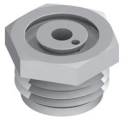
KBP Series Regulators
Maintenance Instructions

Kit Contents

Seat


Seat retainer

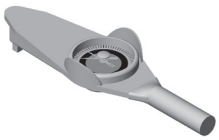
Retainer seal

Diaphragm

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.

Lubricant (with MSDS)

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 166 ft·lb (225 N·m, 23 m·kg)	Cap ring

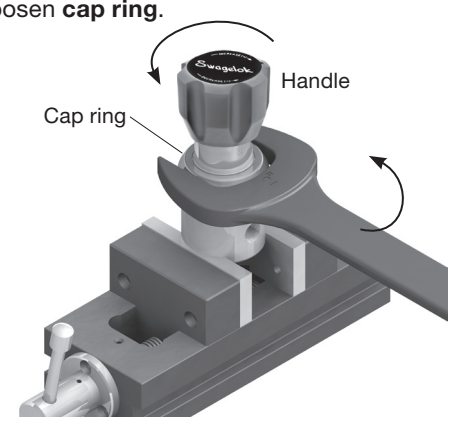
⚠ WARNING

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

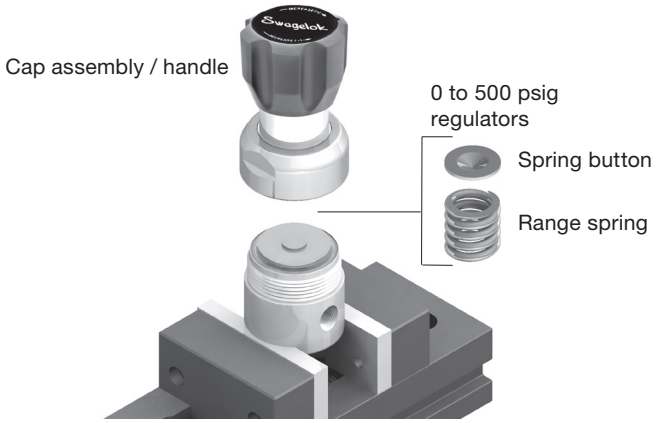
- **depressurize system**
- **purge the system to remove any residual system media left in the regulator.**

Disassembly

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

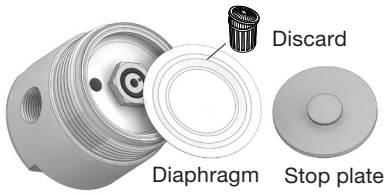


3. Remove **cap assembly** and **handle** as one piece and set aside for later use.

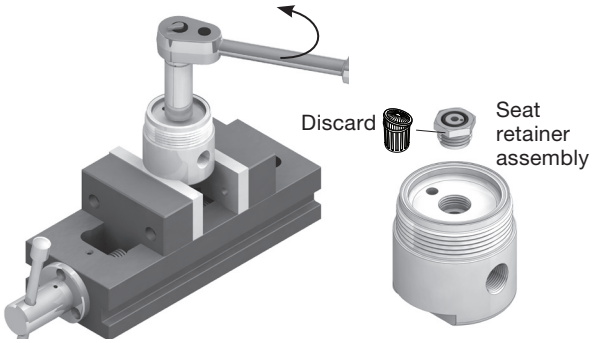


Note: In 0 to 500 psig regulators, the **range spring** and **spring button** may fall from the cap assembly when lifted. Set aside for later use.

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



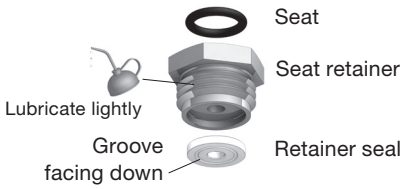
5. Use socket wrench to remove **seat retainer assembly**.



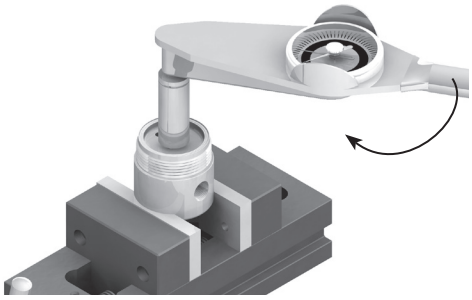
Reassembly

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

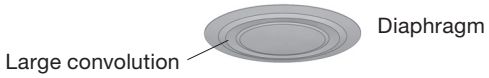
6. Fit the **seat** and **retainer seal** into the **seat retainer** until flush. Lightly lubricate the threads only. Avoid contaminating the retainer seal.



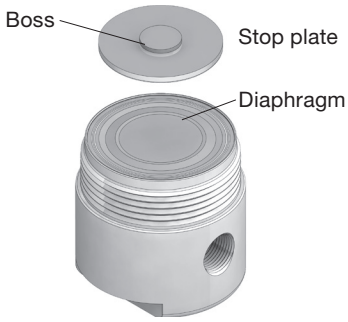
7. Thread seat retainer assembly into body and tighten to 13.0 ft·lb (17.5 N·m, 1.8 m·kg).



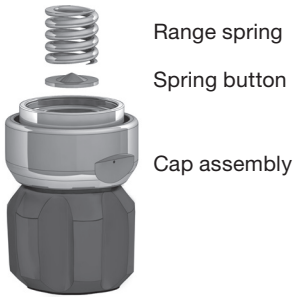
8. Install **diaphragm(s)** into **body** with the large convolution down. For assemblies with two diaphragms, both should have the same orientation.



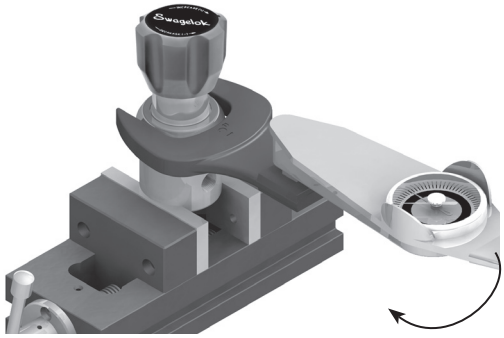
9. Install **stop plate** onto **diaphragm**.



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 166 ft·lb (225 N·m, 23 m·kg).



12. Test and set the regulator for proper operation.

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

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