



INSIDE BLOWOUT PREVENTERS VALVES OPERATION AND MAINTENANCE PROCEDURE REV 2 –

04/10

ASSEMBLY PROCEDURE FOR THE INSIDE BLOWOUT PREVENTER VALVES

1.0 SCOPE

- 1.1. This procedure will provide general instructions regarding assembling the Inside Blowout Preventer valves.

2.0 REFERENCES

- 2.1. The latest revision of the following specifications may be used to obtain additional information regarding this procedure.
 - API Specification 7-1 latest edition.
 - Bill of materials.

3.0 ASSEMBLY PROCEDURE

- 3.1. Clean the Upper and Lower Subs and all internal parts.
- 3.2. Visually inspect for signs of damage or wear.
- 3.3. Fit the Dart with a new elastomer. The elastomer must be compatible with the drilling environment.
- 3.4. Place the Spring over the Dart stem.
- 3.5. Install the Guide into the Body.
- 3.6. Insert the Dart and Spring in the Body and through the Guide.
- 3.7. Apply thread compound to connections on the Body, the Lower Sub and the Stab Body. Recommended: Thread compound base is to include 40% to 60% (by weight) finely powdered zinc.
- 3.8. Screw the Body into the Sub and make up the connection with chain tongs or equivalent. Torque the Body and Sub to the make up torque value specified per API Specification RP7G. (Foot/Lb). Individual make up torque values will be in the accompanying data book.

4.0 HYDROSTATIC TEST FOR THE INSIDE BLOWOUT PREVENTER VALVE

- 4.1. Testing shall be performed in accordance with the test pressure and procedure stipulated in API SPEC 7-1.

HYDROSTATIC TESTING PRESSURES			
MINIMUM PRESSURE WORKING RATING		MAXIMUM HYDROSTATIC SHELL TEST PRESSURE	
psi	MPa	psi	MPa
5000	34.5	10,000	68.9
10,000	68.9	15,000	103.4
15,000	103.4	22,500	155.1

Note: test pressure shall be stabilized prior to the timing start for holding pressure.

- 4.2. Lubricate the pin and box connections of the valve.
- 4.3. Install the test plug and cap on the connections of valve assembly to be tested.
- 4.4. With valve hanging Pin up and Box down, install pressure line to bottom of valve (box connection).
- 4.5. With the bleed valve on top of the test plug in the open position, fill the valve with water until the water bleeds through the open valve. Agitate the valve and actuate the bleed valve several times to eliminate any trapped air in the valve body.
- 4.6. Close the bleed valve.
- 4.7. Pressurize the Valve body to the recommended pressure per API SPEC 7-1
 - 4.7.1. Engage pump and pressure to required test pressure from the table above and stabilize. After stabilization of pressure, the valve will be held at pressure for three (3) minutes minimum with no detectable pressure drop or leakage.
 - 4.7.2. At the elapse of the three minutes, the pressure will be reduced to zero.
 - 4.7.3. Engage pump a second time to required test pressure and hold for a minimum of 10 minutes.
- 4.8. If pressure is held, release pressure. After the pressure is released, open the bleed valve on the top of the test plug and release the pressure trapped inside.



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- 4.9. Turn the valve over and remove the test plug from the Upper Sub. Install a pressure line to the bottom (pin) connection of valve.
- 4.10. Using the release rod, push against the dart and fill it with water. The water level is to be above the internals and into the Sub. Release the dart.
- 4.11. Pressurize the valve to the working pressure. Hold the pressure for five minutes minimum with no detectable pressure drop or leakage.
- 4.12. Release the pressure on the assembly.
- 4.13. If the valve does not test, disassemble, clean, reassemble, and retest the valve to the requirements as outlined in this procedure.

5.0 INSTALLING THE STAB BODY ASSEMBLY

- 5.1. Insert the release rod through ID of the lifting handle from the pin end of the Stab Body.
- 5.2. Screw the releasing handle into the threaded hole of the Stab Body.
- 5.3. Apply thread compound to the connections on The Sub and Stab Body. **Recommended: The compound base is to include 40% to 60% (by weight) finely powdered zinc.**
- 5.4. Insure the Releasing Handle is loose.
- 5.5. Screw the Stab Body into the box end of the IBOP Sub.
- 5.6. Depress the Releasing Rod to open the Valve.
- 5.7. Tighten the Releasing Handle.

DISASSEMBLY PROCEDURE FOR THE INSIDE BLOWOUT PREVENTER VALVE

1.0 SCOPE

This procedure will provide general instructions regarding disassembly of the Inside Blowout Preventer valves.

2.0 REFERENCES

- 2.1. The latest revision of the following specifications may be used to obtain additional information regarding this procedure.
 - API Specification 7-1 latest edition.
 - Bill of materials.

3.0 DISASSEMBLY PROCEDURE

- 3.1. Remove Stab Body
- 3.2. Remove the Releasing Handle.
- 3.3. Remove the Releasing Rod.
- 3.4. Inspect all components for wear or damage.
- 3.5. Clean parts, replace wore or damaged ones and assemble the Stab Body Assembly (refer to 5.0 to reassemble the Stab Body).
- 3.6. Break the connection between the Body and the Sub.
- 3.7. Remove all internal parts.
- 3.8. Remove Elastomeric Seal from the Dart.
- 3.9. Thoroughly clean all parts and valve body. Worn or damaged parts should be replaced prior to re-assembly.

PREPARING THE INSIDE BLOWOUT PREVENTER VALVE FOR INSTALLATION

1.0 SCOPE

1.1. This procedure will provide general instructions regarding installation of the Inside Blowout Preventer valves.

2.0 REFERENCES

2.1. The latest revision of the following specifications may be used to obtain additional information regarding this procedure.

- API Specification 7-1 latest edition.
- Bill of materials.

3.0 INSTALLATION PROCEDURE

3.1. Clean the shipping thread compound from the threaded connections.

3.2. Apply thread compound suitable for drill string use.

3.3. Recommended: Thread Compound base is to include 40% to 60% (by weight) finely powdered zinc.

NOTE: Failure to follow the above procedure explicitly may result in damage and subsequent premature valve failure.

STORAGE OF THE IBOP ASSEMBLY

4.0 SCOPE

4.1. This procedure will provide general storage instructions of an Inside Blowout Preventer valve.

5.0 REFERENCES

5.1. The latest revision of the following specifications may be used to obtain additional information regarding this procedure.

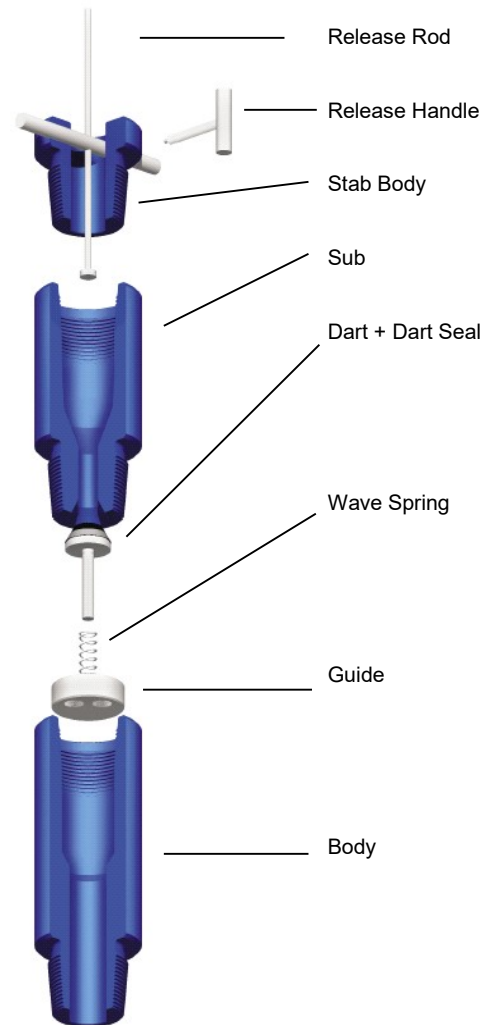
- API Specification 7-1 latest edition.
- Bill of materials.

6.0 STORAGE PROCEDURE

6.1. If the valve is returning from service in the drill string, disassemble and clean and re-assemble with serviceable components.

6.2. Ensure thread protectors are installed.

6.3. Store standing on pin, or laying on its side in a controlled environment with the Releasing Rod depressed and the Release Handle tightened.



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