



ASME BLADDER TANKS - HTS/DTS/WTS SERIES

Bladder Replacement Instructions Models 80 - 450 Liters (21 to 120 Gallon.)

I. Bladder Removal:

CAUTION: Before attempting any repairs or bladder replacements the air pre-charge must be reduced to zero. Using an appropriate air tool, bleed off all air from tank until gauge reads Zero.

Do not attempt to remove air pre-charge valve until all air pressure has been removed - as verified by gauge reading. Personal injury could occur if this procedure is not strictly adhered to.

- A. Remove 8 ea bottom cover bolts (Item 1) and 8 ea. Washers (Item 2).
- B. Remove Flange Cover (Item 3).
- C. Remove bladder retainer nut (hex) on center top (under protective cap).
- D. Remove bladder (Item 4) through flange opening.

II. Bladder Installation:

- A. Carefully clean tank flange surface area and clean mating face of removed flange cover.
- B. Insert bulkhead fitting (Item 4) into inside of bladder and push through smaller hole at the top of the bladder.
- C. Insert rod (broom stick works great) inside bladder against the flat area of bulk head fitting (Item 4).
- D. Carefully roll up bladder length wise and insert through tank at bottom flange opening. Push rod inward toward the top of tank until bulkhead fitting slips through top hole.

CAUTION: Do not use rod or pipe with sharp or pointed edges to install the bulkhead fitting through the top opening of the bladder tank or damage to rubber bladder may occur.

- E. Re-install and tighten bladder retainer nut (Item 5).
- F. Rotate bladder until bladder flange is perfectly flat against tank mating flange face and ensure there is no twisting of the bladder inside the tank. Bladder can be rotated to eliminate twisting.
- G. Re-install flange cover (Item 3) and secure with the 8 bolts and washers (Items 1&2).

NOTE: When tightening the flange cover against the bladder flange and tank flange, make sure bladder flange is fully compressed to ensure a tight seal. If for some reason the bolts bottom out before proper compression is realized, remove the bolts and install an additional washer under the head of each bolt. Re-tighten and ensure bladder flange is tightly compressed.

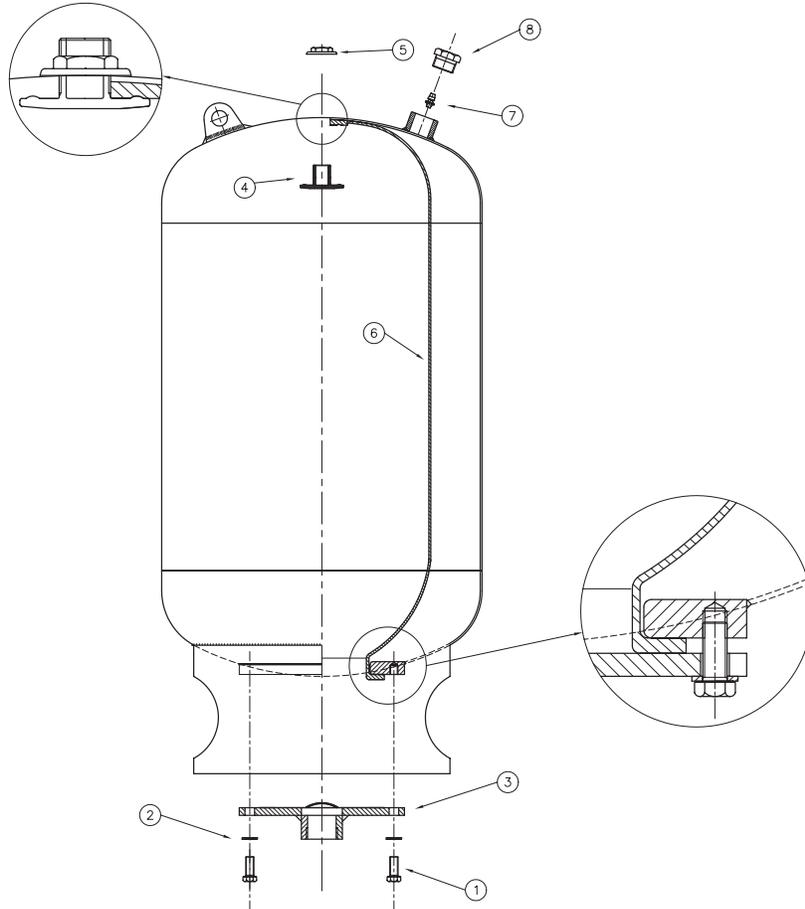
III. Air leak Testing:

- A. Before reconnecting plumbing to tank bottom flange a leakage test should be performed at this time.
- B. Remove protective threaded plug (Item 8).
- C. Connect an appropriate air charging device to the air valve (Item 7).
- D. Charge tank to factory recommended air pressure and/or anticipated initial start-up pressure.
- E. Using a soap solution check for leakage around the entire periphery of the flange make-up area.
Check air pressure again after one hour to ensure there is no loss of air pre-charge.
- F. Re-install threaded plug if there is no leakage and continue with plumbing required.



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BILL OF MATERIAL

ITEM	QTY	DESCRIPTION
1	8	THREADED HEX BOLTS
2	8	WASHERS
3	1	COVER PLATE
4	1	BULKHEAD FITTING
5	1	HEX NUT
6	1	BLADDER
7	1	1/8" AIR CHARGING VALVE
8	1	THREADED CAP