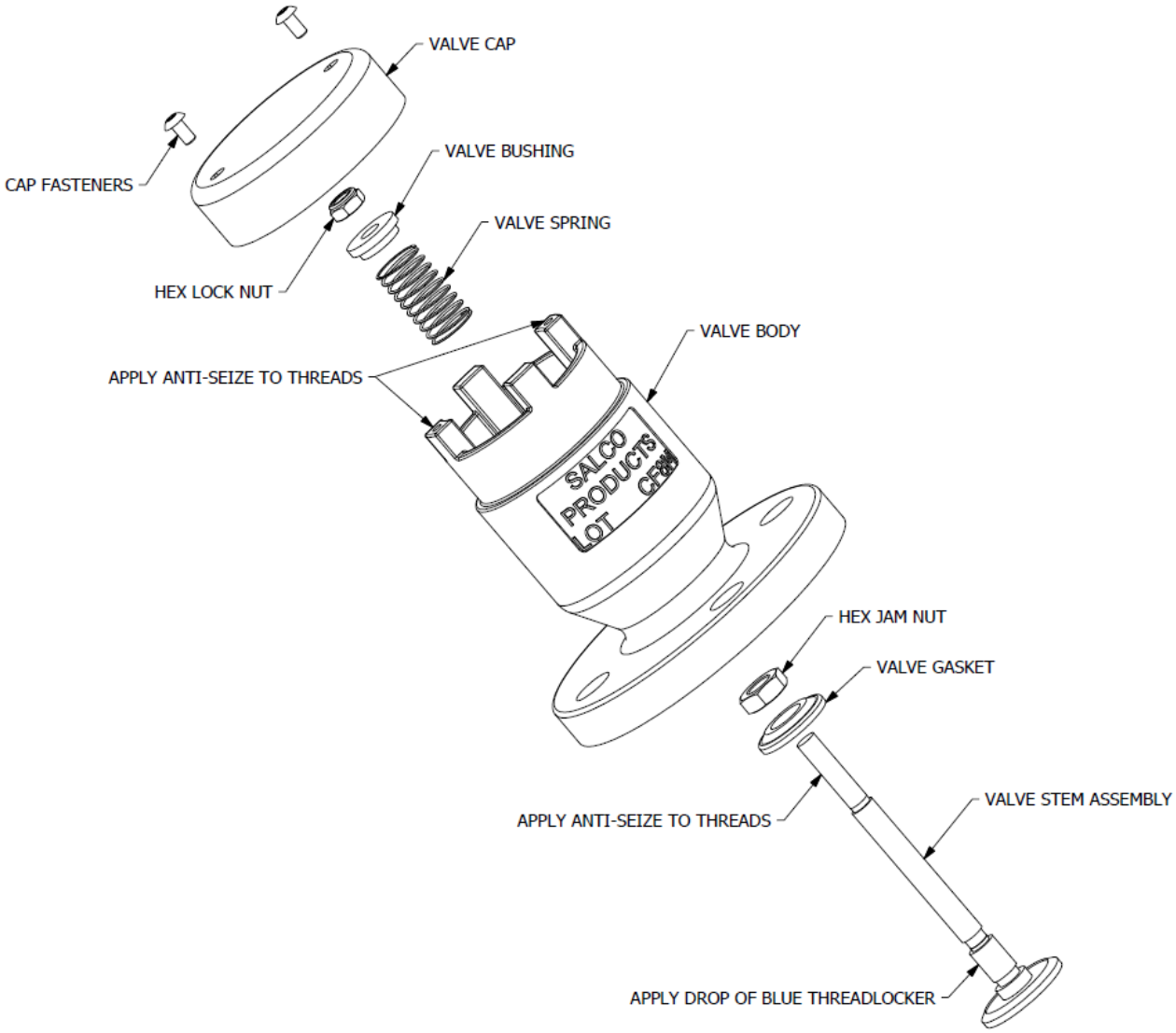
MAINTENANCE INSTRUCTIONS FOR FLANGED VACUUM RELIEF VALVES

Scope

The purpose of this document is to explain the steps necessary to replace the elastomeric valve gasket present on Salco Products one-piece cast flanged vacuum relief valve assemblies.

Flanged Vacuum Relief Valve Anatomy



Valve Disassembly

1. Secure the valve in a suitable holding fixture.
2. Remove the cap fasteners using Torx Plus Security Bit #25 (Salco PN:TRS25IPR)
3. Remove the valve cap.
4. Loosen the hex lock nut on the stem using a 1/2" wrench, relieving spring pressure, until completely removed.
5. The valve bushing and valve spring can now be removed.

6. Remove the valve stem from the valve body.
7. Loosen and remove the hex jam nut from the valve stem using an 11/16” wrench.
8. The valve gasket can be removed and discarded.
9. Clean and inspect all valve components and threads for any signs of damage or distortion. Replace as necessary.

Valve Stem Assembly

1. With the new gasket oriented as shown in Figure 1, slide the gasket all the way down onto the valve stem. Ensure the gasket is fully seated into the gasket holder recess.
2. Apply a drop of blue thread locker to the lower threaded area of the stem as shown in Figure 2.
3. Thread on the hex jam nut until the nut bottoms out and resistance is felt.

Valve Assembly

1. Verify the valve body is clean and free of debris and dirt.
2. Install the valve stem assembly into the valve body from the underside.
3. Apply a small amount of anti-seize to the top threads of the valve stem assembly. See location marked by arrow in Figure 3.
4. Install the valve spring.
5. Install the valve bushing.
6. Install the nylon lock nut and thread down until the nylon engages and prevents rotation by hand.
7. The valve is now ready for setting and testing.

Valve Testing

NOTE: A test bench with a manometer or negative pressure gauge is needed in order to properly set and calibrate the vacuum relief valve to its prescribed setting.

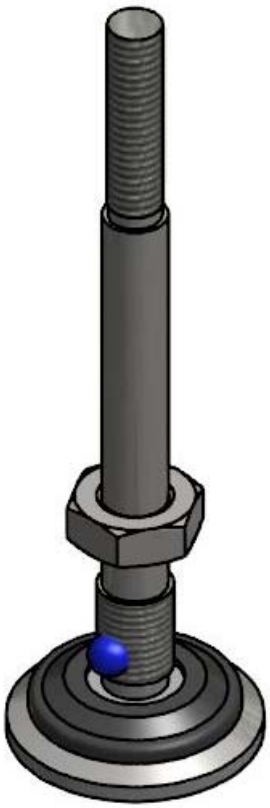
Reference the valve cap markings and Salco Products drawing of the specific part number to find the negative pressure setting of the valve.

Clockwise rotation of the hex lock nut compresses the spring and increases the negative set pressure of the vacuum relief valve.

Reference your companies vacuum relief valve test procedure for vacuum relief valve setting and testing.

Final Assembly

1. Apply anti-seize to the threaded cap holes for the cap fasteners
2. Apply the valve cap to the assembled valve.
3. Install the cap fasteners and tighten

		
Figure 1.	Figure 2.	Figure 3.