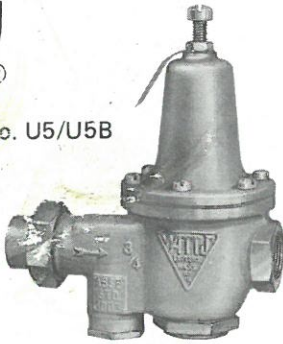


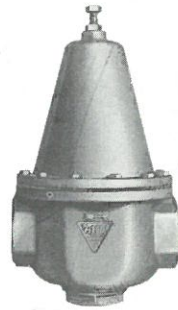
INSTRUCTIONS FOR INSTALLING Watts Water Pressure Reducing Valves



No. U5/U5B

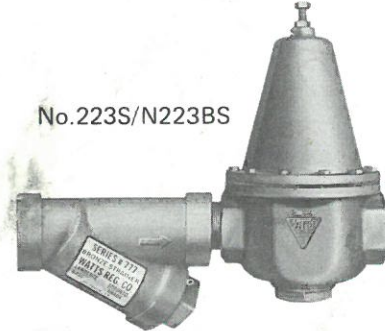


Series U5 only
IAPMO listed



No. 223/N223B

No. 223S/N223BS



INSTALL THE VALVE IN THE LINE WITH THE SUPPLY CONNECTED TO VALVE INLET (MARKED "IN" ON CASTING) OR WITH THE ARROW ON THE VALVE BODY POINTING IN THE DIRECTION OF FLOW.

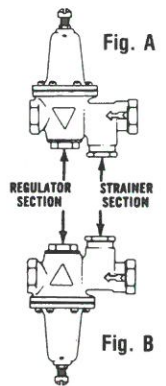
These regulators can be installed horizontally in either an upright or inverted position, as shown or vertically and is a matter of choice of accessibility for servicing the regulator. For example, in an upright position (Figure A) the strainer area, on valves so equipped, can more easily be cleaned out by removing the bottom plug and any collected sediment will fall downwards. Accessibility for servicing the regulator section, however, may be less convenient.

When the valve is installed in an inverted position (Figure B), the "regulator section" is more readily exposed for simplified servicing of the disc and seat, while the strainer can almost as easily be flushed out by turning the water supply on slightly.

NOTE: Regulator must always be installed in an accessible location to facilitate servicing.

For household use install the reducing valve, when possible so that the sill cock line is after or downstream of the reducing valve as shown in diagram below. Before installing the reducing valve flush out the line to remove loose dirt and scale which might damage valve disc and seat. On valves having strainers the screen should be removed and cleaned at least once every six months, more often if water conditions are bad.

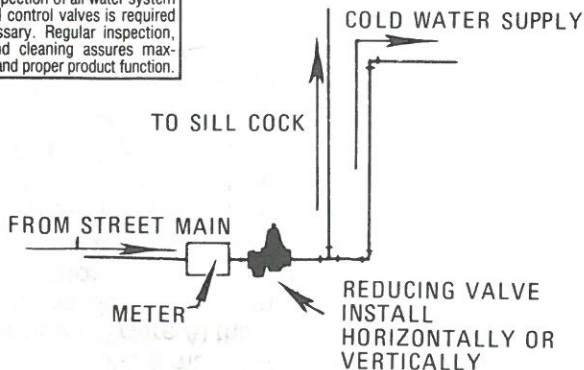
TO READJUST reduced pressures, loosen check nut and turn adjusting screw clockwise to raise reduced pressure and counter clockwise to lower reduced pressure.



When a reducing valve is used it makes a closed system; therefore, pressure relief protection must be provided on the downstream side of the regulator to protect equipment.

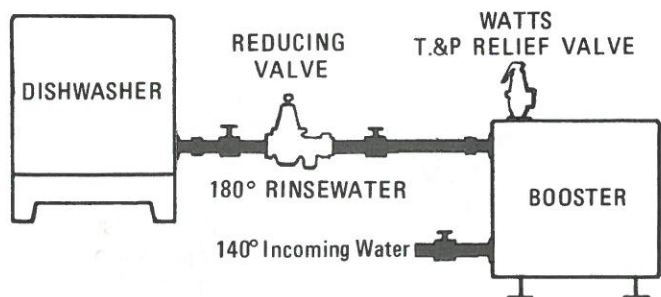
MAIN LINE SERVICE

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.



LOW PRESSURE SERVICE

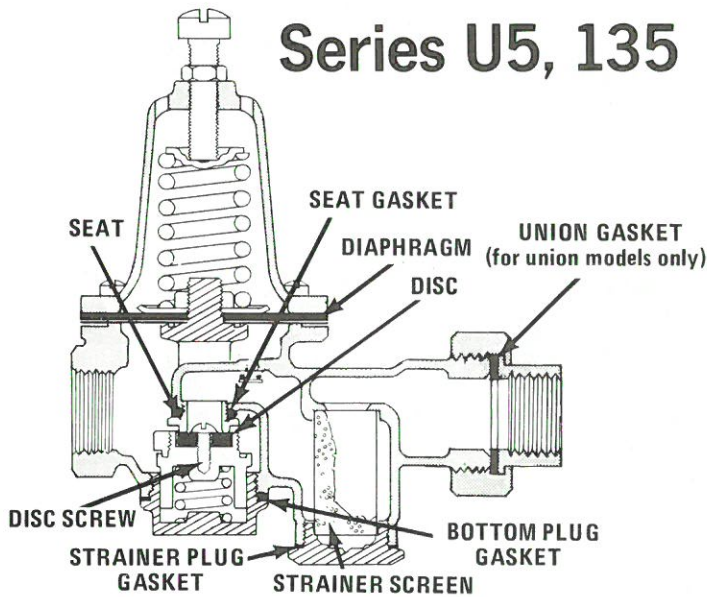
Recommended installation when regulator is used to control flow through the booster heater to dishwasher.



Repair Kits...

When ordering, specify **Ordering Code Number, Kit Number and Valve Size.**

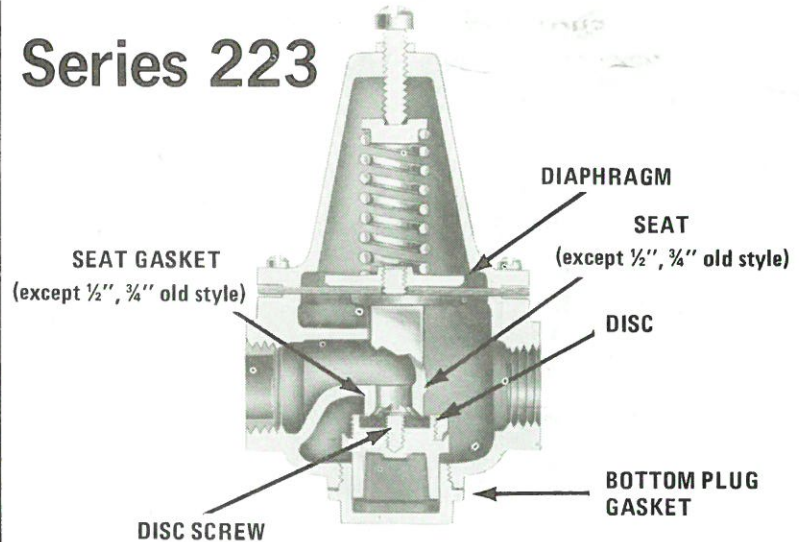
Series U5, 135



Kit for No. U5, 135 includes parts shown above

Ordering Code No.	Kit No.	Valve Series	Size Inches
861460	"A"	U5	1/2
861465	"B"		3/4
861470	"C"		1
861475	"D"		1 1/4
861477	"E"		1 1/2
861480	"F"		2, 2 1/2
861460	"A"	135	1/2
861465	"B"		3/4
861480	"F"		1 1/2

Series 223



Kit for No. 223 includes parts shown above

Ordering Code No.	Kit No.	Valve Series	Size Inches
877104	1/2/223RK	223	1/2
861470	"C"		3/4
861475	"D"		1
861477	"E"		1 1/4
877494	1 1/2/223RK		1 1/2
877500	2/223RK		2
877551	2 1/2/223RK		2 1/2
877555	2 1/2 N223RK	N223B	2 1/2 Bronze
878305	3 N223RK	N223B	3 Bronze

WATTS "THERMAL EXPANSION BY-PASS MODEL" WATER PRESSURE REGULATORS SERIES U5B, N223B

The use of a water pressure reducing valve normally creates a closed system. When water is heated in a closed system, it expands causing an increase in pressure. This pressure may increase to the set pressure of the relief valve (on the water heater) causing it to drip, thus releasing the expanding water and protecting the system against excessive pressure. This increase in the system pressure over that regulated by the reducing valve is called "thermal expansion pressure".

Watts Thermal Expansion By-Pass Model water pressure reducing valves, U5B and N223B are an economical solution of this annoyance, since under cer-

tain conditions it allows the expanding water to escape back into the supply main before it can affect the relief valve.

Effectiveness of the Thermal Expansion by-pass feature is limited to systems where the street main pressure is less than the setting of the heater relief valve. Therefore, the highest **allowable** pressure setting for the relief valve should be selected for widest effectiveness of a by-pass.

When approved by local authorities, 150 lb. pressure relief setting is recommended in accordance with latest allowable pressure standards for gas and electric water heaters.

"ATTN. INSTALLER: After installation, please leave this Instruction Sheet for occupant's information."

WATTS[®]
REGULATOR
WATTS REGULATOR COMPANY

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Tel: (416) 851 8591

Fax: (416) 851 8788

IS U5-223 905

Watts Regulator (Nederland) b.v.

Telex: 844 35365

LIMITED WARRANTY: Watts Regulator Company warrants each product against defects in material and workmanship 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. This shall constitute the exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental or consequential damages, including, without limitation, damages or other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemicals, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product. THE COMPANY MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED EXCEPT AS PROVIDED IN THIS LIMITED WARRANTY.

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