

# Series 1156F, T156B and N256

## Feed Water Pressure Regulators

Sizes: 1/2" – 3/4" (15 – 20mm)

### ⚠ WARNING



**THINK  
SAFETY  
FIRST**

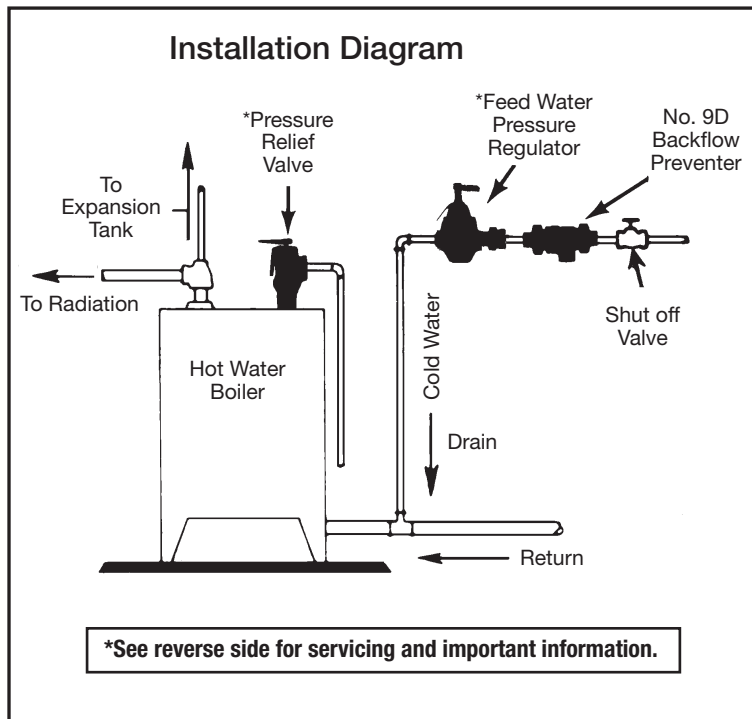
Read this Manual BEFORE using this equipment. Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment. Keep this Manual for future reference.

### Installation Instructions

1. The Watts Feed Water Pressure Regulator must be installed on the cold water supply line to the boiler. It may be installed in either vertical or horizontal position. Allow sufficient clearance to operate the fast fill and purge lever.
2. Install a shutoff valve upstream of the regulator.

### NOTICE

- Local codes typically require the use of a backflow preventer in the system (Watts Model 9D). Consult local authorities for the type, installation and testing requirements. The backflow preventer must be installed upstream of the regulator.
3. Prior to installing the regulator, flush out the supply pipe to clear it of chips, scale, dirt, etc.
  4. Install the Watts regulator in the supply line to the boiler with the arrow on the valve body pointing in the direction of flow to the boiler.



### Operation

1. To fill the system, open the shutoff valve upstream of the regulator. This valve must always be kept open when the system is in operation. Water will flow into the system until it is full and under pressure.

### NOTICE

Series with Fast Fill and Purge Lever 1/2" valves are equipped with a unique and simple "fast fill and purge lever" which permits rapid filling of the system, and sustained flow for air purging. When the lever is raised to the vertical position it pushes a removable "Push Rod" down. This manually forces the valve to a wide open position for maximum flow. Returning the lever to its normal position releases the tension on the rod permitting the valve to maintain normal system pressure.

### ⚠ CAUTION

Always observe the Boiler Pressure Gauge when using this feature. Using this feature with the Purge Valve closed can result in over pressurizing the system or exceeding the Pressure Safety Relief Valve setting. Over pressurization can result in a water discharge from the Relief Valve. This feature can be disabled to prevent tampering or accidental misuse of the fast fill feature by simply unscrewing the fast fill lever cap and removing the push rod.

2. The regulator is set to deliver water to the boiler at approximately 15 lbs. pressure. This pressure is sufficient for a 3 story building. To reset the reducing valve for higher pressure (when the pressure is not sufficient to lift the water to highest radiation):

- A. Calculate the number of feet from the regulator to the top of highest radiation.
- B. Multiply this number by 0.43 and add 3 lbs. This will give the pressure required to raise the water to the highest radiator and keep the system under pressure.

3. **To reset the regulator valve:**

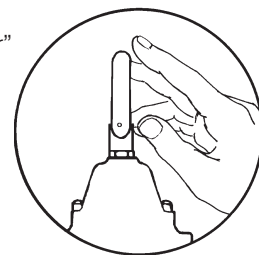
Remove the fast fill lever cap, and loosen the lock nut. To raise the reduced pressure - slowly turn the adjusting screw clockwise until the system gauge indicates the pressure required. To lower the reduced pressure - turn the adjusting screw counterclockwise. After completing adjustments, tighten the lock nut and replace the fast fill lever cap.

### NOTICE

Watts is not responsible for boiler failure on boilers without low water cutoffs.

### ⚠ WARNING

Annual inspection of all water system safety and control valves is required and necessary. Regular inspection, testing and cleaning assures maximum life and proper product function.



**WATTS®**

## Service

### The strainer screen should be serviced at least twice a year.

This series is a new development for standard capacity domestic water regulation service. It has special unitized construction which consists of the seat, disc and stem assembly, and strainer screen all together in one unit for complete replacement maintenance.

#### To clean or replace parts:

1. Close the shutoff valve upstream of the regulator.
2. Bleed pressure from system.
3. Loosen and remove the fast fill cap. Remove the spring cage and all parts above the diaphragm.
4. Loosen and remove the diaphragm lock nut and lock washer, pressure plate and diaphragm from the valve stem.
5. Unscrew seat cylinder from body and remove entire assembly.
6. Prior to reassembly flush valve to remove sediment.
7. After repairs are completed reassemble in reverse order.

## Troubleshooting

A dripping Pressure Safety Relief Valve can be an indication that the Feed Water Pressure Regulator requires service.

**Important:** The pressure Safety Relief Valve is on the system to protect against excessive water pressure only. The function of the valve is to release any excess pressure from the system caused by thermal expansion of the water. Therefore, do not be alarmed at water drippage as the valve is doing what it is designed to do. This drippage will not prevent the natural buildup of temperature in the boiler because the valve operates on pressure only. The valve will open when the gauge pressure reaches 30 lbs.

To avoid water damage or scalding due to valve operation, a drain pipe must be connected to the Pressure Safety Relief Valve and run to a safe place of disposal.

#### Never plug the discharge of a pressure safety relief valve!

Other possible causes should also be examined prior to servicing the regulator. Some other possible causes are a water logged air cushion tank, an over pressurized diaphragm style air cushion tank, an undersized air cushion tank and, on systems with a domestic water coil, a leak in the tankless coil.

Periodic inspection of the system by a qualified plumbing and heating technician is recommended. Corrosive water conditions, extremely high water temperatures, unauthorized adjustments or repair could render the valve ineffective for the service intended. Regular inspection and cleaning of all water safety and control valves assures maximum life and proper product and system function.

**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.

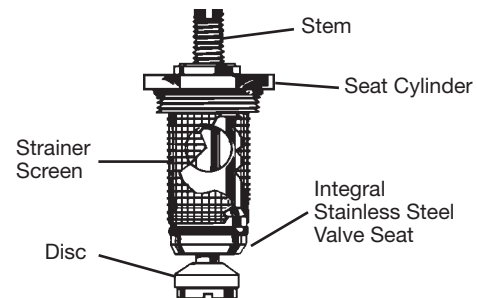
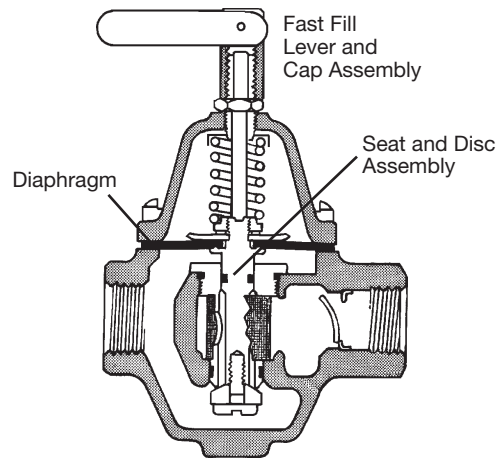
**THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE COMPANY HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE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



A Watts Water Technologies Company



#### When ordering, Specify:

1. Ordering Code Number
2. Size of Valve
3. Type Number
4. Model Shown on Nameplate

## Series 1156F-N256 Repair Kits

ORDERING CODE	KIT NO.	SIZES	
		in.	mm
884390	1156FRK	1/2	15
878339	N250RK	3/4	20

Kit for No. 1156F and 256 includes all items shown.

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.  
**For more information: [www.watts.com/prop65](http://www.watts.com/prop65)**