

INSTALLATION INSTRUCTIONS

SERVICE KIT – MECHANICAL SEAL REPLACEMENT KIT. PART NO. **27660**

- Monsoon Standard & Universal Single & Twin Pumps

● KIT CONTENTS

ITEM		QTY	ITEM		QTY
1	Screw Pozi Drive M6 × 35	4	11	'O'-Ring (ID 4.1 mm x 1.6 mm sec)	1
2	Circlip	1	12	1/8 " Bonded Seal	1
3	Stainless Washer	1	13	'O'-Ring (ID 15.0 mm x 3.5 mm sec)	2
4	Seal Rotary Assembly	1	14	Reed Clamp Tie Wrap	2
5	Seal Counterface	1	15	Seal Applicator Tool	1
6	'O'-Ring (ID 66.4 mm x 1.78 mm sec)	1	*16	Hose Sealing Washer, Eire (OD 24.5 x ID 15.3 × 2.4)	4
7	Woodruff Key	1	17	'O'-Ring (ID 8.1 mm x 1.6 mm sec)	1
8	'O'-Ring (ID 24.6 mm x 2.4 mm sec)	2	18	'O'-Ring (ID 10.1 mm x 1.6 mm sec)	1
9	M4 × 16 Screw	4			
10	G ½ " Rubber Washer	1			

*NOTE: Two variants of the hose sealing washer are supplied for UK or Eire pumps which are not interchangeable. Ensure replacements used are identical in size to the sealing washer being replaced.

● PUMP DISASSEMBLY

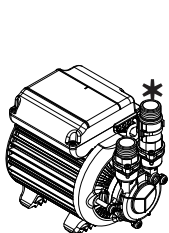
To access the mechanical seal assembly the flow switch assemblies must first be removed (Fig. 1).

Please refer to the relevant section of enclosed Supplementary Sheet 19083 as detailed below:-

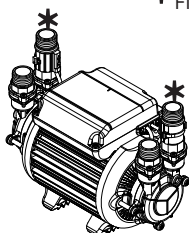
Monsoon Standard Single & Twin Pumps	Section 1.
Monsoon Universal Single	Section 2.
Monsoon Universal Twin	Section 3.

Flow Switch Assemblies:-

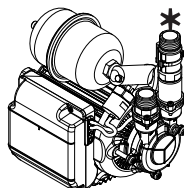
*Flow switch body assembly



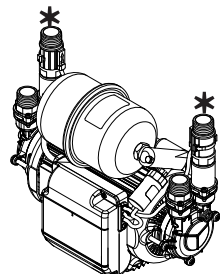
Standard Single Pump



Standard Twin Pump



Universal Single Pump



Universal Twin Pump

Fig. 1

To identify which components are required, the following exploded view details the pump components along with the serviceable parts.

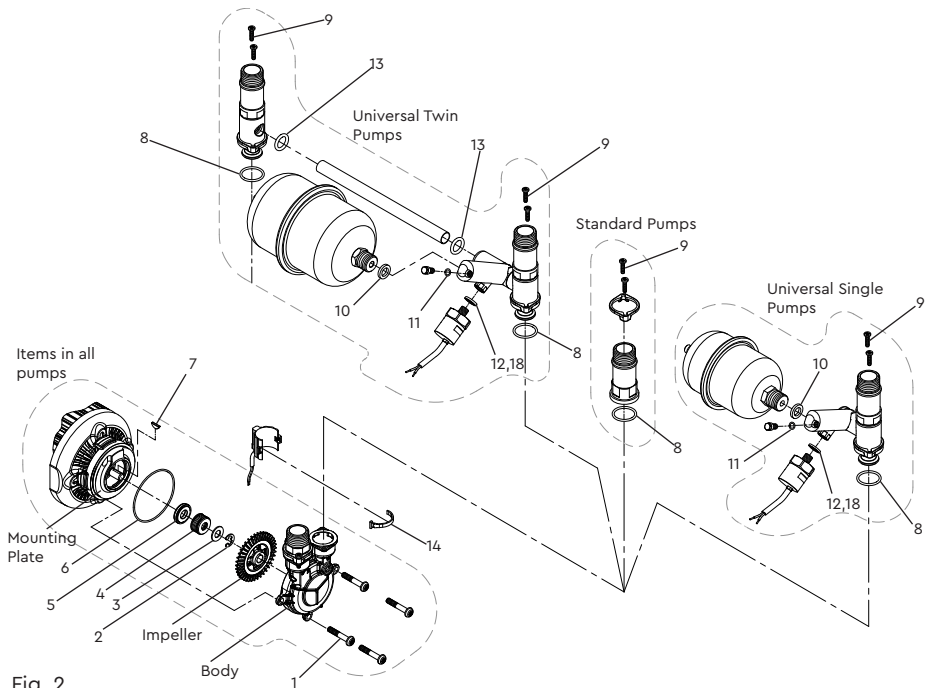


Fig. 2

To disassemble the pump, the following items are required to be removed in the sequence detailed (Fig. 2).

- Remove 4 screws (item 1) and gently prise off the pump body – note 'O'-ring (item 6) between pump body and mounting plate.
- Slide impeller away from shaft and remove woodruff key (item 7) – (see note: Fig. 3).
- Remove circlip (item 2) and mechanical seal parts. (items 3 & 4).
- Gently prise off mounting plate.
- Remove Counterface (item 5) from its mounting plate location.
- Note: Other parts are supplied in this kit and can be used as shown in Fig. 2 if replacement required.

Note:

Difficulties may be experienced in the removal of the impeller. To overcome this, two screwdrivers can be used to gently lever the impeller away from the shaft as detailed (Fig. 3), ensuring equal pressure is applied to each side of the component to avoid bending the shaft.

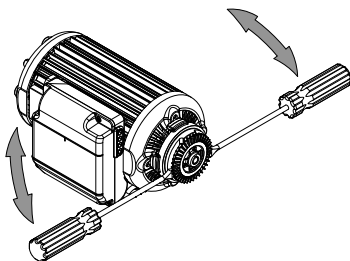


Fig. 3

NOTE: DO NOT USE EXCESSIVE FORCE, AS THIS MAY DAMAGE THE COMPONENTS

Cont ...

- **MAINTENANCE & CARE BEFORE REASSEMBLY**

To allow ease of reassembly, along with correct functioning of the pump, the following points on reassembly are necessary:

- All pump parts must be free from debris and assembled in the correct order.
- The impeller must be a slide fit on the shaft.
- The seal must always be replaced as a complete unit.

- **SEAL IDENTIFICATION & ASSEMBLY**

The seal is shown in order of identification in Fig 4.

- A Seal Counterface complete with rubber cup washer.
- B Seal bellows assembly.
- C Stainless steel Washer.
- D Seal retaining clip.

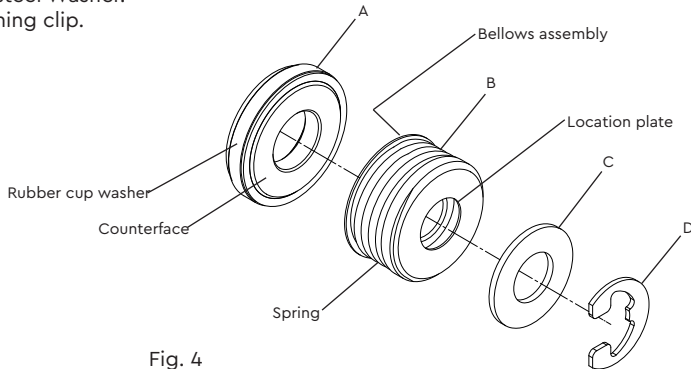


Fig. 4

To assemble the seal correctly, the shaft must be clean and the following steps carried out.

1. Use End 1 of the applicator tool to push the seal counterface (item A) firmly into the housing, ensuring it is located flat against the back of the mounting plate housing.
 2. Now use End 2 of the applicator tool to push the bellows section of the seal assembly (item B) onto the motor shaft until it is flat against the seal counterface (Fig. 5). The shaft may be lubricated with clean water to assist assembly.
Assemble the spring and location plate onto the shaft so as to complete the seal bellows assembly (Fig. 6)
 3. The washer (item C) can then be placed on the shaft and the whole assembly held into position by locating the Circlip (item D) in the groove and pushing it into position (Fig. 7)
- WARNING:** Do not install the circlip onto full shaft diameter, it must only be located in the groove.

Fig. 5

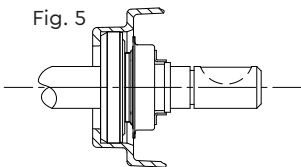


Fig. 6

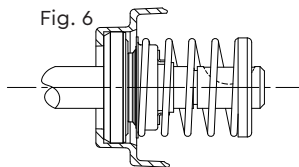


Fig. 7

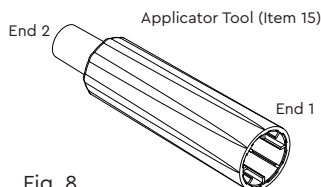
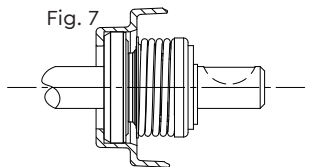


Fig. 8

- **PUMP REASSEMBLY**

Reassembly of the remaining pump parts is the reverse of disassembly instructions, ensuring all re-used parts are clean, and new replacement parts fitted as required.
Secure pump body screws to a torque of 2.6 Nm (item 1).

- **INITIAL OPERATING INSTRUCTIONS**

- Consult instruction manual for commissioning instructions.
- Do not run pump dry. Allow the water to be pumped to enter the pump body thus ensuring the seal is lubricated before switching the pump on. Failure to do this will damage the seal.
- Carefully check pump and pipework for leaks whilst pump running and stationary before leaving the installation unattended.

Stuart Turner Limited reserves the right to amend specifications without notice.



Stuart Turner Ltd, Henley-on-Thames, Oxfordshire RG9 2AD ENGLAND

Tel: +44 (0) 1491 572655, Fax: +44 (0) 1491 573704
info@stuart-turner.co.uk www.stuart-turner.co.uk