1"—8" GREEN SAVER

MODEL 2285

PRESSURE REDUCING/SURGE ANTICIPATION

Normally Closed Valve





MODEL #2285

For the above valves, use a basic 2150 Valve and the parts pictured...

INSTALLATION AND MAINTENANCE:

- 1. Inlet pipe plug installed for straight pattern installation; for angle installation, re-install plug.
- 2. Flow direction must be as indicated on nameplate.
- Valve must have minimum inlet pressure of 2 PSI (5 feet). If lower inlet pressure is required, consult factory.
- 4. Valve can be installed in any position.
- Valve can be repaired without removing valve body from system.
 To adjust downstream pressure, adjust screw on
- regulator, part #33. To increase pressure, turn adjustment screw clockwise. To decrease pressure, turn adjustment screw counterclockwise.
- To adjust surge sensing regulator, part #62, adjust screw. Set pressure 10 psi higher than regulating pressure in step #6.
- 8. Valve can be closed manually with bleed screw, part #47.
- 9. No normal maintenance is required.



TROUBLESHOOTING:

PROBLEM	PROBABLE CAUSE	CORRECTION
1. Downstream pressure too low	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.
	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. Downstream pressure too high	Ruptured diaphragm.	Replace diaphragm.
	Internal foreign matter.	Remove cover, clean thoroughly.
	Cover spring left out.	Add cover spring.
	Leak in control line.	Check for leaks and repair.

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03/04 F-2373B

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PRESSURE REDUCING/SURGE ANTICIPATION Normally Closed Valve

VALVE DESCRIPTION

The Griswold Model 2285 valve consists of (1) a main valve, (2) a pressure-regulating pilot, (3) a surge anticipation pilot, (4) a manual on/off pilot, and (5) a Schraeder valve to allow for downstream pressure measurement.

The 2285 valve is a normally closed valve. With its manual on/off pilot in the closed position the main valve remains shut.

Opening the manual on/off pilot causes the 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. When downstream pressure attempts to raise above a pre-set limit, caused by abrupt closure of downstream valves, its surge anticipation pilot will relieve the excess pressure to atmosphere.

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. Open the 2285 valve by turning its manual on/off pilot handle counter-clockwise. If no flow occurs, there may be closed valves downstream of the 2285 valve. Open the highest flowing valve downstream of the 2285 valve. If no flow occurs again, check for closed valves upstream of the 2285 valve.

4. 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.

5. Stop flow by closing the valve downstream of the 2285 valve.

6. Slowly turn the adjusting screw on the surge anticipation pilot counter-clockwise until water drips from the opening underneath the surge anticipation valve. Now turn the adjusting screw clockwise 4 turns.

NOTE: Ideally, the surge pilot should be set 15-20 psi higher than the regulated pressure. Setting the surge control pressure too close to the regulated pressure may cause excessive discharge to atmosphere. To verify surge pressure setting, open and close a valve downstream. The gauge reading under no flow (static) condition is the surge pilot's setting.

7. Disconnect the gauge kit; replace the Schraeder cap. The 2285 valve is now set for normal operation.



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