

# Instruction Sheet CBX Expansion Tank Bag Replacement

402-090

SUPERSEDES: New EFFECTIVE: July 1, 2004

Plant ID No. 001-3818

Before proceeding with the bag replacement, read instructions carefully and check that you have the required tools and supplies available.

Suggested tools: Source of compressed air, tire valve air chuck, extension cord, hand lamp, pressure gage with air chuck, valve core removal tool, wrenches or sockets- (CBX15-42) 1 1/16", (CBX84-130) 1 1/16" & 1 7/16", (CBX170-600) 7/8" & 1 7/16", pipe wrenches.

### To Remove Existing Bag

- 1. Isolate tank from system.
- 2. Disconnect or cut line to tank and allow water to drain from system connection (22). Check air charge at Schrader valve (13) to see if there is any air pressure in the tank. If the reading is 0 add air to collapse the bag to expel water from the bag.
- 3. When water stops flowing from the system connection, remove valve core to bleed air from tank.

CAUTION: AIR PRESSURE IN TANK COULD CAUSE VALVE CORE TO BE A PROJECTILE. WEAR SAFETY GLASSES. NO OTHER PLUGS ARE TO BE REMOVED FROM THE TANK. WARNING: FAIL-URE TO COMPLY WITH THESE INSTRUCTIONS REGARDING THE AIR CONNECTIONS CAN RESULT IN SERIOUS PERSONAL INJURY OR DEATH AND/OR PROPERTY DAMAGE.

- 4. Lay tank on its side to make system connection/cover assembly accessible.
- 5. When tank is at 0 psi, remove the nuts (20) securing the cover assembly to the tank.
- 6. Separate the cover assembly away from the rubber flange several inches and separate rubber flange of the bag away from the tank flange.
- 7. Pull the cover/support post and bag from the tank.
  - Note: The smaller sizes do not have a support post. (CBX15-42)
- 8. Remove the spacer rings (17) from the stude and put aside for reuse.

#### **CAUTION: DO NOT DROP IN TANK**

- 9. Wipe out the inside of the tank, making sure it is dry and check all tank flange and interior surfaces for any sharp edges. Smooth any rough surfaces.
- 10. Remove 7/8" heavy hex nut (15B) from the end of the support post (15A). (Used with CBX84-600)
- 11. Remove the washer (15D).
- 12. The old bag can now be removed from the support post.
- 13. Clean the fixed sealing flange (15C) which is welded to the bag support post and the holes in the post.

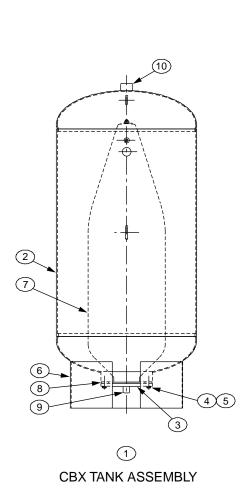
## To Install New Bag

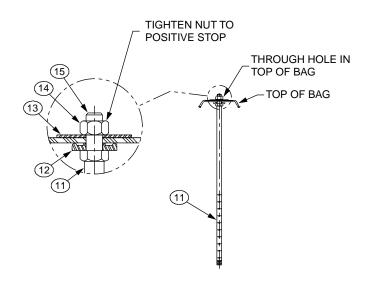
Note: CBX15-42 Expansion Tanks do not use a support post so disregard steps 1-3.

- 1. Install new bag over support post (CBX84-600 only) engaging the 7/8" screw with the hole in the end of the bag.
- 2. Install the washer over the 7/8" screw.
- 3. Run the 7/8" hex nut down and tighten to a positive stop.
- 4. Make sure the sealing surface of the tank flange, the cover plate sealing surface and both sides of the rubber flange of the bag are clean.
- 5. Install spacer rings over the studs.

# **CBX Expansion Tank Bag Replacement**

- 6. Insert the bag & cover assembly (CBX15-42), bag/support post/cover assembly (CBX84-600) into tank with system connection in the same direction as original, which would be in line with the window in the base ring.
- 7. Install the cover plate retaining nuts and tighten them equally in a star pattern until the cover assembly is positive against the spacer rings.
- 8. Right the tank and position tank so that it can be reconnected to the system.
- 9. If seismic constraints were used, re-secure the seismic constraints.
- 10. Reinstall the valve core to the charging connection.
- 11. Connect an air chuck to an air hose and re-pressurize the tank to the fill pressure of the system or minimum operating pressure of the system at the elevation of the installation of the tank in the system.
- 12. Make a soap and water solution and check all connections for air leaks.
- 13. Connect tank to system and open system valve.
- 14. Check for leaks.





- 1 Tank Assembly
- 2 Shell
- 3 Cover Assembly
- 4 Stud
- 5 Nut
- 6 Base Ring
- 7 Bag
- 8 Spacer Ring
- 9 System Connection
- 10 Air Charging Valve
- 11 Support Post
- 12 Sealing Flange
- 13 Washer
- 14 <sup>7</sup>/<sub>8</sub>" Nut
- 15  $\frac{7}{8}$ " Bolt