

# PRESSURE REDUCING VALVES | RD-11, RD-40, RD-50 & HRD-70 | INSTALLATION AND OPERATING INSTRUCTIONS

File No: 11.85

Date: DECEMBER 24, 2015

Supersedes: 11.85

Date: MAY 13, 2008

## 1.0 INSTALLATION

The pressure reducing valve should be installed with the flow arrow on the body pointing in the direction of the flow. Install the union fittings, supplied with the valve (model RD-11 and c-11), on the inlet side of the valve body, for quick installation and removal if necessary. A shut-off valve should be installed on the city water side of the pressure reducing valve. If the pressure reducing valve is not equipped with a fast fill feature, a by-pass may be used. A three valve by-pass around the pressure reducing valve will also serve as a fast fill option and is recommended for service.

#### **CAUTION**



The use of Teflon tape when installing a valve provides lubricity. Care should be taken to avoid over tightening, which may crack the valve body.

## 2.0 OPERATION

Models RD-11, RD-40 and RD-50 are preset at 12 psi, and the HRD-70 is preset at 45 psi. Open the cold water fill valve and the system will be filled until the boiler gauge indicates the preset valve pressure has been obtained.

Model RD-11 is preset at 12 psi and is equipped with a fast fill feature. When filling the system as noted above, the fast fill thumbscrew should be manually turned in completely. This overrides the pressure regulating function of the valve. The system should be filled until the boiler gauge indicates the preset pressure of the valve and then the fast fill thumbscrew should be backed off completely until it spins freely.

# WARNING



The fast fill thumbscrew must never be left in the down position after the system has been filled. The thumbscrew must be placed in the free position to avoid over pressurization and unnecessary relief valve discharge.

## 3.0 ADJUSTMENT

Allow system water to cool to ambient temperature. If necessary, adjust valve pressure setting as follows: pressure setting can be raised or lowered by loosening the jam nut and turning the slotted adjusting screw clockwise to increase the set pressure or counter-clockwise to lower the set pressure. This should be done slowly until the boiler pressure gauge indicates the required system pressure. A screw driver should be used to hold the adjusting stem stationary while the jam nut is secured.

# 4.0 SERVICE

If the pressure reducing valve fails to maintain the set cold fill pressure, the sediment strainer may be clogged. To service the strainer, shut off city water supply and the isolation valve on the discharge of the pressure reducing valve. Remove and clean or replace the strainer and replace the strainer gasket and nut. Open both the city water shut-off valve and the isolation valve to resume normal system operation.

#### TORONTO

23 BERTRAND AVENUE TORONTO, ONTARIO CANADA M1L 2P3 +1 416 755 2291

#### BUFFALO

93 EAST AVENUE NORTH TONAWANDA, NEW YORK U.S.A. 14120-6594 +1 716 693 8813

#### BIRMINGHAM

HEYWOOD WHARF, MUCKLOW HILL HALESOWEN, WEST MIDLANDS UNITED KINGDOM B62 8DJ +44 (0) 8444 145 145

# MANCHESTER

WOLVERTON STREET
MANCHESTER
UNITED KINGDOM
M11 2ET
+44 (0) 8444 145 145

## BANGALORE

#59, FIRST FLOOR, 3RD MAIN MARGOSA ROAD, MALLESWARAM BANGALORE, INDIA 560 003 +91 (0) 80 4906 3555

## SHANGHAI

NO. 1619 HU HANG ROAD, XI DU TOWNSHIP FENG XIAN DISTRICT, SHANGHAI P.R.C. 201401 +86 21 3756 6696

## SÃO PAULO

RUA JOSÉ SEMIÃO RODRIGUES AGOSTINHO, 1370 GALPÃO 6 EMBU DAS ARTES SAO PAULO, BRAZIL +55 11 4781 5500

ARMSTRONG FLUID TECHNOLOGY ESTABLISHED 1934

ARMSTRONGFLUIDTECHNOLOGY.COM

