

3 Component Removal and Installation

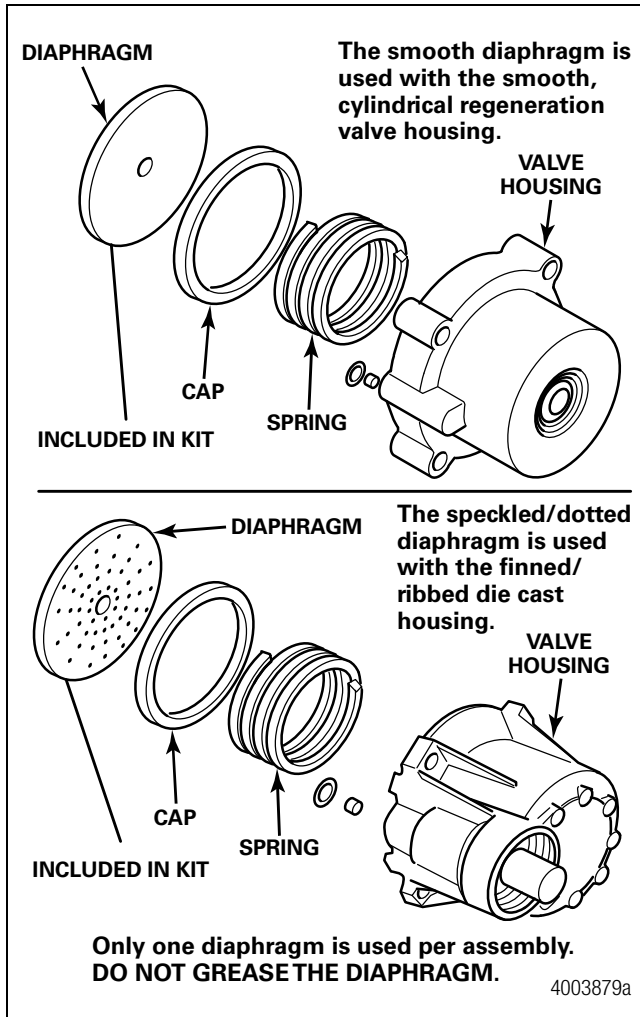


Figure 3.11

- Remove the four mounting bolts and the valve housing assembly. When you remove the housing, the spring and cap will fall out.
- Remove the rubber diaphragm.
- Clean and inspect the diaphragm lip groove. If the groove is damaged so that a tight seal cannot be maintained, replace the air dryer.
- Install the new diaphragm with its lip in the groove. **DO NOT GREASE THE DIAPHRAGM.**
- Install the new spring and cap with the cap lip facing out. Install the valve housing assembly with the new lubricated O-ring and filter over the orifice. Install the new mounting bolts and tighten to 53 in-lb (6 N•m). Figure 3.12.

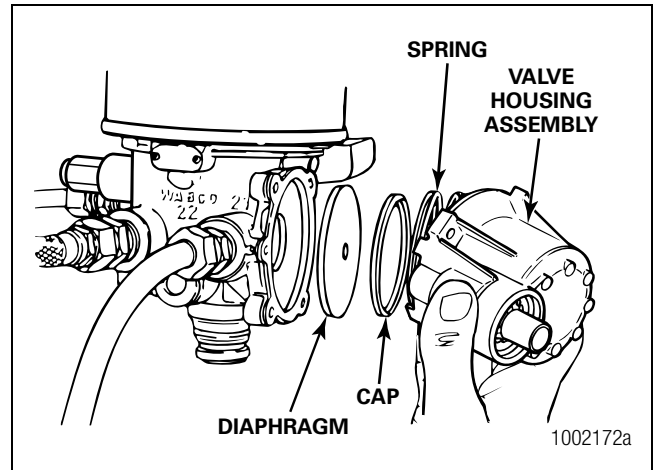


Figure 3.12

Purge Valve Assembly

- Review Figure 3.13 to ensure you have all of the parts required to replace the purge valve.

Use the grease included with the replacement kit to lubricate O-rings and seals. **Do not grease the rubber seat.**

If shims are included in the replacement kit, they must be installed above and below the spring. If they are not included, they are not needed.

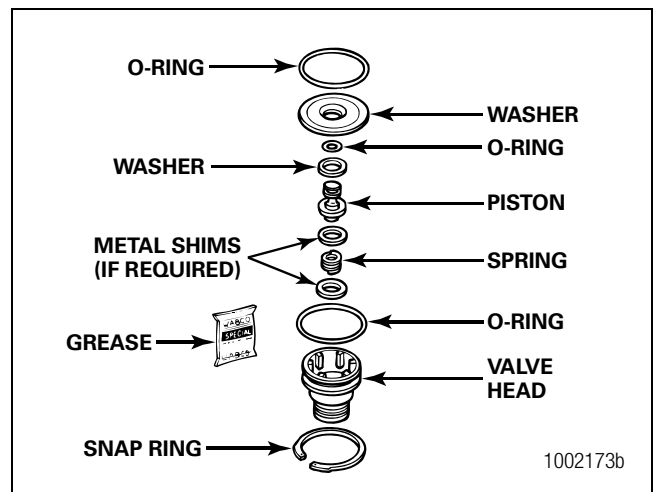


Figure 3.13

- Remove the snap ring, valve head and spring.
- Remove the piston assembly from the base. Figure 3.14.

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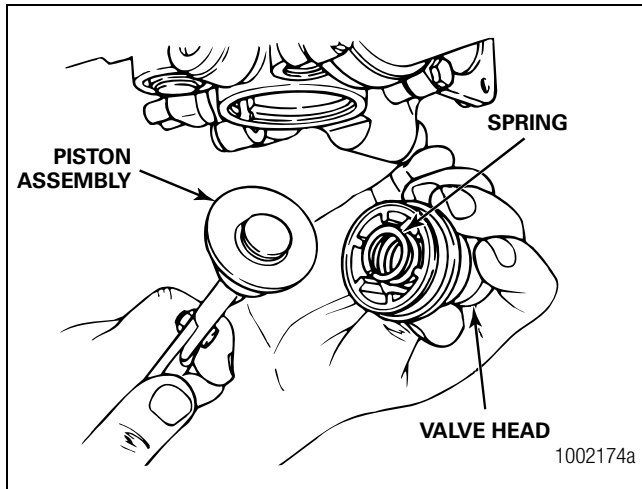


Figure 3.14

4. Remove washer and O-rings from the base.
5. Clean and inspect the valve bore. If the bore is damaged so that a tight seal cannot be maintained, replace the air dryer.
6. Apply a thin layer of grease to the valve bore and to all O-rings (use the grease included with replacement kit).
7. Install new washer and O-ring in dryer base and on valve head.

NOTE: Lip on washer must face piston seat. Figure 3.15.

8. Assemble the piston assembly,
 - Install O-ring in groove on piston head.
 - Install piston seat in groove on piston base.
 - Install washer on piston.

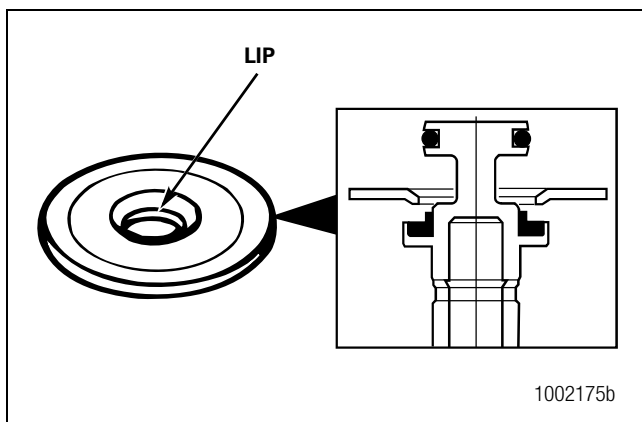


Figure 3.15

9. Install washer on piston assembly. Figure 3.16.

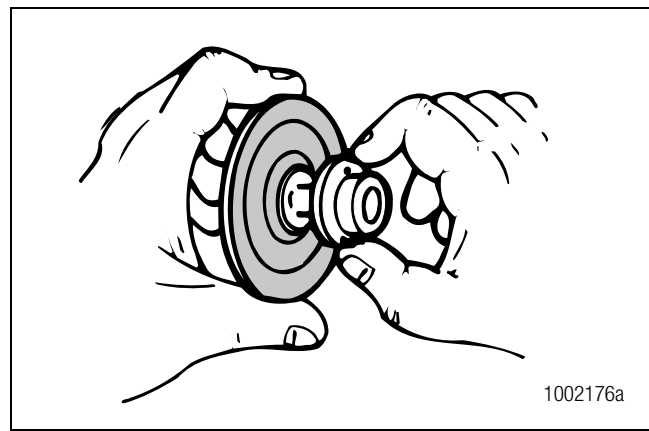


Figure 3.16

10. Install spring in valve head; fit valve head assembly into bore.

NOTE: If shims are included in the replacement kit, they must be installed above and below the spring. If they are not included, they are not needed.

11. Install snap ring to hold the valve head in place.

NOTE: Make sure the snap ring is fully seated or assembly will leak from the purge valve.

Pressure-Controlled Check Valve (PCCV)

⚠ WARNING

Remove all air pressure from the tank before you remove the pressure-controlled check valve. Pressurized air can cause serious personal injury.

NOTE: New style valves have the hex nipple pipe fitting installed.

1. Before replacing, look at the arrow on this valve. You must install the valve so that the arrow faces the tank on which it is installed. Figure 3.17.