# **KFB Series Regulators Maintenance Instructions**

# Swagelok

#### **Kit Contents**















#### **Tools Required**

Tool	Size	Component
Vise	-	Body
Socket	18 mm	Seat retainer
	11/16 in. or 17 mm	Antitamper nut
Torque wrench		
	Capable of 180 ft·lb (240 N·m)	Seat retainer, Cap ring
Tool Kit		
Large cap ring spanner		
	-	Cap ring

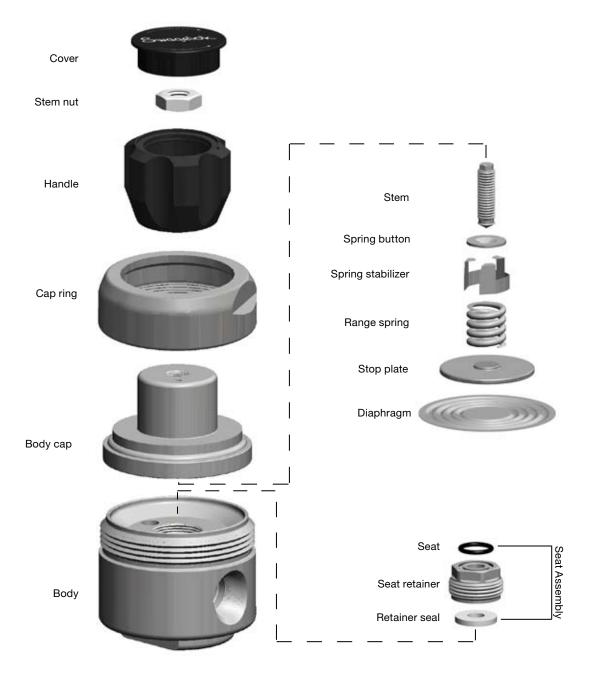
NOTE: See *Pressure Regulators*, MS-02-230, for tool kit ordering information.

### **Symbols**





## **Exploded View**



#### **AWARNING**

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.

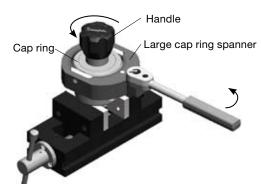
#### **Disassembly**

- 1. Place the regulator in a vise.
- 2. Turn the handle counterclockwise until it stops.

Note: Handle and stem nut position are factory set. If they are removed, they will have to be reset to that position.

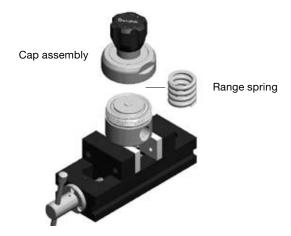
Note: If using an antitamper nut, remove it from the body. Then turn the stem counter clockwise until it stops.

Loosen the cap ring.



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

Note: The **range spring** may fall from the cap assembly when lifted. Set aside for later use.



5. Remove the diaphragm and the stop plate.

#### NOTICE

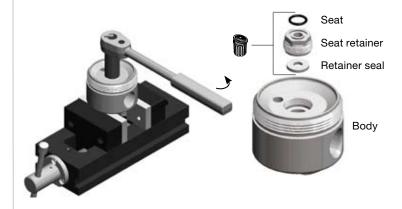
Do not damage the diaphragm sealing face on the body. Leakage could result.



6. Loosen and remove the **seat assembly**. Discard the seat, seat retainer, and the retainer seal.

#### NOTICE

Be careful not to scratch the inside of the body. Leakage could result.

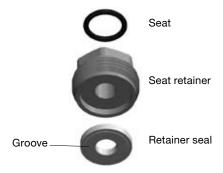


#### Reassembly

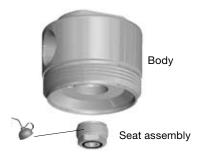
#### **NOTICE**

Ensure all parts and tools are free of debris or damage.

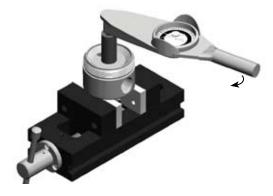
7. Insert the **retainer seal** with the groove facing away from the **seat retainer** and the **seat** into the seat retainer.



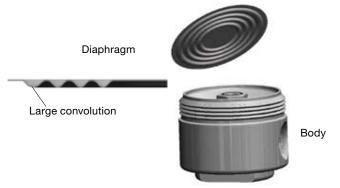
8. Fully thread the **seat assembly** into the **body**.



9. Tighten the **seat assembly** to 13 ft·lb (17.5 N·m).



10. Install the **diaphragm** with the large convolution facing towards the **body**.



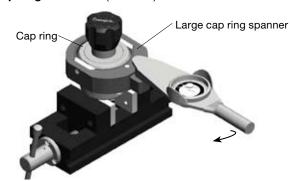
11. Install the **stop plate** onto **diaphragm** with the **boss** on the stop plate facing away from the diaphragm.



Reinsert the range spring into the cap assembly if necessary.



13. Thread the cap assembly onto the body and tighten the cap ring to 180 ft-lb (240 N·m).



- 14. Test the regulator for proper operation.
- 15. If using an antitamper nut, thread the antitamper nut onto the stem after the set outlet pressure is reached. Tighten the nut to 10 to 12.5 ft·lb (13.5 to 17 N·m).

For additional information, see www.swagelok.com.