil.
- 5) Replace the oil filler cap / dipstick.

#### Clean or Replace The Air Filter

## Clean or Replace The Air Filter (every 50 hours of use).

- 1) Remove the air filter cover wing nut.
- 2) Remove the air filter cover.
- 3) Remove the air filter element.
- 4) If the air filter is damaged contact your local distributor to purchase a replacement, If the filter is dirty, remove and wash the sponge section of the filter in a solution of warm water and mild detergent and rinse thoroughly. Leave the filter to dry completely; For the main filter element, blow dry air through it from the inside out until the contaminants are removed from the filter.
- 5) Place the sponge section back over the main filter element then place both back into the original position and replace the air filter cover etc.

## **MAINTENANCE Cont...**

## **Check The Fuel Tank Filter**

## Check the fuel tank filter after every 100 hours of use

- 1.Remove the fuel tank cap and filter.
- 2.Clean the filter and, if damaged replace.
- 3.Insert the filter back into place.
- 4. Ensure the tank cap is tightly secured.

# **MAINTENANCE Cont...**

# Trouble Shooting

Issue/Fault	Potential Cause	Solution
No Output From Pump	1.Pump Not Fully Primed. 2.Inlet Pipe Leaking. 3.Filter/Strainer clogged 4.Suction / overall head too high 5.Damaged pump seal	1.Prime the pump 2.Tighten Clamps / Replace damaged pipe 3. Clean filter / Strainer 4.Reduce the height to recommended level. 5.Replace pump seal
Low Water Flow	1.Filter / strainer, pipeline obstructed 2.Inlet pipe leaking 3.Worn / damaged impellor 4.Suction / Overall head too high	Inspect and clear obstruction     Tighten clamps / replaced damaged pipe     Check and replace impeller     Reduce the height to the recommended level.
Flow Stops Suddenly	1.Inlet connector leaking 2.cavitation caused by too high a suction head 3.Filter / Strainer obstructed	1.Check and tighten connector     2.Reduce the height to recommended level.     3.Inspect and clear obstruction
Pump Excessively Noisy and Vibrating	1.cavitation caused by too high a suction head 2.Filter / strainer obstructed 3.Loose rotary equipment 4.Unstable pump installation 5.Air in system 6.Damaged or binding components	7.Reduce the height to recommended levels. 8.Inspect and clear obstruction. 9.Inspect and tight loose part 10.Stop operation and reposition pump. 11.Release air and prime the pump 12.Inspect and repair / replace component.

# **ACCESSORIES**

For information on the accessories available for this product, please visit our website. www.sip-group.com

# **SPARE PARTS**

For information on the spare parts available for this product, please visit our website. www.sip-group.com

## **UK - DECLARATION OF CONFORMITY**

We

SIP (Industrial Products) Ltd
Gelders Hall Road
Shepshed
Loughborough
Leicestershire
LE12 9NH
England

As the manufacturer within the UK, England, Scotland & Wales, declare that the 04909 - SIP 3" DIESEL WATER PUMP

Conforms to the requirements of the following regulation(s), as indicated.

2014/30/EU 2006/42/EC 2018/989/EU

And the relevant harmonised standard(s), including

BS EN ISO 14982: 2009 BS EN 809:1998+A1:2009+AC:2010

al poso.

Mr P. Ippaso - Managing Director SIP (Machinery Europe) Ltd

Date: 18/07/2024



#### **EU - DECLARATION OF CONFORMITY**

We

SIP (Machinery Europe) Ltd
ASM Chartered Accountants
First Floor Block One
Quayside Business Park
Dundalk
County Louth
Republic of Ireland

As the manufacturers authorised representative within the EC  $\,$  declare that the

04909 - SIP 3" DIESEL WATER PUMP

Conforms to the requirements of the following directive(s), as indicated.

2014/30/EU 2006/42/EC 2018/989/EU

And the relevant harmonised standard(s), including EN ISO 14982:2009

EN 809:1998+A1: 2009+AC:2010

Mr P. Ippaso - Managing Director SIP (Machinery Europe) Ltd

Date: 18/07/2024

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Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.

Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility please use it or alternatively use a recognised recycling agent. This will allow the recycling of raw materials and help protect the environment.





FOR HELP OR ADVICE ON THIS PRODUCT PLEASE CONTACT YOUR DISTRIBUTOR, OR SIP

DIRECTLY ON: TEL: 01509 500400

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or

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