Piston Seal Replacement

1. Unscrew and remove handle
2. Unscrew handle connector
3. Lift handle connector. Remove o’ring to expose pin. Use suitable tool to push pin from one side and then pull out. Ensure o’ring is securely located in groove on re-assembly.

4. Unscrew outer body tube end cap and remove body tube
5. Unscrew the ball / seal retainer use a separate spanner to hold the large hexagon below it.

6. When free, pull the piston rod clear of the pump.

Small Black Seal
Item 11
Replace only if worn

Be careful not to lose balls during assembly
DO NOT apply silicone grease in this area

Item 7
Replace only if worn and apply a small amount of silicone grease on re-assembly

Small Green Seal
Item 12
apply a small amount of silicone grease on re-assembly

7. Carefully remove the old seal and replace.

If you are only replacing piston seal Re-assemble pump in reverse order see page 3 to replace inner slide tube seals
Inner Slide Tube Seal Replacement

A1. Unscrew air exchanger valve

A2. This will release inner slide tube from non return valve at the base manifold end

A3. Replace O’ring - Item 5

Carefully remove from groove and replace and apply a small amount of silicone grease on re-assembly

A4. Slide end cap back over tube and re-assemble

A5. Replace O’ring - Item 7

Fit new seal (Item 7) and apply a small amount of silicone grease around seal only

Re-assemble pump in reverse order
see page 4 to replace micron filter and non return valve
**Micron Filter & Non Return Valve Replacement**

Note: The inclusion of this o’ring has **NO EFFECT** on the performance of the pump and is simply a manufacturing change.

**B1. Unscrew Non Return Valve Housing and remove from Manifold Block**

**B2. Remove Micron Filter (Item 4) using long nose pliers**

**B3. Unscrew Spring Retainer using broad blade screwdriver or 13mm A/F hexagon socket**

**B4. Remove spring retainer, spring and non return valve spindle and replace with new parts**

**B5. Fit new micron filter Item 4 and re-assemble**

**B6. Replace foot plate**

**B7. Replace lock ring**

**B8. Replace handle**

**Note:** All items (2,3,4 & 9) must be clean and dry before re-assembly. **DO NOT** apply silicone grease to any of these items.

**Re-assemble pump in reverse order**

Original version of pump (No o’ring)

Retain this o’ring for re-assembly as it is not included in the kit.

Original version of pump (No o’ring)

Latest version of pump

Latest version of pump

Latest version of pump