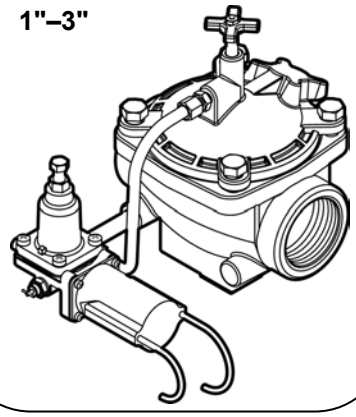
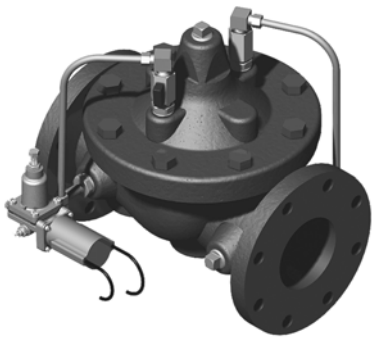
PRESSURE REDUCING SOLENOID

Normally Closed Valve

1"–3"

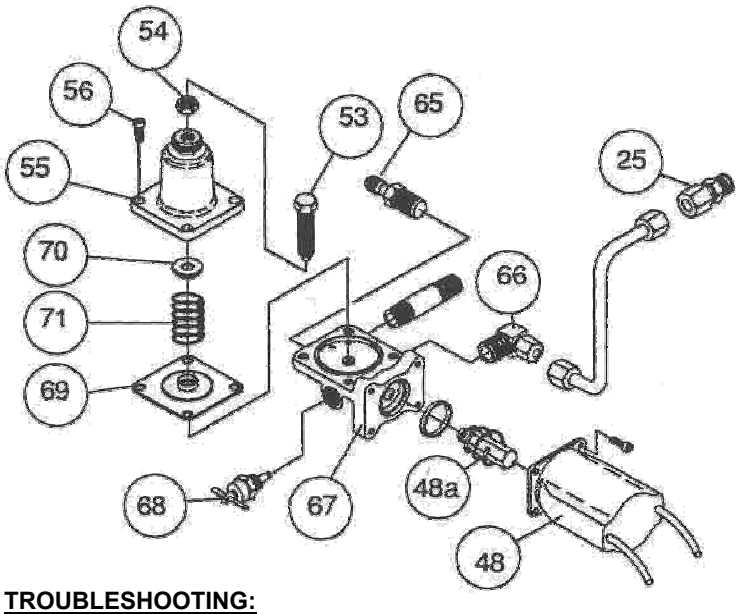


4"–8"



MODEL #2230

For the above valves, use a basic 2170 Valve and the parts pictured...



INSTALLATION AND MAINTENANCE:

1. Valves are shipped with manual flow adjustment stem closed; stem must be opened before installing. Inlet pipe plug installed for straight pattern installation; for angle installation, re-install plug.
2. Flow direction must be as indicated on nameplate.
3. Valve must have minimum inlet pressure of 2 PSI (5 feet). If lower inlet pressure is required, consult factory.
4. Hook up solenoid to proper voltage. Connections must be solid and waterproof.
5. To adjust downstream pressure, adjust screw on regulator, part #53. To increase pressure, turn adjustment screw clockwise. To decrease pressure, turn adjustment screw counter-clockwise.
6. Valve can be installed in any position.
7. Valve can be repaired without removing body from system.

TROUBLESHOOTING:

PROBLEM	PROBABLE CAUSE	CORRECTION
1. Valve fails to open	Installed backwards.	Check flow arrow.
	Lack of operating pressure.	Make sure inlet is 2 PSI minimum.
	Optional manual flow adjustment stem fully closed.	Open stem.
	External obstruction in line, such as closed gate valve, etc.	Check other system elements.
	Internal foreign matter.	Remove cover, clean valve thoroughly.
	Restriction in copper tube, such as ends not de-burred or bend in tube.	Repair problem.
	Internal metering pin left out.	Add metering pin.
	If after long satisfactory service, check diaphragm disk assembly wear, particularly the metering pin and pin bearing wear.	Eliminate other causes, then replace assy.
2. Valve fails to close	Ruptured diaphragm.	Replace diaphragm.
	Internal foreign matter.	Remove cover, clean thoroughly.
	Manual bypass left open.	Close manual bypass.
	Residual electricity on solenoid.	Check controller.
3. Valve closes too slowly.	Lack of pressure differential across valve.	Partially close flow adjustment stem until valve closes at desired rate.

03/04
F-2454B

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GRISWOLD CONTROLS®

PRESSURE REDUCING SOLENOID

Normally Closed Valve

VALVE DESCRIPTION

The Griswold Model 2230/7230 valve consists of (1) a main valve, (2) a pressure-regulating pilot, (3) a solenoid control pilot, (4) a manual on/off pilot, and (5) a Schraeder valve to allow for downstream pressure measurement.

The 2230/7230 valve is a normally closed solenoid valve. With its manual on/off pilot in the closed position and the solenoid de-energized, the main valve remains shut. Energizing the solenoid or opening the manual on/off pilot valve causes this valve to open.

The valve supplies a constant downstream pressure with fluctuating or excessive upstream pressure, when open. Desired downstream pressure may be set anywhere from 5 to 125 psi.

A flow stem on the valve is provided for emergency shutoff and for reducing closing time of the valve in low flow applications.

REQUIRED TOOLS TO SET THE VALVE

1. Adjustable or 1/2" open, box or socket wrench.

2. 0–150 PSI gauge equipped with quick-connect fitting for attachment to tire type (Schraeder) valve.

TO SET THE VALVE

1. Remove the cap from the Schraeder valve.

2. Attach the gauge kit to the Schraeder valve.

3. Turn the flow stem on the main valve all the way "out" (counter-clockwise).

4. Open the 2230/7230 valve by turning its manual on/off pilot handle counter-clockwise. If no flow occurs, there may be closed valves downstream of the 2230/7230 valve. Open the highest flowing valve downstream of the 2230/7230 valve. If no flow occurs again, check for closed valves upstream of the 2230/7230 valve.

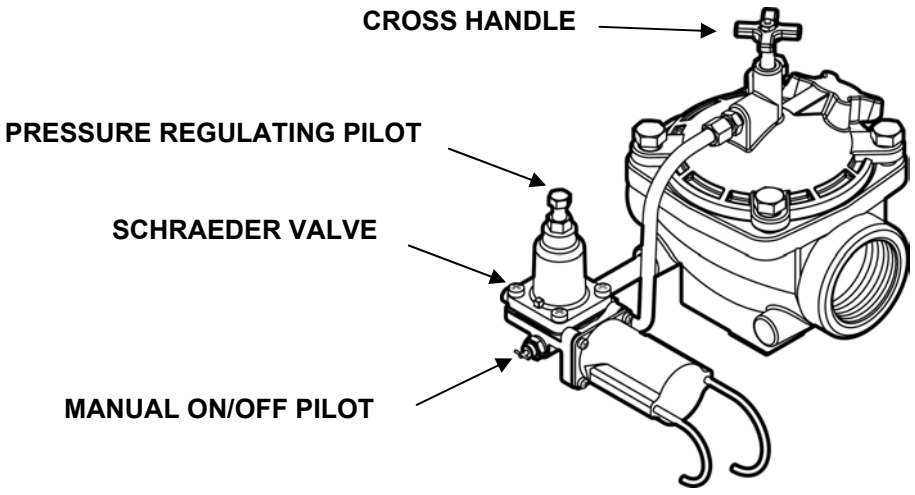
5. With water flowing through the valve, turn the adjusting screw on the regulating pilot until desired downstream pressure is observed on the gauge. Turning the adjusting screw "in" (clockwise) increases pressure, "out" (counter-clockwise) decreases pressure.

NOTE: If turning the adjusting stem clockwise does not increase downstream pressure, upstream pressure may be too low. Check upstream pressure under flowing (not static) conditions.

6. Turn off the 2230/7230 valve by shutting off its manual on/off pilot valve. If the valve takes too long to close, turn the flow stem (cross handle) on the main valve clockwise 3 turns.

7. Open the valve by energizing its solenoid. After one minute, de-energize the solenoid. The valve should begin to close. If it is too slow, turn the cross handle clockwise 2 to 3 more turns.

8. Disconnect the gauge kit; replace the Schraeder cap. The 2230/7230 valve is now set for normal operation.



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