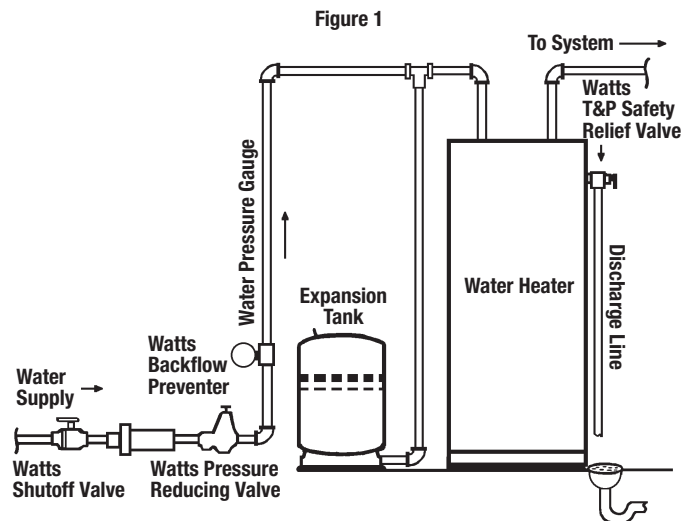


# Potable Hot Water Expansion Tank

## Installation Instructions Model DET-35-M1



DET-35-M1



Certified to  
ANSI/NSF 61  
(73°F/23°C)

### Pressure — Temperature

DET-35-M1 Order No. 0067440

Max. Pressure: 50psi (10.3 bar)

Max. Temp: 200 °F (93°C)

Tank Volume: 14.0 gal. (53 liters)

Tank Acceptance: 5.6 gal. (21.2 liters)

Air Pre-charge: 20psi (138 kPa)

Connections Size: 1" (25mm)

Diameter: 16.0" (406mm)

Length: 21.7" (551mm)

Weight: 32 lbs. (15 kgs.)

### Acceptance Volume

AIR SIDE PRE-PRESSURE		WATER SIDE VOLUME AT 150 psi (gallons)
psi	kPa/bar	DET-35-M1
20	138 kPa	10.7
40	276 kPa	9.2
60	413 kPa	7.6
80	551 kPa	6.1

### ⚠ WARNING!

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.

This Expansion Tank is designed and intended for water storage at a maximum pressure of 150psi (10.3 bar) and a maximum temperature of 200°F. (93°C) Any use other than for potable water or at a sustained or instantaneous pressure in excess of 150psi or 200°F is **UNSAFE** and may cause property damage, serious bodily injury or result in death.

Do not exceed 80psi (5.5 bar) air charge. Air charge pressures exceeding 80psi (5.5 bar) could become hazardous and will void any and all warranties, either written or implied. Failure to follow these instructions may cause property damage, serious bodily injury or death.

**Disclaimer:** 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.

**Notice:** This Expansion Tank, like all Expansion Tanks, may eventually leak. Do not install without adequate drainage provisions where water flow will cause damage.

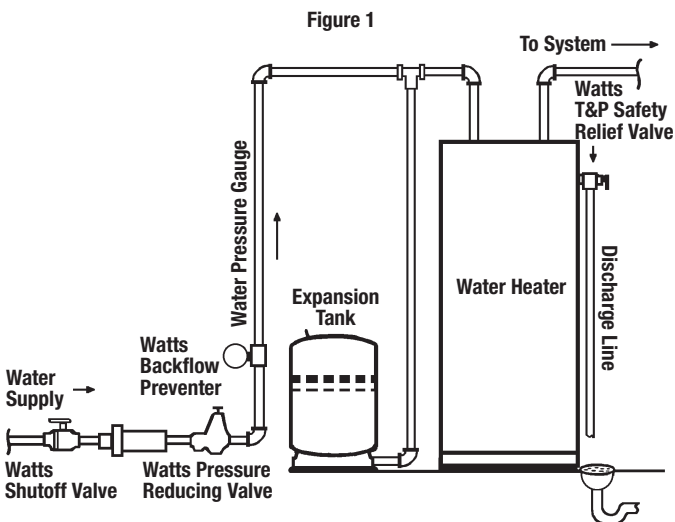
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## Installation

- Before beginning installation determine the system pressure.
  - Open a faucet to allow the system pressure to equalize.
  - Read the system pressure at the Pressure Gauge (Figure 1).
  - Close faucet.
- The Expansion Tank Pre-Charge must be set to the system pressure as determined in Step 1.
 

**Note:** The normal pre-charge is 20psi. Do not exceed 80 psi. If system pressure exceeds 80psi, it will be necessary to either: **A.** Add a pressure Reducing Valve to the system or, **B.** Locate the expansion tank in a riser where the static pressure is below 80psi.

  - Unscrew the protective cap from the air inlet valve.
  - Using a tire pressure gauge check the tank pre-charge pressure.
  - If necessary, pressurize the tank to the proper setting using a manual bicycle tire pump. **Caution do not exceed 80psi.**
  - Replace the protective air cap.
- Shut off the water supply valve.
- Shut off power source to the hot water heater, (electricity, gas, oil burner switch), and drain system following water heater manufacturer recommendations.
- Install the Expansion Tank in the System (refer to Figure 1).
  - This Expansion Tank, as all Expansion Tanks, may eventually leak. **Do not install without adequate drainage provisions.**



## 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.
- Turn on the water supply valve.
  - Open a hot water fixture and allow water flow until all air is removed from the system.
  - Reapply power to the hot water heater.
  - Open a hot water fixture to allow a slight flow until the hot water has reached operating temperature.
  - Re-check system pressure following Step 1.a through c.
 

**Caution:** Do not adjust the air pre-charge of the Expansion Tank with the system under pressure. The air pre-charge should only be adjusted under zero system pressure. If necessary adjust the Pressure Reducing Valve to the Expansion Tank Pre-charge as determined in Step 2.



**Note:** Product information is subject to change without notice and supersedes all previous publications.

### 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](http://www.watts.com/prop65)

**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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