

**CONVERSION INSTRUCTIONS  
FOR INTEGRAL BONNET  
NEEDLE VALVES  
(0, 1, 18, 20, & 26 Series)**

MS-INS-IB-CONV  
Revision C  
September, 1998

**Kit Contents:**

- Lubricant
- Instruction Sheet
- Springs
- Material Safety Data Sheet
- Packing Nut
- Upper Packing
- Lower Packing
- Packing Gland
- Lower Gland
- Spacer Gland

**WARNING:** Before servicing any installed valve, you must:

- depressurize system
- cycle valve

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

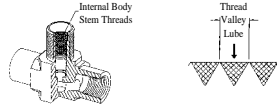
**DISASSEMBLY**

1. Unscrew the packing nut from the valve body.
2. With the handle, retract the stem from the body.
3. Loosen the set screw and remove the handle. Set aside for later use.
4. Remove the packing nut, upper gland, packing(s), and lower gland from the stem.
5. Discard the old packing nut, packing(s), and glands. New components are provided in the kit.
6. Clean remaining parts thoroughly.

**REASSEMBLY**

7. Lubricate the internal body stem threads, filling the "valley" of the threads with the lubricant provided. Lubricate all metal stem tips. Soft stem tips do not require lubrication.

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8. For valves with PEEK packing, also lubricate the packings.
9. Screw the stem back into the valve body.
10. Slide the lower gland and new packings on the stem, the lower gland should fit snugly on the stem. Refer to drawing for proper packing orientation.
11. Slide the packing gland onto the stem and push down until the packing is snug in the valve body.
12. Slide the springs over the stem. Refer to drawing for proper orientation per valve series.
13. For the "0", "1" (5/8" packing nut hex size), and "20" series: slide the gland onto the stem. The gland should have a very loose fit around the stem. "1" (7/8" packing nut hex size), "18" and "26" Series valves do not utilize a gland above the springs.
14. Lubricate the top two (2) or three (3) exterior body threads with the lubricant provided.
15. Place the packing nut over the stem and screw the packing nut onto the valve body until finger tight.
16. Place the handle on the stem. Align the set screw with the groove on the side of the stem. Tighten the set screw.



17. Fully close the valve and retract the stem two (2) or three (3) turns before torquing the packing nut.
18. Refer to the appropriate chart and torque the packing nut to the torque value listed.

**O, 1, 18 Series Torque Values**

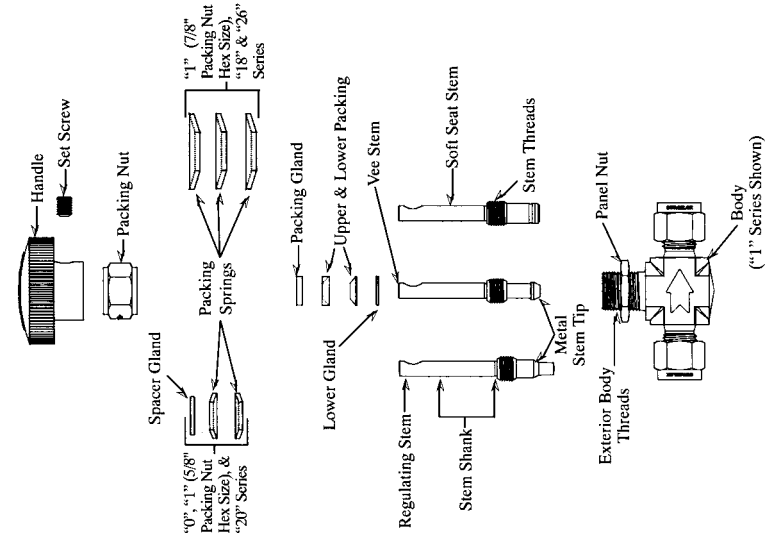
Valve Material	Packing Nut Hex Size		Torque Value (in.-lbs.)
	in.	mm.	
Stainless Steel	9/16	14.3	25
	5/8	15.9	60
	7/8	22.2	125
Brass & Carbon Steel	1-1/8	28.6	300
	9/16	14.3	20
	5/8	15.9	30
Alloy 400	7/8	22.2	60
	1-1/8	28.6	175
	9/16	14.3	25
	5/8	15.9	30
	7/8	22.2	100

**20 & 26 Series Torque Values**

Valve Series	Torque Value (in.-lbs.)
20	30
26	125

**Gland Identification:**

- Spacer Gland has the largest outer diameter.
- Packing gland is the thickest gland.
- Lower gland has the tightest fit on stem.



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