

PRESSURE RELIEF VALVE MAINTENANCE INSTRUCTIONS -PICTURE INDEX AND PARTS LIST

This document should be used in conjunction with the 'standard' installation document supplied with all AKO Pressure relief valves (PRVInformation&Cert).

PICTURE / DRAWING INDEX









Ń

Μ



PRESSURE RELIEF VALVE MAINTENANCE INSTRUCTIONS Sleeve replacement

- I. In it's complete state the AKO valve should look like Picture I. Please note there may not be a pressure switch (Parts List - Part H). If there is not a pressure switch it will be replaced with a plug (Parts List - Part G).
- 2. ENSURE THE VALVE IS DE-PRESSURISED BEFORE ANY WORK IS CARRIED OUT. Check the sleeve as well as the gauge (the gauge may be faulty!). Exhaust all air from the valve using the Schrader connection (Picture 7).
- Disconnect the complete manifold (Picture 2) from the main valve body (Picture 3) using Points B/C (Pictures 4/5).
- 4. Disconnect the swivel piece (Parts List Part B) using Point A (Picture 4) from the valve body, leaving just the bare valve (Picture 6).
- 5. Thoroughly clean all internal and external threads using a wire brush and air line.
- 6. DEPENDING ON THE SIZE OF THE AKO VALVE, ORDER THE CORRECT FITTING TOOL (Parts List - Part U) REFER TO THE RELEVANT SET OF FITTING INSTRUCTIONS (FI10-50mm/FI40-80mm/FI100-250mm).
- 7. All parts must be reconnected using A131 Permabond glue (Part Q) to ensure a leak tight seal.
- Connect swivel piece (Parts List Part B) to main body of the refurbished Pinch Valve. Ensure the Dowty Washer (Parts List – Part A) is between the fitting and the valve body. Ensure a tight connection - BEWARE NOT TO DAMAGE THE FEMALE ALUMINIUM THREAD OF THE PINCH VALVE.
- Connect the complete manifold (Picture 2) back onto the valve body using point B/C (Pictures 4/5). Ensure that again there is a tight connection and that the pressure gauge is facing the front (Picture 1).
- 10. The pressure relief valve must be left undisturbed for 24 hours to ensure the Permabond glue is dry.
- 11.IT IS ESSENTIAL THAT THE PRESSURE RELIEF VALVE IS COMPLETELY LEAKTIGHT. The valve should be tested under water at 6 bars to ensure the valve does not have any visible leaks. Connect the AKO foot pump (Parts List - Part R) to the AKO Pressure relief valve (Picture 7). You will hear a click when the pump and valve are connected. Inflate the valve using an AKO foot pump, charge the valve to 6 bars for testing. Disconnect the air supply by slightly turning the Schrader valve clockwise (be careful not to disturb the thread connection), and look/listen for any leaks.
- 12.Carry out a water test by submerging the valve to the level of the pressure switch DO NOT SUBMERGE THE PRESSURE SWITCH – (Drawing I) - If there is not a pressure switch the valve can be fully submerged.
- 13.Initially there will be bubbles coming from the flange connections but after a few minutes these will disperse. Wipe away any air bubbles from the valve and connections. This process may need to be repeated a number of times. Any air bubbles reappearing will indicate there is a leak.
- 14.Inspect the valve fully for leaks, paying extra attention to the thread connections.
- 15.If there does not appear to be any leaks remove the valve from the water. The gauge should be marked to show the set air pressure and then monitored for 24 hours to ensure the valve is leak tight (Drawing 2).
- 16.If leaks can not be detected underwater, leak detection spray (Parts List Part S) should be used. This is available from AKO UK Ltd. Spray onto suspect areas and look for air bubbles.
- 17.If a leak has been identified the complete process should be repeated (or repair of individual part/problem carried out). If there are still problems with the valve leaking please contact the AKO Technical Department.

PRESSURE RELIEF VALVE MAINTENANCE INSTRUCTIONS Replacing Damaged Parts

- 1. In it's complete state the AKO valve should look like Picture I. Please note there may not be a pressure switch (Parts List - Part H). If there is not a pressure switch it will be replaced with a plug (Parts List - Part G).
- 2. Identify damaged part from Parts List and order from AKO UK.
- 3. ENSURE THE VALVE IS DE-PRESSURISED BEFORE ANY WORK IS CARRIED OUT. Check the sleeve as well as the gauge (the gauge may be faulty!). Exhaust all air using the Schrader connection (Picture 7).
- 4. Disconnect the complete manifold (Picture 2) from the main valve body (Picture 3) using Points B/C (Pictures 4/5).
- Disconnect the swivel piece (Parts List Part B) using Point A (Picture 4) from the valve body, leaving just the bare valve (Picture 6).
- 6. Thoroughly clean all internal and external threads using a wire brush and air line.
- 7. Disconnect the damaged part from the manifold block ensuring other parts are not disturbed. Clean any threads as required.
- 8. All parts must be reconnected using A131 Permabond glue (Parts List Part Q) to ensure a leak tight seal.
- Reconnect the new replacement part to the manifold block, ensuring all other manifold parts are not disturbed.
- Connect the complete manifold (Picture 2) using point B/C (Pictures 4/5). Ensure that again there is a tight connection and that the pressure gauge is facing the front (Picture 1).
- 11. The pressure relief valve must be left undisturbed for 24 hours to ensure the Permabond glue is dry.
- 12. IT IS ESSENTIAL THAT THE PRESSURE RELIEF VALVE IS COMPLETELY LEAK TIGHT. The valve should be tested under water at 6 bars to ensure the valve does not have any visible leaks. Connect the AKO foot pump (Parts List - Part R) to the AKO Pressure relief valve (Picture 7). You will hear a click when the pump and valve are connected. Inflate the valve using an AKO foot pump, charge the valve to 6 bars for testing. Disconnect the air supply by slightly turning the Schrader valve clockwise (be careful not to disturb the thread connection), and look/listen for any leaks.
- Carry out a water test by submerging the valve to the level of the pressure switch - DO NOT SUBMERGE THE PRESSURE SWITCH -(Drawing I) - If there is not a pressure switch the valve can be fully submerged.
- 14. Inspect the thread connections on the replacement part to ensure there are not any leaks. During the test also check the rest of the valve to ensure there are no other leaks.
- 15. If there does not appear to be any leaks remove the valve from the water. The gauge should be marked to show the set air pressure and then monitored for 24 hours to ensure the valve is leak tight (Drawing 2).
- 16. If leaks can not be detected underwater, leak detection spray (Parts List -Part S) should be used. This is available from AKO UK Ltd. Spray onto suspect areas and look for air bubbles.
- 17. If a leak has been identified the complete process should be repeated. If there are still problems with the valve leaking please contact the AKO Technical Department.



Valve & Flow Control Technology

13 Alvis Way, Royal Oak Trading Estate, Daventry, Northants NN11 8PG.

 Tel:
 01327 312747

 Fax:
 01327 312565

 e-mail:
 sales@ako-valves.com

 Web:
 www.ako-valves.com