

Series ETA and DETA

ASME Code Expansion Tank

Installation Instructions

Warnings

- This Expansion Tank is designed and intended for water storage at maximum pressure and maximum temperature as indicated on the nameplate. Any use other than for water or at a sustained or instantaneous pressure in excess of listed rating is UNSAFE and may cause property damage, serious bodily injury or result in death.
- This Expansion Tank, like all Expansion Tanks, may eventually leak. Do not install without adequate drainage provisions where water flow will cause damage.
- Improper installation, adjustment, alteration, service or maintenance may cause property damage, serious bodily injury or death. Read instructions completely before proceeding with installation.
- Only qualified personnel should install or service this equipment in accordance with local codes and ordinances.
- The manufacturer of this tank does not accept any liability or other responsibility for personal injury or property damage resulting from improper use, installation or operation of this tank or the system of which it is a part.

Important!

- A Pressure Relief Valve sized and installed in accordance with Local Codes must be incorporated in the system. In those systems requiring a combined Temperature and Pressure Safety Relief Valve, the Temperature and Pressure Safety Relief Valve should be sized and installed in accordance with Local Codes.
- Never plug a Safety Relief Valve.

1. Prior to beginning installation, visually inspect the tank for damage which may have occurred during transit.
2. Determine the system pressure.
3. Prior to installation of the tank in the system the tank must be pre-charged to the system pressure as determined in Step 2.

To pre-charge tank:

- A. Remove pipe plug covering the valve enclosure.
- B. Check and adjust the charge by adding or releasing air (Oil and water free compressed air or nitrogen gas may be used.)
- C. After adjusting air pressure, test air valve for leakage, (Shrader type tire valve core may be used for replacement.)
- D. Replace pipe plug.

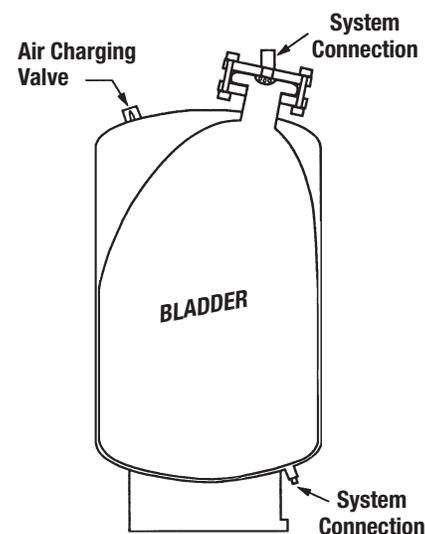
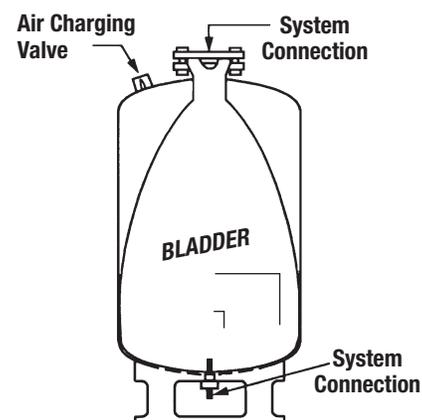
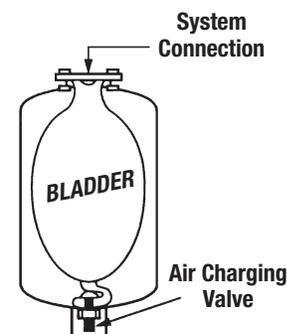
4. Set tank in place and connect system piping using isolation valve(s) and drain.

Caution: Do not loosen nuts on cover plate - This will result in loss of pre-charge. Cover plate must not be removed until the air pressure in the tank has been bled to zero gauge pressure. (Model ET-RA only)

5. Purge air from system prior to placing tank into operation. When filling the system with water, open valves to tank to ensure any water or air remaining in the bladder from factory testing is displaced prior to placing the tank in operation.

Note: Model ET-RA 85 through 800 - These tanks have both top and bottom access to the bladder. It is recommended that only the bottom connection be used for connection to the system. Top connections may be used for gauges, relief valves, etc.

6. Any connection not used must be plugged and checked for leakage.



CALIFORNIA PROPOSITION 65 WARNING

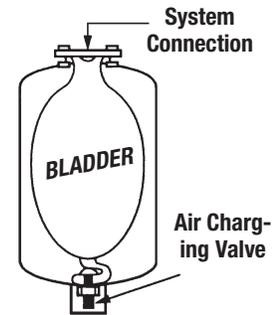
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: www.watts.com/prop65

Instructions for replacing Expansion Tank Bladder

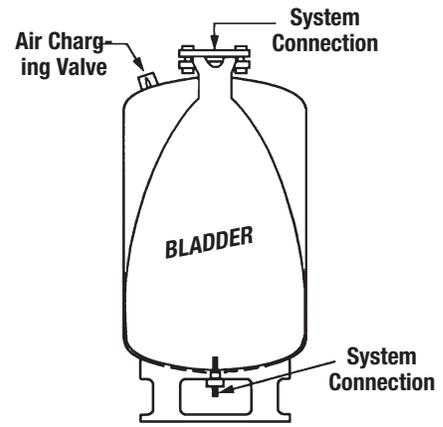
Models ET-RA 35 and ET-RA 50

1. Tank must be drained and all pressure released.
2. Bladder is attached to tank at both ends. To remove bladder from tank remove all bolts from cover plate and take off plate.
3. You will now be able to push bladder to side wall of tank. Reach into tank at far end and you will note that the bladder has a tab at this end which has been slipped over extension of Schrader valve and held in place with a threaded washer. Unscrew washer (counter- clockwise) and this will release bladder from tank.
4. Pull out bladder and install new bladder by reattaching to Schrader valve.
5. To complete bladder attachment, you will note that the bladder has gasket molded right with the bag. Make sure the bladder is not twisted on the interior of the tank.
6. Reattach cover plate to make an air and water tight seal.
7. Recharge tank.



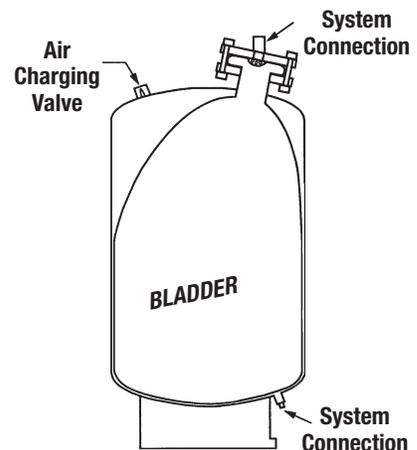
Models ET-RA 85 and ET-RA 800

1. Tank must be drained and all pressure released.
2. Bladder is attached to tank at both ends. To release bladder remove jam nut holding bottom fitting. This fitting can now be pushed up inside the tank and bladder. To release bladder from opposite end, remove all nuts from flange and then take off cover plate.
3. You will now be able to reach in and remove bladder. Remove strainer assembly from inside bladder.
4. To install new bladder, insert strainer assembly into bladder and then carefully position new bladder into tank so that strainer assembly allows nipple to protrude through hole in bottom of tank (base ring end).
5. Install jam nut to a snug fit.
6. To complete bladder attachment, you will note that the bladder has a gasket molded right with the bag. Make sure the bladder is not twisted on the interior of the tank.
7. Reattach cover plate to make an air and water tight seal.
8. Recharge tank.



Models ET-RA 1000 and ET-RA 2000

1. Tank must be drained and all pressure released.
2. Bladder is attached to only top of tank.
3. Remove all nuts and bolts from cover plate and take off plate.
4. You will now be able to pull out old bladder.
5. Take the new bladder and roll lengthwise into tube shape.
6. Place bladder into flanged opening.
7. To complete bladder attachment, you will note that the bladder has the basket molded right with the bag. Make sure the bladder is not twisted on the interior of the tank.
8. Reattach cover plate to make an air and water tight seal.
9. Recharge tank.



Limited Warranty: Watts Regulator Co. (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE COMPANY HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication, improper installation or improper maintenance or alteration of the product.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights. **SO FAR AS IS CONSISTENT WITH APPLICABLE STATE LAW, ANY IMPLIED WARRANTIES THAT MAY NOT BE DISCLAIMED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL SHIPMENT.**

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