

M & M International, Inc.

Lubrication Procedures for Upper and Lower Top Drive IBOP Safety Valves

Using a number 2 multi-purpose grease, lubrication of valves should be performed routinely every 7 to 14 days.

Step 1: Be sure there is no pressure being applied to the inner bore of the valve, either via the well bore or rig pumps.

Step 2: Cycle valve to be greased open and closed several times to release any pressure trapped within its internal components.

Step 3: Remove ¼” NPT plug from valve body and replace with ¼”NPT grease zert.

Step 4: Open valve to its full open position and then rotate the operating stem back toward the closed position about 15 degrees. Total rotation of the operating stem from the open to closed positions is 90 degrees. The purpose of this procedure is to place the ball just shy of being fully open. This allows the pumping of the grease without pressure locking, yet still exposes the surface of the ball to the grease. If the valve is in the closed position the bore through the ball will accept most of the grease, only to be washed away at first pump cycle. The volume of grease to be used should be about 7 ounces or ½ of a standard size tube of grease. The annular volume between the internal valve components and the inside of the valve body is approximately 14 ounces.

Step 5. Remove ¼” NPT grease zert and replace with ¼” NPT plug. A non hardening Teflon seal paste is recommended for use on the ¼” NPT plug.

Step 6. Cycle the valve and proceed with hydrostatic testing of the valve according to standard rig practices.

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