

MS-INS-SB Revision E November, 1998

## **UNION BONNET**

## <u>RE-PACKING INSTRUCTIONS FOR THE 31 SERIES</u> <u>UNION BONNET VALVES</u>

KIT CONTENTS: Packing(s) Material Safety Data Sheet(s)

) Lubricant(s) Instruction Sheet

WARNING: Before servicing any installed valve, you must

• depressurize system

• cycle valve

WARNING: Residual material may be left in the valve and system.

**NOTE:** It is important to refer to the exploded view drawing while following the maintenance instructions.

1. Loosen the packing nut and union nut. Unscrew the union nut and bonnet assembly from the valve body. Set aside.

- 2. With an Allen wrench, loosen the set screw in the handle and remove. Set aside.
- 3. Remove the packing nut and set aside.
- 4. Unscrew the stem from the bottom of the bonnet and set aside.

5. Remove packing(s) and glands from the bonnet assembly. Discard the old packing(s) and set aside the glands for later use.

## NOTE: For Grafoil® packed valves, carefully pry packings out of bonnet without scratching the bonnet.

6. Clean all parts thoroughly in solvent.

7. Lubricate the stem threads and stem shank with MS-LT-NNS-1 provided in the kit. Lubricate all metal stem tips with same lubricant.

## NOTE: For Grafoil packed valves, also lubricate the stem shank and individual Grafoil packings.

8. Screw the stem into the bottom of the bonnet.

NOTE: Be sure the stem is retracted into the bonnet.

9. Lubricate the body threads and bonnet seal area. Assemble the union bonnet assembly onto the body.

10. Slide the lower gland, new packing(s), and upper gland onto the stem. For Grafoil packed valves; Push the Grafoil packing down into the bonnet, one at a time, using the upper gland. Repeat this procedure until you have used all of the packings provided in the kit. Be sure packing is completely pressed into the bonnet and is not visible over the top of the bonnet.

11. Screw the packing nut onto the bonnet.

12. Place the handle on the stem and align the stem indent with the handle's set screw hole and tighten the set screw into the handle.

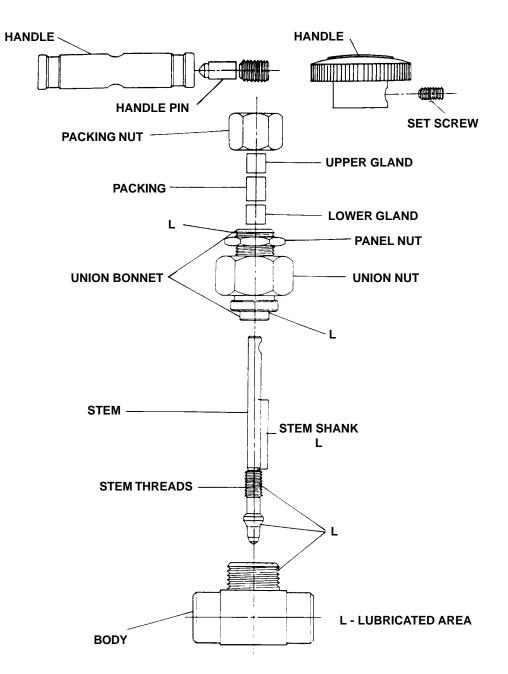
13. Torque the union nut as follows:

VALVE	TORQUE
SERIES	(inlbs.)
31	360

NOTE: Before tightening the packing nut, turn the stem into the bonnet 1 or 2 turns.

14. Tighten the packing nut 1/2 to 3/4 turn past finger-tight to seal.

**NOTE: This is dependent on system pressure and viscosity of the system fluid.** ©1988, 1989, 1990, 1991, 1998 Swagelok Company



™Grafoil - UCAR Carbon Company