

IMPORTANT – Swagelok® V Series, VL Series, and VB Series Manifolds with Grafoil® Packing

This manifold is adjusted for factory testing at 1000 psig (69 bar) nitrogen unless optional test parameters are specified. Packing adjustments may be required for leak-tight performance. A packing adjustment is recommended after initial installation.

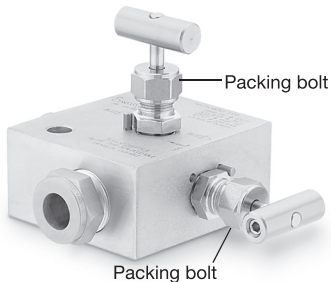
⚠ Warning Failure to inspect and maintain valve packing may result in leakage.

Tool Requirements

- 13/16 in. open-end wrench
- 13/16 in. crowfoot wrench
- 5/8 in. open-end wrench
- 5/8 in. crowfoot wrench
- Torque wrench, capable of applying up to 150 in.-lb (16.9 N·m) of torque

Small-Bonnet Packing Adjustment

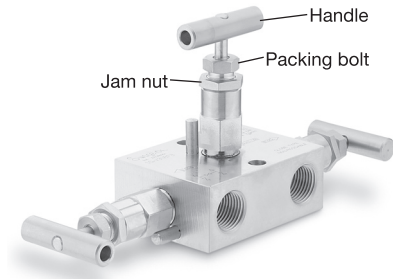
1. Using a torque wrench with a 5/8 in. crowfoot wrench, tighten the **packing bolt** using 50 in.·lb (5.6 N·m) of torque.
2. Repeat for each small bonnet valve on the manifold.
3. Test the manifold for proper operation.



Large-Bonnet Packing Adjustment

1. Turn the **handle** counterclockwise to actuate the valve to the fully open position. Then turn the **handle** clockwise two 360° turns.
2. Hold the packing bolt stationary with a 5/8 in. open-end wrench, then using a 13/16 in. open-end wrench, loosen the **jam nut**. Turn the **jam nut** counterclockwise until it stops against the **packing bolt**.
3. Using a torque wrench with a 5/8 in. crowfoot wrench, tighten the **packing bolt** using 135 in.·lb (15.3 N·m) of torque.
4. Thread the **jam nut** against the bonnet. Using a torque wrench and a 13/16 in. crowfoot wrench, tighten the **jam nut** using 135 in.·lb (15.3 N·m) of torque.

5. Repeat steps 1 through 4 for each large bonnet valve on the manifold.
6. Test the manifold for proper operation.



Swagelok—TM Swagelok Company
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