

INSTALLATION INSTRUCTIONS

SERVICE KIT - MONSOON UNIVERSAL Part No. **28453**

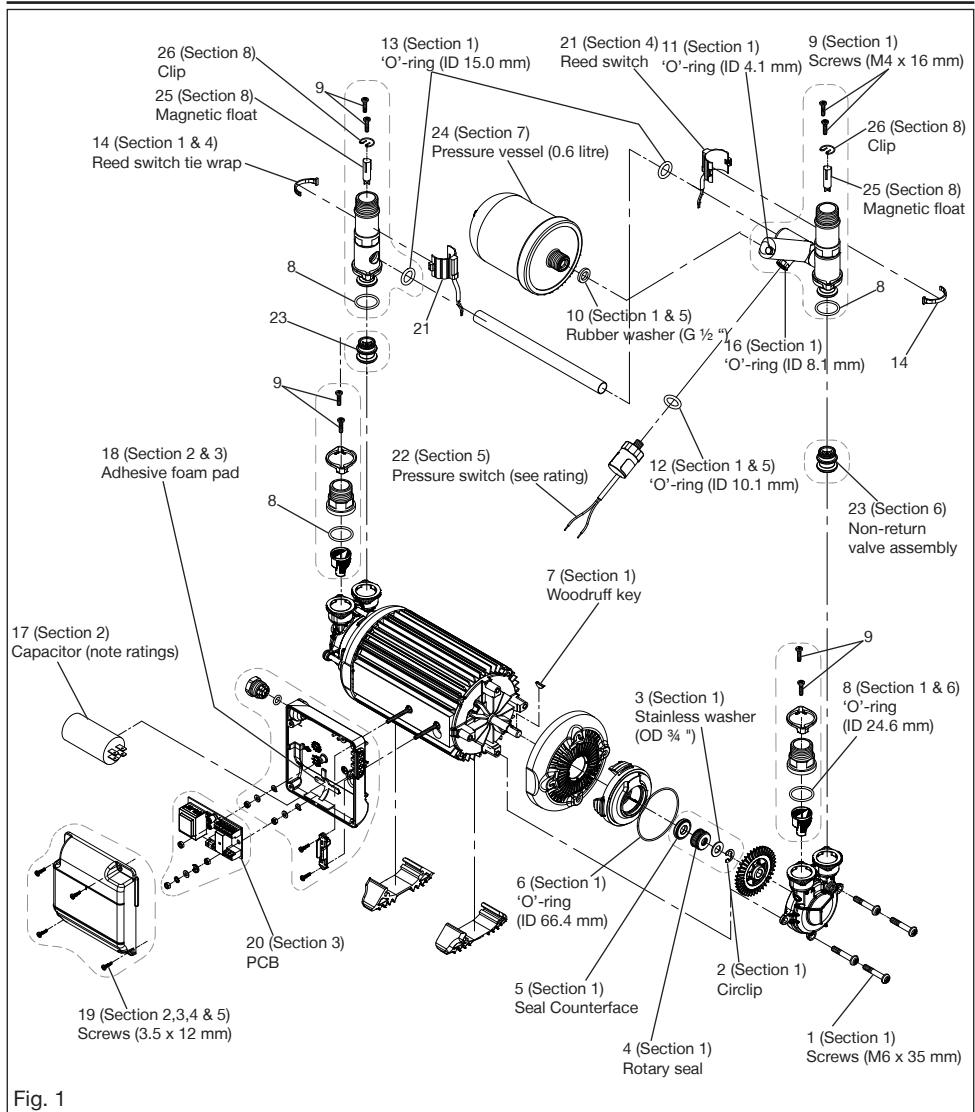


Fig. 1

- Note: 1) Quantities are to cover a twin pump, singles use half.
2) See relevant section for detailed instructions.

● **COMPLETE KIT CONTENTS**

This kit contains parts for a range of different pump types - please ensure you correctly identify the relevant parts for the pump being serviced before commencing. Also refer to the relevant section for detailed instructions for the correct installation of the parts.



Fitting of incorrectly identified parts could lead to pump failure. If in doubt contact PumpAssist on +44 (0) 800 31 969 80.

ITEM		QTY	ITEM		QTY
1	Screws (M6 x 35 mm)	8	14	Reed Switch Tie Wrap	2
2	Circlip	2	15	Applicator Tool (not shown)	1
3	Stainless Washer (OD ¾ ")	2	16	'O'-Ring (ID 8.1 mm)	1
4	Rotary Seal Assembly	2	17	Capacitor (1 off each variant)	4
5	Seal Counterface	2	18	Adhesive Foam Pad	1
6	'O'-Ring (ID 66.4 mm)	2	19	Screws (3.5 x 12 mm)	4
7	Woodruff Key	2	20	PCB	1
8	'O'-Ring (ID 24.6 mm)	4	21	Reed Switch	2
9	Screws (M4 x 16 mm)	8	22	Pressure Switch (1 off each variant)	2
10	Rubber Washer (G ½ ")	2	23	Non-Return Valve Assembly	2
11	'O'-Ring (ID 4.1 mm)	1	24	Pressure Vessel	1
12	'O'-Ring (ID 10.1 mm)	1	25	Magnetic Float	2
13	'O'-Ring (ID 15.0 mm)	2	26	Clip	2

Check to see that you have all the above items and that they are not damaged. If any damage is found contact Stuart Turner Ltd within 24 hours of receipt.

● **PUMP PREPARATION**

To prepare the pump to accept the service kit parts, each pump part must be removed noting its exact position and sequence (Fig. 1).

Now clean all the individual parts. Before fitting the new service kit parts, the pump and seal type must be identified.

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SECTION 1 - MECHANICAL SEAL REPLACEMENT

The parts required to replace the seal are:

ITEM		QTY	ITEM		QTY
1	Screws, (M6 x 35 mm)	4	9	Screws (M4 x 16 mm)	4
2	Circlip	1	10	Rubber Washer (G ½ ")	1
3	Stainless Washer (OD ¾ ")	1	11	'O'-Ring (ID 4.1 mm x 1.6 mm c/sec)	1
4	Rotary Seal Assembly	1	12	'O'-Ring (ID 10.1 mm x 1.6 mm c/sec)	1
5	Seal Counterface	1	13	'O'-Ring (ID 15.0 mm x 3.5 mm c/sec)	2
6	'O'-Ring (ID 66.4 mm x 1.78 mm c/sec)	1	14	Reed Switch Tie Wrap	2
7	Woodruff Key	1	15	Seal Applicator Tool (not shown)	1
8	'O'-Ring (ID 24.6 mm x 2.4 mm c/sec)	2	16	'O'-Ring (ID 8.1 mm x 1.6 mm c/sec)	1

DISASSEMBLY

To access the mechanical seal assembly the flow switch assemblies must first be removed (Fig. 2).

Flow Switch Assemblies:-

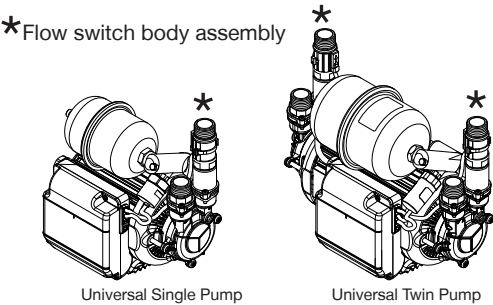
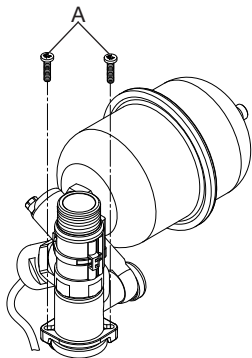
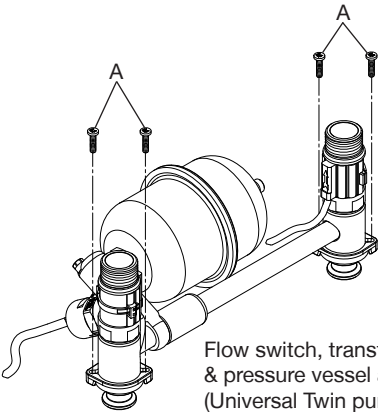


Fig. 2

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



Flow switch & pressure vessel
assembly (Universal Single pump)
Fig. 3



Flow switch, transfer pipe
& pressure vessel assembly
(Universal Twin pump) Fig. 4

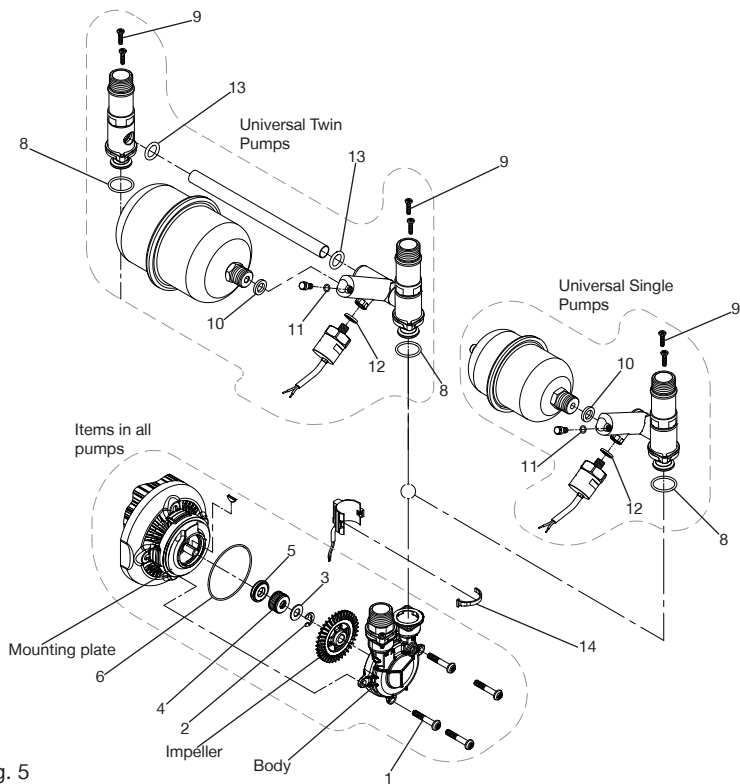


Fig. 5

To disassemble the pump, the following items are required to be removed in the sequence detailed (Fig. 5).

- Remove screws (A) and lift complete assembly away and position next to pump ensuring no stress is placed on the cables.
- 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. 6).
- 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. 5 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. 6), ensuring equal pressure is applied to each side of the component to avoid bending the shaft.

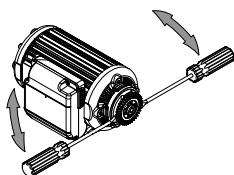


Fig. 6

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

● **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 5.

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

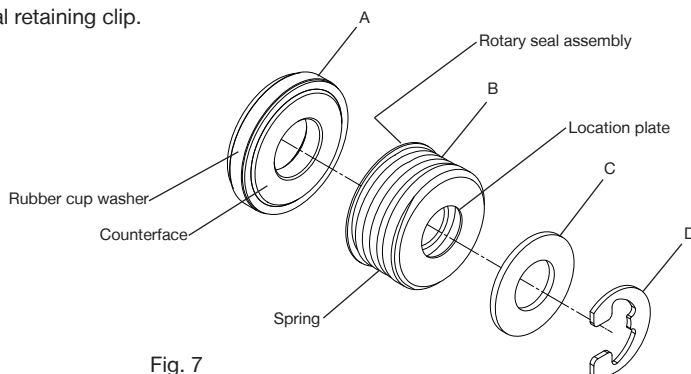


Fig. 7

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 rotary section of the seal assembly (item B) onto the motor shaft until it is flat against the seal counterface (Fig. 8). 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 rotary seal assembly (Fig. 9)

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. 10)

WARNING: Do not install the circlip onto full shaft diameter, it must only be located in the groove.

Fig. 8

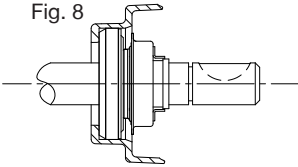


Fig. 9

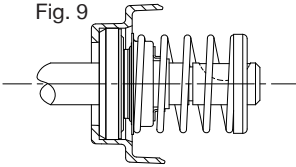


Fig. 10

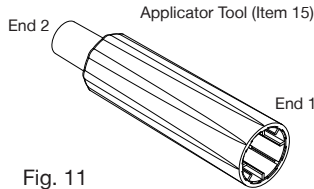
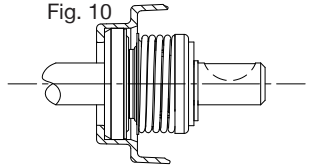


Fig. 11

● 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).
- Screws (A) to be tightened to 1.5 Nm of torque.

● 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.

SECTION 2 - CAPACITOR REPLACEMENT

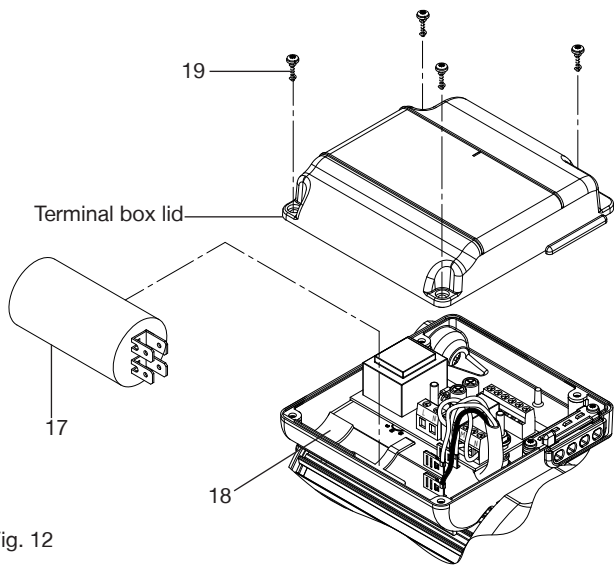


Fig. 12

The parts required to replace the capacitor are:

ITEM		QTY	ITEM	QTY
17	Capacitor	1	19	Screws, Self Tapping (3.5 x 12 mm) 4
18	Adhesive Foam Pad	1		

● **CAPACITOR - USED ON MONSOON UNIVERSAL PUMPS**

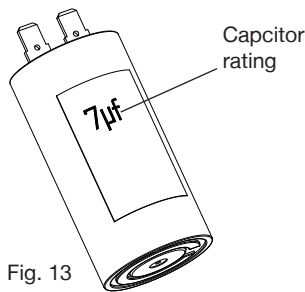


Fig. 13

5 µf	- U2.0 / U3.0 bar Single
7 µf	- U1.5 / U2.0 / U3.0 bar Twins – U4.5 bar Singles
10 µf	- U4.0 bar Twin
12 µf	- U4.5 bar Twin

● **DISASSEMBLY**



- Isolate electrical supply before fitting replacement part.
- Replacing the capacitor, should only be carried out by a competent person.
- The supply cord and internal wiring within the terminal box are routed and secured to ensure compliance with the electrical standard EN 60335-1. It is essential that prior to any disturbance of this internal wiring, all cable routing and securing details are carefully noted to ensure reassembly to the same factory pattern is always maintained.

Cont ...

Reference Fig 12:

- Remove 4 screws (item 19), and carefully remove terminal box lid.
- **IMPORTANT:** Take note of capacitor wiring connection and colours before removal. Disconnect and remove capacitor (item 17) and foam securing pad (item 18), make note of pad fitted position.



Damaged components must be replaced. Contact Stuart Turner for advice on replacements not supplied with kit.

● REASSEMBLY

Reassembly is the reverse of the disassembly instructions, with new replacement parts fitted as required.

Note: For correct installation the capacitor must be connected, secured and positioned as detailed (Figs. 14, 15 & 16).

Secure terminal box lid screws to a torque of 0.8 Nm (item 19).

IMPORTANT NOTE: For correct pump rotation, ensure both blue wires are connected to the linked capacitor terminals as shown.

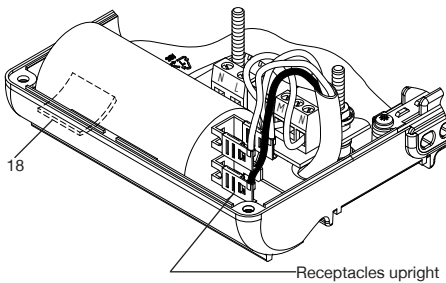


Fig. 14

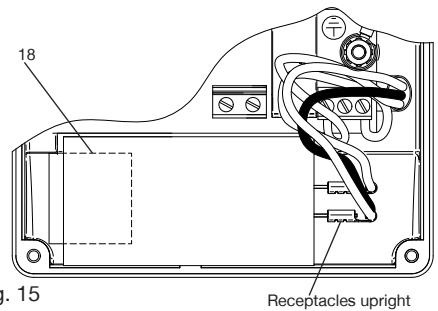


Fig. 15

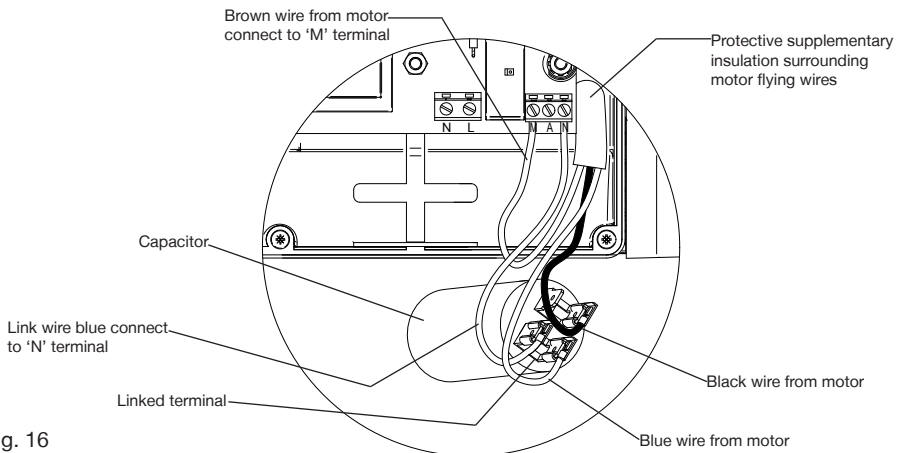


Fig. 16

● 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.

Cont ...

SECTION 3 - PRINTED CIRCUIT BOARD REPLACEMENT

The parts required to replace the printed circuit board are:

ITEM		QTY	ITEM		QTY
18	Adhesive Foam Pad	1	20	Printed Circuit Board	1
19	Screws, Self Tapping (3.5 x 12 mm)	4			

Note: - When fitted this printed circuit board will detect the following fault conditions:

- **Dry running caused by water starvation to the pump.**

If the above fault condition occurs, then the pump will stop.

The fault should therefore be rectified before restarting the pump.

Check that there is sufficient water supply to the pump and also ensure that all outlets are closed.

- Protective Logic Sequence

If water starvation occurs and the power supply to the pump remains uninterrupted, the pump controller will perform the following protective sequence.

- 1) If the pump detects water starvation, it will stop operation after a 1 minute period.
- 2) The pump will remain in the off condition for a period of 5 minutes.
- 3) The pump will then re-start and if the water starvation condition remains present, the pump will then stop operation after a 1 minute period.
- 4) The pump will remain in the off condition for a period of 5 minutes.
- 5) The pump will then re-start and if the water starvation condition remains present, the pump will then stop operation after a 1 minute period.
- 6) The pump will remain in the off condition for a period of 5 minutes.
- 7) The pump will then re-start and if the water starvation condition remains present, the pump will then stop operation after a 1 minute period.
- 8) After three consecutive resets are performed the pump will remain in the off condition indefinitely.
- 9) To restart the pump, the power supply should be first isolated for a period of at least 10 seconds before switching on again.

If the pump fails to operate normally after three attempts to re-start, then please consult Stuart Turner PumpAssist +44 (0) 800 31 969 80.

- Fault Finding

The PCB is also fitted with a “power on” indicator light. This will remain illuminated when mains power is supplied to the board.

The indicator light is located on the PCB within the terminal box.



This operation should only be carried out by a competent person

To view the light the following procedure must be followed:-

- Isolate the mains electrical power supply from the pump.
- Remove the four screws (item 19) retaining the terminal box lid (Fig. 17).
- Lift the terminal box lid off.
- **IMPORTANT** – Ensure there is no contact with any of the internal parts of the terminal box.
- Briefly reconnect the mains power supply to the pump – the indicator light should illuminate if the pump has been correctly wired.
- Isolate the mains electrical power supply from the pump.
- Re fit the terminal box lid ensuring no cables are trapped.
- Re fit the four terminal box lid retaining screws, tighten to 0.8 Nm.

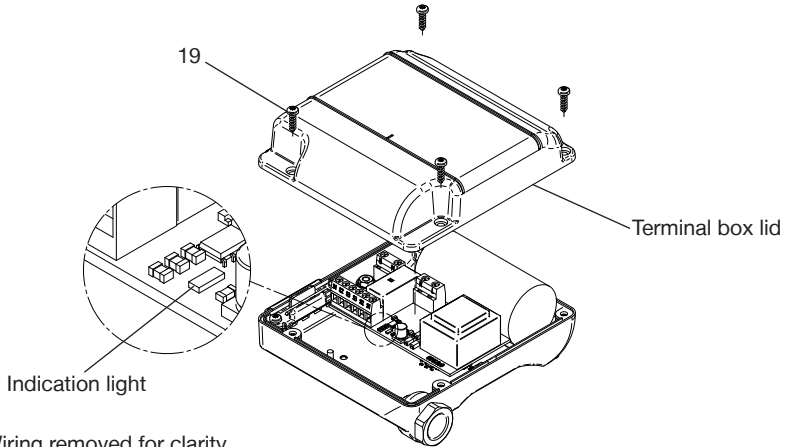


Fig. 17 Wiring removed for clarity

● DISASSEMBLY



- **Isolate electrical supply before fitting replacement part.**
- **Replacing the PCB should only be carried out by a competent person.**
- **The supply cord and internal wiring within the terminal box are routed and secured to ensure compliance with the electrical standard EN 60335-1. It is essential that prior to any disturbance of this internal wiring, all cable routing and securing details are carefully noted to ensure reassembly to the same factory pattern is always maintained.**

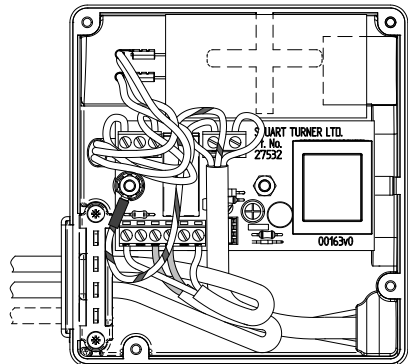
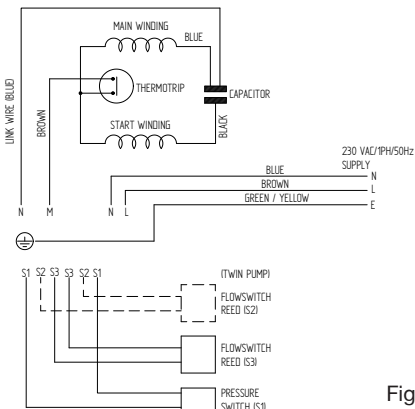


Fig. 18

Cont ...

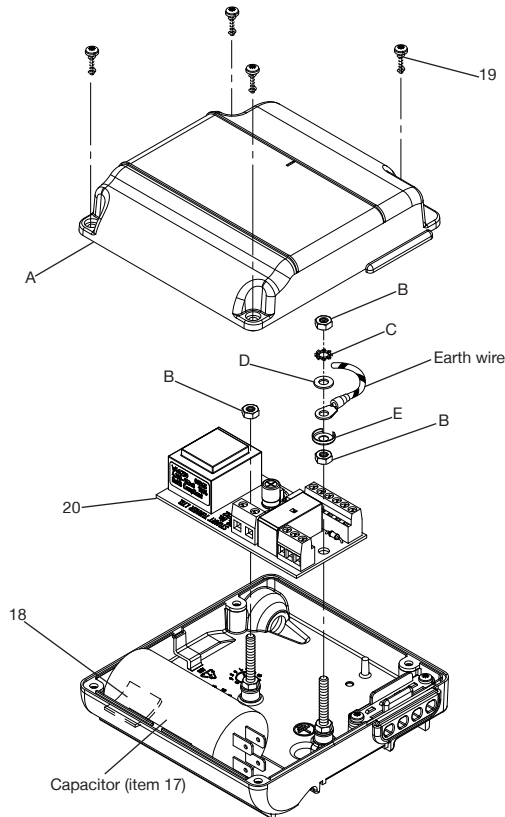


Fig. 19

Reference Fig 19.

- Remove four screws (item 19) and carefully remove terminal box lid (item A).
- **IMPORTANT:** Take note of capacitor wiring connection and colours **before removal**.
- Disconnect and remove capacitor (item 17), and foam securing pad (item 18) make note of pad fitted position.
- Remove M4 nut (item B) then M4 lock washer (item C) and plain washer (item D), this allows removal of earth wire and cup washer (item E).
- Disconnect all wiring from terminal blocks on printed circuit board (PCB item 20).
- Remove two M4 nuts (item B) and carefully lift PCB (item 20) away from terminal box.



Damaged components must be replaced. Contact Stuart Turner for advice on replacements not supplied with kit.

● REASSEMBLY

The replacement PCB supplied with this kit maybe of a different design to the PCB being replaced. The new PCB is interchangeable with the existing, however, the following steps must be adhered to.

Reassembly is the reverse of the disassembly instructions with the new replacement parts fitted as required.

Note: For correct operation the capacitor must be secured and positioned as detailed in Figs. 20 & 21.

Cont ...

The replacement PCB's mains supply cord must be routed and secured as shown in Fig. 18. Re-connect all internal wiring as detailed in appropriate wiring diagram and ensure the internal wiring is routed and secured to the same pattern as noted in disassembly section (except mains supply cord, see Fig. 18).

Secure PCB nuts to a torque of 1.5 Nm (item B).

Secure terminal box lid screws to a torque of 0.8 Nm (item 19).

IMPORTANT NOTE: For correct pump rotation, ensure both blue wires are connected to the linked capacitor terminals as shown.

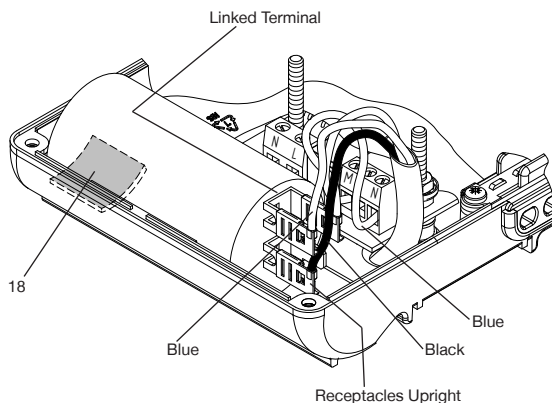


Fig. 20

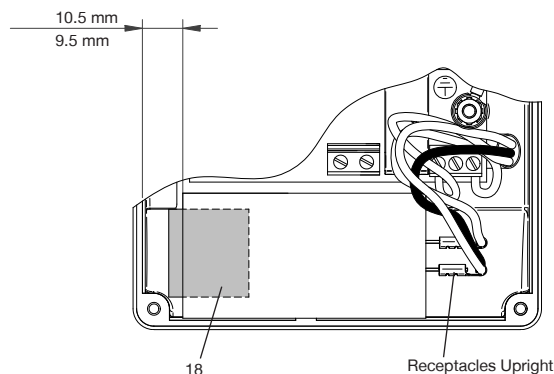


Fig. 21

● 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.

Cont ...

SECTION 4 - REED SWITCH REPLACEMENT

The parts required to replace the reed switch are:

ITEM		QTY	ITEM		QTY
14	Reed Switch Tie Wrap	1	21	Reed Switch	1
19	Screws, Self Tapping (3.5 x 12 mm)	4			

● **WIRING DIAGRAMS**

Fig.	Pump	UK	Eire	
22	Monsoon Universal N1.5 bar Single	✓	✓	Manufactured from October 2009
	Monsoon Universal N2.5 bar Single	✓	-	
	Monsoon Universal N3.5 bar Single	✓	✓	
	Monsoon U2.0 bar Single	✓	✓	
	Monsoon U3.0 bar Single	✓	✓	
	Monsoon U4.5 bar Single	✓	✓	
23	Monsoon Universal N2.5 bar Twin	✓	-	Manufactured up to November 2008
	Monsoon Universal N3.5 bar Twin	✓	-	
	Monsoon Universal N4.1 bar Twin	✓	-	
	Monsoon Universal N1.5 bar Twin	-	✓	
	Monsoon Universal N2.5 bar Twin	-	✓	
	Monsoon Universal N3.5 bar Twin	-	✓	
	Monsoon Universal N4.1 bar Twin	-	✓	
	Monsoon U1.5 bar Twin	✓	✓	Manufactured from October 2009
	Monsoon U2.0 bar Twin	✓	✓	
	Monsoon U3.0 bar Twin	✓	✓	
	Monsoon U4.0 bar Twin	✓	✓	
	Monsoon U4.5 bar Twin	✓	✓	

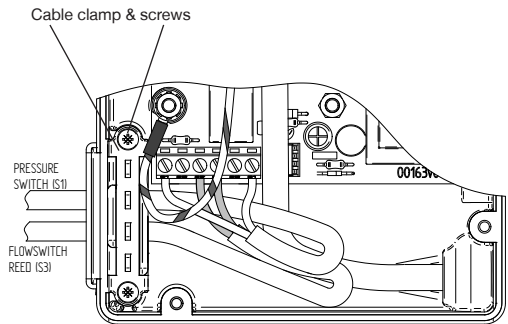
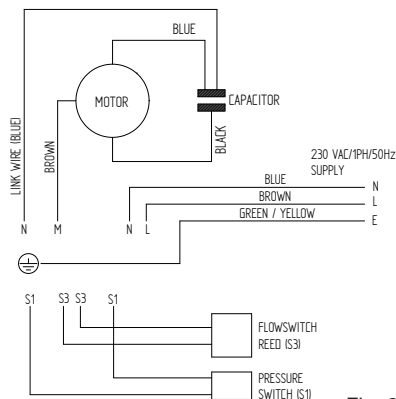


Fig. 22

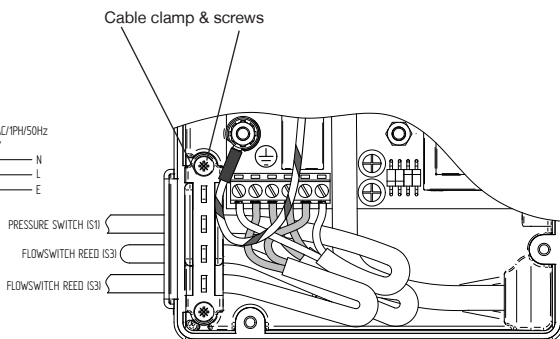
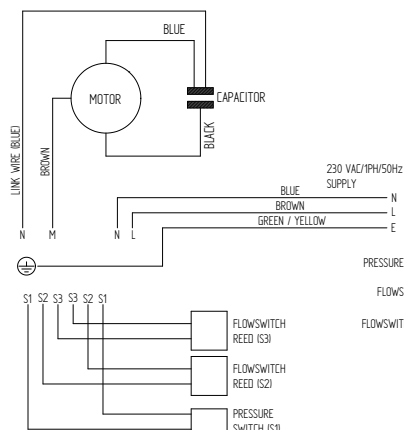


Fig. 23

- **DISASSEMBLY**



- Isolate electrical supply before fitting replacement part.
- Replacing the reed switch components should only be carried out by a competent person.
- The supply cord and internal wiring within the terminal box are routed and secured to ensure compliance with the electrical standard EN 60335-1. It is essential that prior to any disturbance of this internal wiring, all cable routing and securing details are carefully noted to ensure reassembly to the same factory pattern is always maintained.

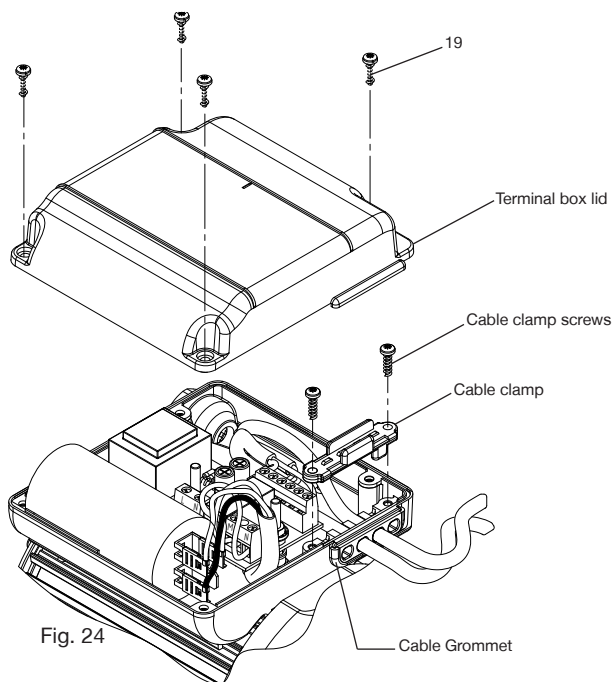


Fig. 24

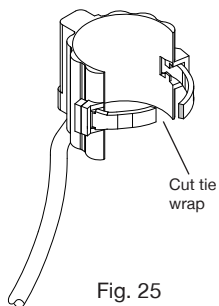


Fig. 25

- Remove four screws (item 19) and carefully remove terminal box lid (Fig. 24).
- Note the cable routing within the terminal box (Figs. 22 or 23).
- Identify, disconnect and remove the reed switch wiring from the terminal block (Figs. 22 or 23).
- **IMPORTANT** – take note of the cable clamp orientation before removal, as reassembly in the original factory orientation is essential. Remove two screws and cable clamp, this allows any reed or pressure switch cables to be removed from the terminal box (Fig. 24).
- Remove the reed switch cable from the terminal box by gently sliding the cable out through the grommet, ensuring no damage to the grommet sealing area (Figs. 22 or 23).
- Remove the existing reed switch by cutting the securing tie wrap and pulling away from the body Fig. 25.



Damaged components must be replaced. Contact Stuart Turner for advice on replacements not supplied with kit.

● REASSEMBLY

Reassembly is the reverse of the disassembly instructions with the new replacement parts fitted as required.

Secure cable clamp screws and terminal box lid, to a torque of 0.8 Nm.

Note: For correct operation of the flow switch, the reed must be secured to the body as detailed below.

Firstly feed the tie wrap through the retainer on the reed switch, ensuring that the tie wrap serrations are facing outward (Fig 26).

Now locate the reed switch within the body groove as highlighted X-X (Fig. 27), and feed the tie wrap through the second catch.

The tie wrap can now be pulled tight to secure the reed and the excess cut to length (Fig. 28).

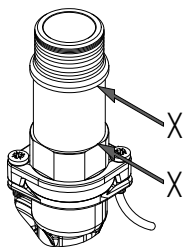
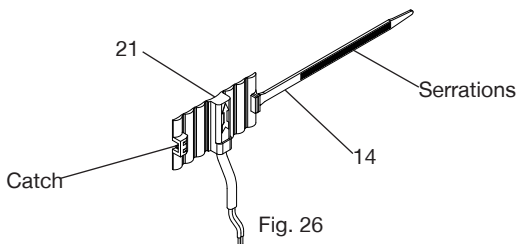


Fig. 27

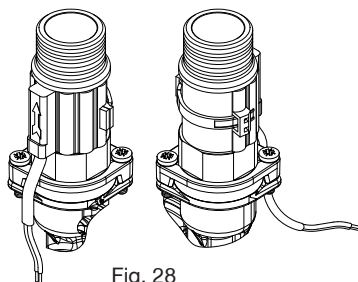


Fig. 28

● 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.

Cont ...

SECTION 5 - PRESSURE SWITCH REPLACEMENT

The parts required to replace the pressure switch are:

ITEM		QTY	ITEM		QTY
10	Rubber Washer (G ½ ")	1	19	Screws, Self Tapping (3.5 x 12 mm)	4
12	'O'-Ring (ID 10.1 mm x 16 mm sec)	1	22	Pressure Switch	1

● **PRESSURE SWITCHES**

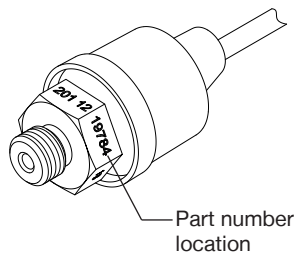


Fig. 29

Number
19784
19785

Used on Monsoon Universal Pumps
U1.5 / U2.0 / U3.0 bar Twins - U2.0 bar Single
U4.0 / U4.5 bar Twins – U3.0 / U4.5 bar Singles

● **WIRING DIAGRAMS**

Fig.	Pump	UK	Eire
30	Monsoon Universal N1.5 bar Single	✓	✓
	Monsoon Universal N2.5 bar Single	✓	-
	Monsoon Universal N3.5 bar Single	✓	✓
31	Monsoon Universal N2.5 bar Twin	✓	-
	Monsoon Universal N3.5 bar Twin	✓	-
	Monsoon Universal N4.1 bar Twin	✓	-
	Monsoon Universal N1.5 bar Twin	-	✓
	Monsoon Universal N2.5 bar Twin	-	✓
	Monsoon Universal N3.5 bar Twin	-	✓
	Monsoon Universal N4.1 bar Twin	-	✓
		Manufactured from November 2008	
32	Monsoon Universal N1.5 bar Twin	-	✓
	Monsoon Universal N2.5 bar Twin	-	✓
	Monsoon Universal N3.5 bar Twin	-	✓
	Monsoon Universal N4.1 bar Twin	-	✓

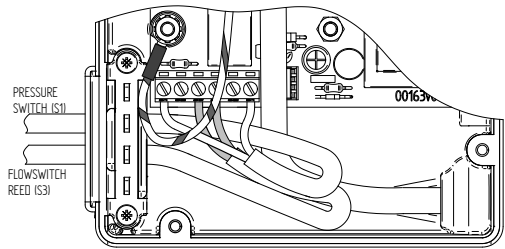
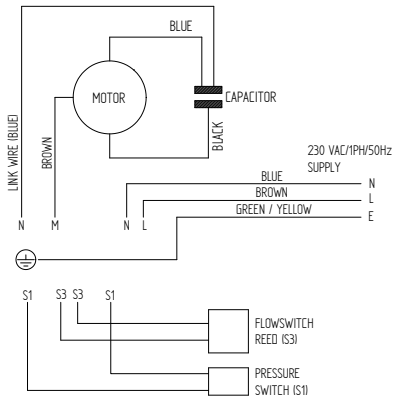


Fig. 30

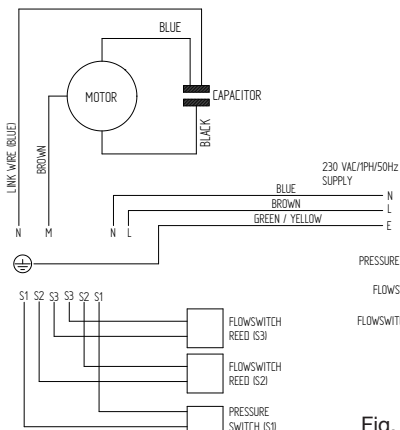


Fig. 31

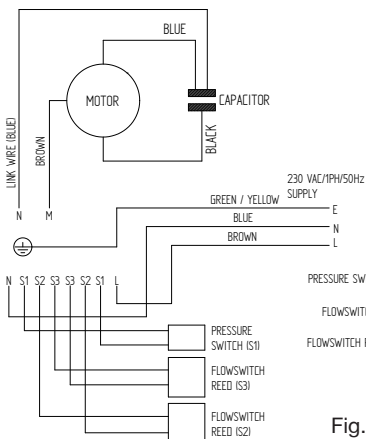
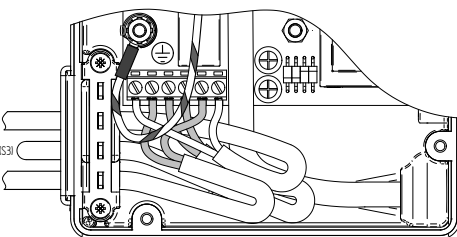
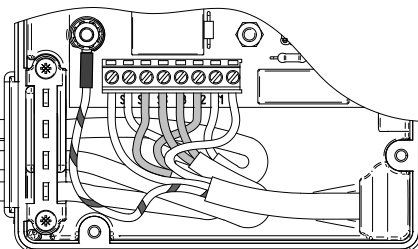


Fig. 32



● DISASSEMBLY



- Isolate electrical supply before fitting replacement part.
- Replacing the pressure switch components should only be carried out by a competent person.
- The supply cord and internal wiring within the terminal box are routed and secured to ensure compliance with the electrical standard EN 60335-1. It is essential that prior to any disturbance of this internal wiring, all cable routing and securing details are carefully noted to ensure reassembly to the same factory pattern is always maintained.

Note:

The switch supplied with this kit may appear different to the unit being replaced. The variation is due to product evolution and is intentional.

Cont ...

- Unscrew pressure vessel and remove rubber washer.
- Remove four screws (item 19) and carefully remove terminal box lid (Fig. 33).
- Note the cable routing within the terminal box (Figs. 30, 31 or 32).
- Identify and remove the pressure switch wiring from the terminal block on PCB.
- **IMPORTANT:** Take note of cable clamp position **before removal** as reassembly in the original factory orientation is essential - Remove two screws and cable clamp, this allows the pressure switch cables to be removed from the terminal box (Fig. 33).
- Remove the pressure switch cable from the terminal box by gently sliding the cable out through the sealing grommet, ensuring no damage to the seal area (Fig. 33).
- Unscrew the pressure switch and seal from the flow switch manifold body (Fig 34).

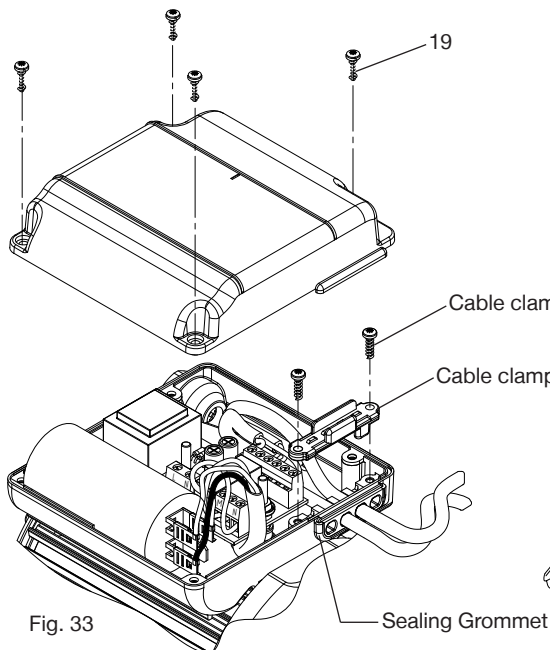


Fig. 33

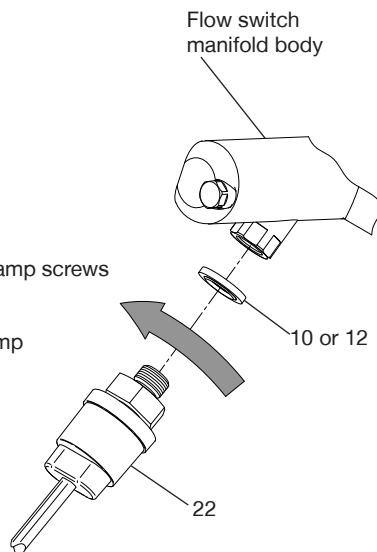


Fig. 34



Damaged components must be replaced. Contact Stuart Turner for advice on replacements not supplied with kit.

● REASSEMBLY

Reassembly is the reverse of the disassembly instructions with the new replacement parts fitted as required.

- Pressure switch (item 22) to be tightened to a torque of 7-8 Nm.
- Secure two cable clamp screws and four terminal box lid screws, to a torque of 0.8 Nm (Fig. 33).

● 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.

Cont ...

SECTION 6 - NON-RETURN VALVE (NRV) REPLACEMENT

The parts required to replace the non-return valve are:

ITEM		QTY
8	'O'-Ring (ID 24.6 mm x 2.4 mm sec)	2
9	Screws (M4 x 16 mm)	2
23	Non-Return Valve Assembly (NRV)	1

● **DISASSEMBLY**

To access the NRV, the flow switch body assemblies must first be removed (Fig. 35). Please refer to the following, dependant on pump.

Note: The NRV is part of the flow switch body assemblies - see Figs. 37 & 38 for reference.

Flow Switch Assemblies:-

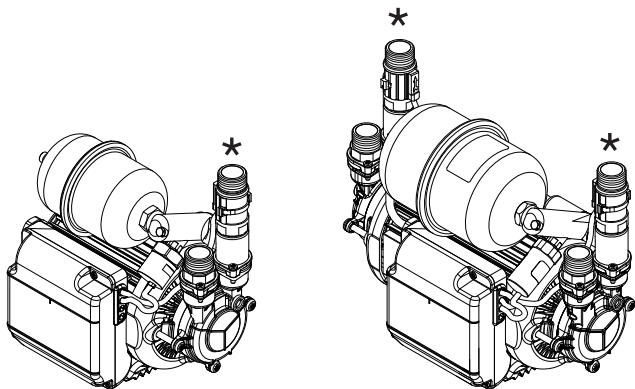


Fig. 35

★ Flow switch body assembly

Universal Single Pump:-

- Remove screws (item 9) and lift assembly away ensuring no stress is placed on the cables.

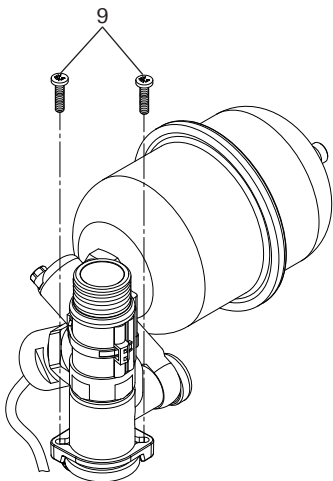


Fig. 36

Cont ...

Universal Twin Pump:-

- Remove screws (item 9) and lift complete assembly away ensuring no stress is placed on the cables.

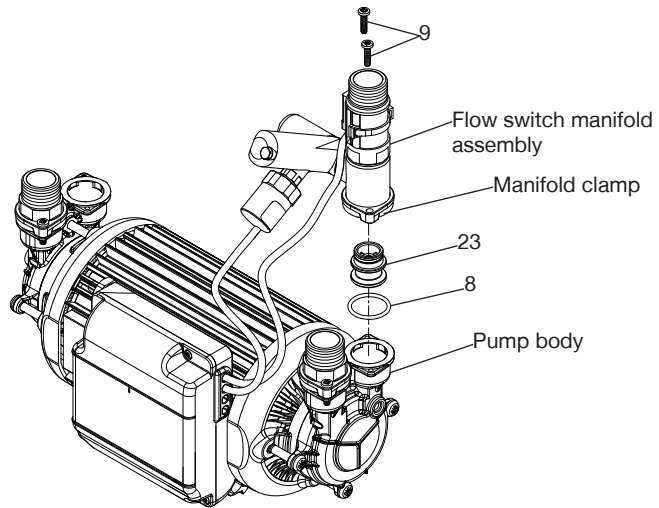


Fig. 37

Once the flow switch assemblies have been removed the NRV is now accessible as shown in Fig. 36.

- Remove 'O'-ring (item 8) from between pump body and flow switch assembly.
- Firmly pull the NRV assembly (item 23) from the lower end of the flow switch body assembly (Fig. 38).

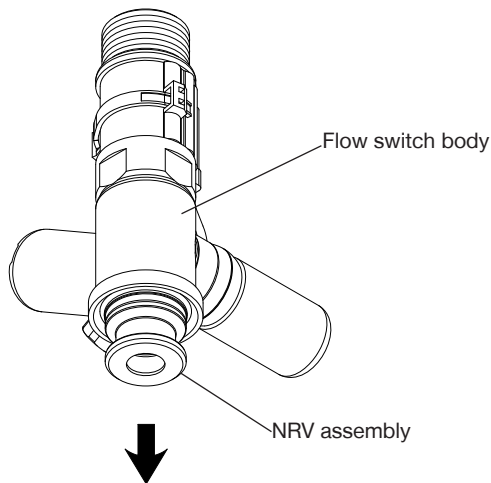


Fig. 38

● **REASSEMBLY**

Reassembly is reverse of disassembly instructions, ensuring all re-used parts are clean, and new replacement parts fitted as required.

Secure flow switch manifold clamp screws to a torque of 1.5 Nm (item 9).

Cont ...

- **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.

SECTION 7 - PRESSURE VESSEL REPLACEMENT

The parts required to replace the pressure vessel are:

ITEM		QTY
10	Rubber Washer (G ½ ")	1
24	Pressure Vessel (0.6 litre)	1

● **DISASSEMBLY**

- Rotate the pressure vessel as shown to unscrew (Figs. 39 or 40).
- Remove rubber washer from manifold body (Fig. 41).



Damaged components must be replaced. Contact Stuart Turner for advice on replacements not supplied with kit.

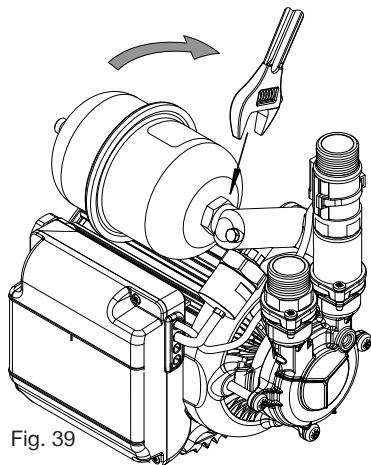


Fig. 39

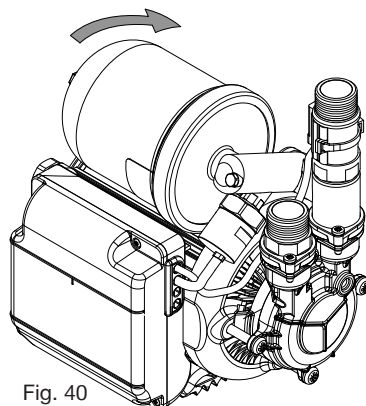


Fig. 40

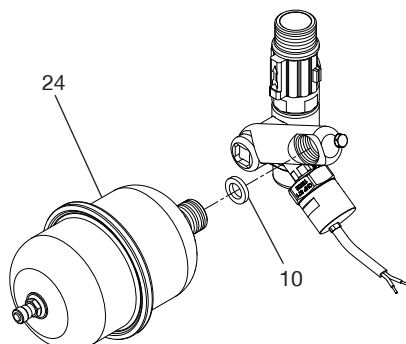


Fig. 41

Cont ...

- **REASSEMBLY**

Reassembly is the reverse of the disassembly instructions with the new replacement parts fitted as required.

Engage vessel screw thread and tighten as shown to confirm a secure hand tight connection (Fig. 42). A spanner can be used if required to nip tight to 5-6 Nm torque (Fig. 43).

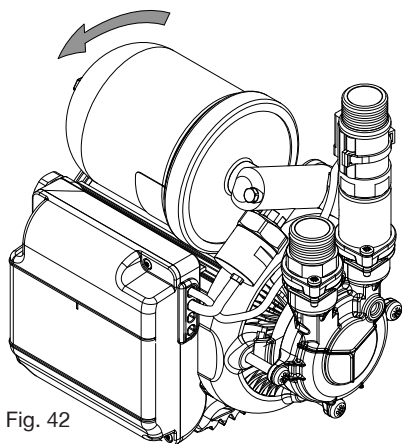


Fig. 42

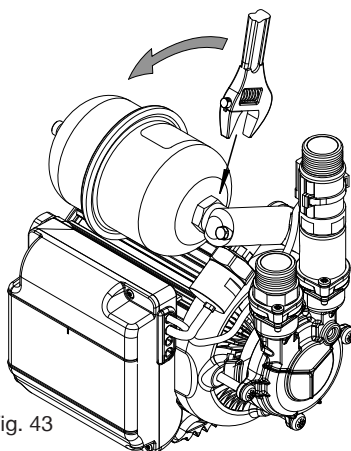


Fig. 43

- **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 reserves the right to amend specifications without notice.

SECTION 8 - MAGNETIC FLOAT REPLACEMENT

The parts required to replace the magnetic float are:

ITEM	QTY
25 Magnetic Float	2
26 Clip	2

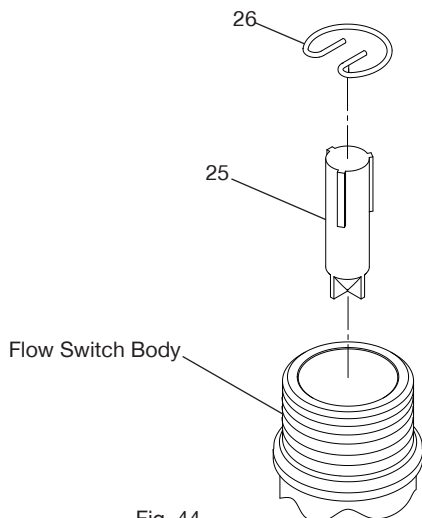


Fig. 44

● DISASSEMBLY



- **Isolate electrical supply before fitting replacement part.**

- Remove clip (item 26) using needle nose pliers (Fig. 44).
- Remove magnetic float (item 25) using needle nose pliers (Fig. 44).



Damaged components must be replaced. Contact Stuart Turner for advice on replacements not supplied with kit.

● REASSEMBLY

Reassembly is the reverse of the disassembly instructions with the new replacement parts fitted as required.

● 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.



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