

KBP Series Regulators Maintenance Instructions



Kit Contents



Seat



Seat retainer



Retainer seal






Diaphragm



Lubricant (with MSDS)

0 to 250 psig (0 to 17.2 bar) and
0 to 500 psig (0 to 34.4 bar) kits
contain 2 diaphragms.
All other kits contain 1.

Tools Required

Tool	Size	Component
 Socket	5/8 in.	Seat Retainer
 Crow's foot	2 in.	Cap ring
 Torque wrench	capable of 13.0 ft-lb (17.5 N·m, 1.8 m·kg)	Seat retainer
	capable of 129 ft-lb (175 N·m, 17.9 m·kg)	Cap ring

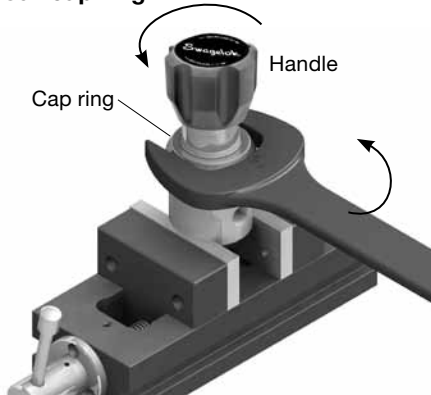
⚠ WARNING

Before removing a regulator from the system for service, you must

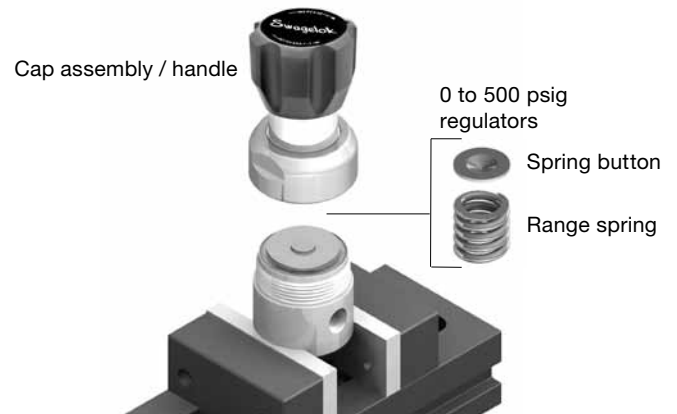
- depressurize system
- purge the system to remove any residual system media left in the regulator.

Disassembly

1. Turn **handle** counterclockwise until it stops.
2. Loosen **cap ring**.

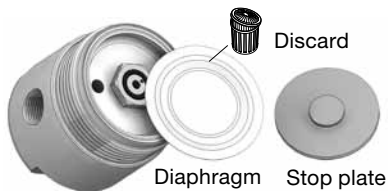


3. Remove **cap assembly** and **handle** as one piece and set aside for later use.

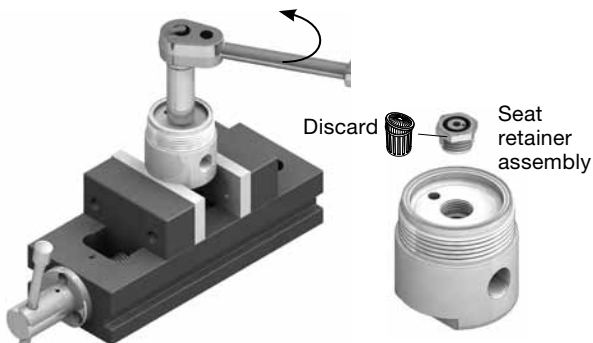


Note: In 0 to 500 psig regulators, the **range spring** and **spring button** may fall from the cap assembly when lifted. Set aside for later use.

4. Remove **stop plate** and **diaphragm(s)**.



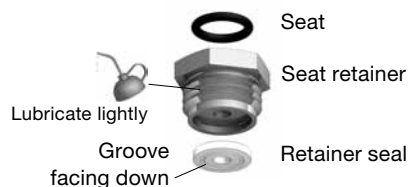
5. Use socket wrench to remove **seat retainer assembly**.



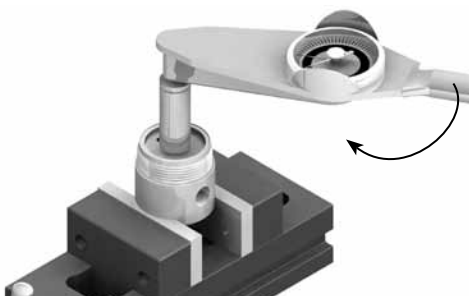
Reassembly

Note: Ensure all parts are free of debris or damage.

6. Fit the **seat** and **retainer seal** into the **seat retainer** until flush. Lightly lubricate the threads only. Avoid contaminating the retainer seal.



7. Thread seat retainer assembly into body and tighten to 13.0 ft·lb (17.5 N·m, 1.8 m·kg).



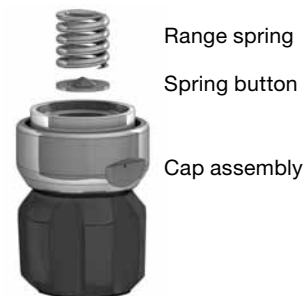
8. Install **diaphragm(s)** into **body** with the large convolution down. For assemblies with two diaphragms, both should have the same orientation.



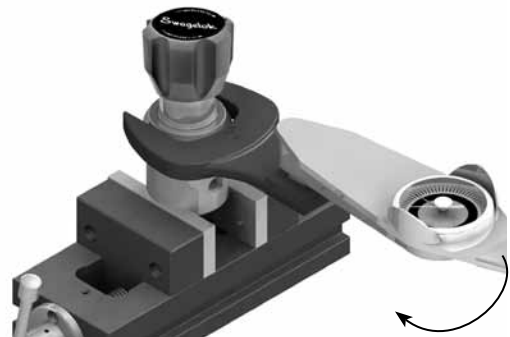
9. Install **stop plate** onto **diaphragm**.



10. For 0 to 500 psig regulators, reinstall the **spring button** and **range spring** into the **cap assembly**.



11. Place cap assembly on body and thread cap ring onto body. Tighten cap ring to 129 ft·lb (175 N·m, 17.9 m·kg).



12. Test and set the regulator for proper operation.

For additional information on regulator operation, see www.swagelok.com.