



LOWFLOW
a division of Jordan Valve

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I & M 5800HP/5850HP Series

Installation & Maintenance Instructions for Mark 5800HP & Mark 5850HP Regulating Valves

Warning: Low Flow Regulators must only be used, installed and repaired in accordance with these Installation & Maintenance Instructions. Observe all applicable public and company codes and regulations. In the event of leakage or other malfunction, call a qualified service person; continued operation may cause system failure or a general hazard. Before servicing any valve, disconnect, shut off, or bypass all pressurized fluid. Before disassembling a valve, be sure to release all spring tension.

Please read these instructions carefully!

Your LowFlow/Jordan product will provide you with long, trouble-free service if it is correctly installed and maintained. Spending a few minutes now reading these instructions can save hours of trouble and downtime later. When making repairs, use only genuine LowFlow Valve parts, available for immediate shipment from the factory.

Assembly Instructions



1. Inspect the Teflon soft seat insert. There can be no burrs, cuts, or scratches in the ID sealing area of the insert.
2. Install the soft seat insert into the orifice.
3. Thread the seat cap on top of the insert and tighten securely.



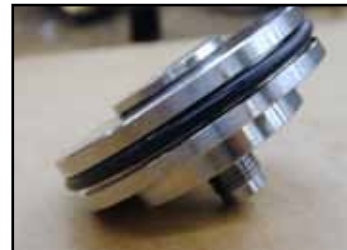
4. Apply liquid Teflon (Loctite 567) to the exposed threads of the seat assembly.
5. Assemble the seat assembly into the body and torque to 200 in-lbs.



6. Lube the piston and cylinder o-rings with Dow Corning grease.
7. Assemble the o-rings to the mating parts.



8. Install the Teflon piston bushing onto the piston.
9. Slide the piston into the cylinder as shown, being careful not to damage the o-ring.



10. Install the plug, plug spring, follower, and stem seal into the piston in order as shown below.





11. Thread the lower spring guide onto the piston and tighten securely. You will have to compress the stem seal when tightening.
12. Place the cylinder assembly into the body with the plug pointed towards the seat. You must be very careful not to damage the cylinder o-ring on the threads of the body.
13. Using pressure from your fingers, press the cylinder assembly all the way into the counterbore. You may have to work from side to side to get this properly seated.



14. Install the spring and upper spring guide onto the lower spring guide.



15. Use anti-seize and generously coat the spring housing threads.
16. Assemble the spring housing into the body and tighten with a pipe wrench securely.



17. Lubricate all of the adjusting screw threads with anti-seize.
18. Thread the jamnut onto the adjusting screw.
19. Slide the nametag onto the threads.
20. Thread the adjusting screw assembly into the spring housing until you can feel the range spring start to compress.



21. If not already done, stamp "inlet" and "outlet" on the appropriate ports. This should be done above the ports on the milled flats. The inlet side has a vertical hole drilled into it, and the outlet has a horizontal hole at the bottom of the port.

Final Testing

1. Verify that all the information on the nametag is correct.
2. Make sure that both the Inlet and Outlet ports are stamped properly. (see Assembly Instructions).
3. Place the valve in the test fixture.
4. Remove all spring compression from the range spring.
5. Apply 100 psi to the inlet and close the downstream isolation valve. (Make sure you hear flow coming through the valve).
6. Apply a soap solution to the entire valve and check for leaks. Pay special attention to the bleed hole in the spring housing. If leakage occurs here, either the stem seal is bad, or one of the o-rings has been damaged.
7. Open the downstream isolation valve, and apply spring tension until the valve shuts off.
8. Close the downstream valve and check for Class VI leakage.
9. Blow valve dry and install protectors on the end connections.