



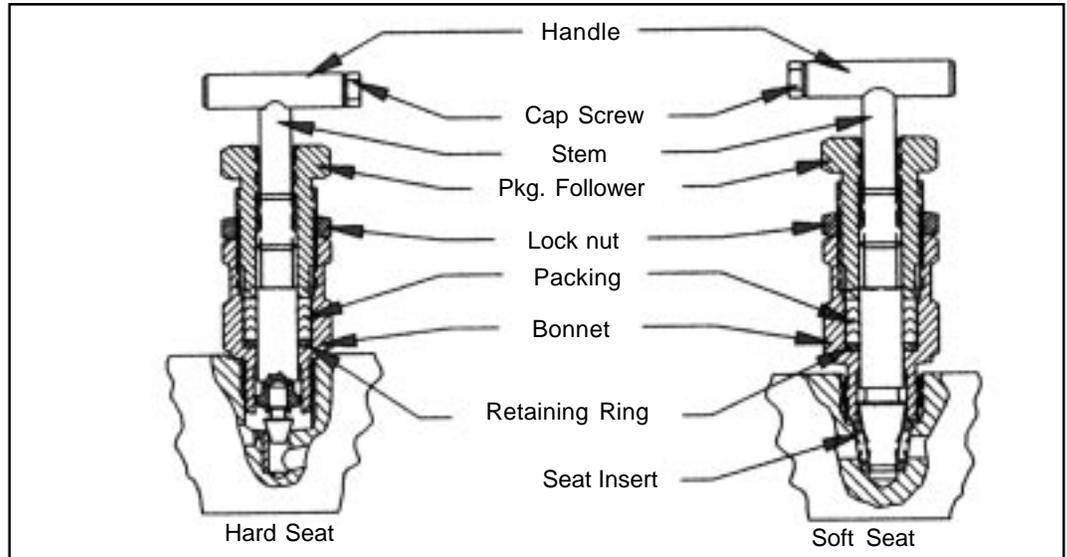
3170 Wasson Road • Cincinnati, OH
45209 USA
Phone 513-533-5600
Fax 513-871-0105
E-Mail: hex@richardsind.com
www.hexvalve.com

Maintenance Manual

Installation & Maintenance Instructions for Manifold Valves

Warning: Hex Valve Manifold Valves must only be used, installed, and repaired in accordance with these Installation & Maintenance Instructions. Observe all applicable public and company codes and regulations. In the event of leakage or other malfunction, call a qualified service person; continued operation may cause system failure or a general hazard.

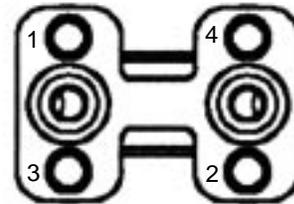
HM10	HM50
HM13	HM53
HM14	HM54
HM16	HM55
HM18	HM56
HM20	HM57
HM23	HM58
HM40	HM59
HM45	HM77
HM46	HM88



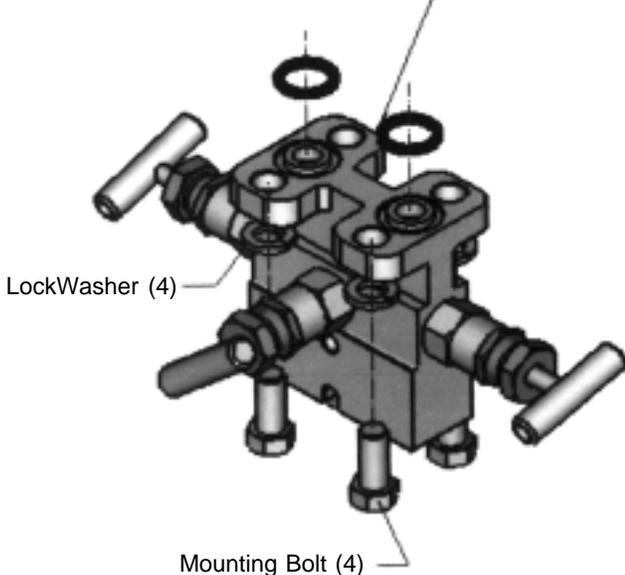
Manifold Installation

1. If manifold is flanged, fit DIN manifold gaskets (2) over bushings and into groove.
2. Position manifold flange over transmitter, place lockwasher on bolt (4) and thread bolts finger tight into transmitter

3. Apply torque 50-55 foot pounds in a diagonal sequence as shown, making sure gaskets are properly seated in grooves.



DIN Mounting Gasket (2)



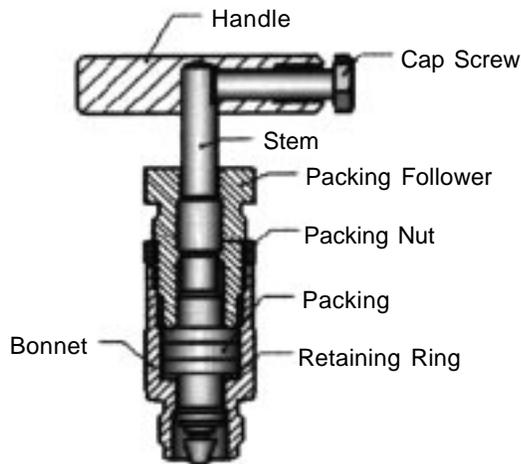
4. Use Teflon tape, thread lubricant or other user approved compound for NPT connections.
5. Blow down instrument impulse lines prior to installation of instrument manifolds.

Packing Disassembly

1. Loosen the handle **cap screw** and remove the **handle**.
2. Remove the **packing nut** and **packing follower** from the **bonnet**.
3. Remove the **packing** from the **bonnet**.

Packing Reassembly

1. Inspect **stem** and packing chamber bore. Replace **stem** if damaged or shows evidence of corrosion in the area of the **packing**. (*The **bonnet** must be removed from the **body** to replace the **stem**. Lubricate the bonnet threads prior to reinstalling **bonnet** into **body** and torque it to 55 ft-lbs.*)
2. Lubricate the **stem** in the packing area with an Anti-Seize compound such as "THRED-GARD".
3. With the **retaining ring** in the packing chamber, install the four pieces of Teflon Chevron **packing**, or three pieces of Braided or Graphite **packing**, one piece at a time.
4. Install the **packing follower** and **packing nut** and tighten with just enough torque to seal the **packing**.
5. Put the **handle** back on **stem** and retighten the **cap screw**.



3. Install the **bonnet**, using 55 ft-lbs torque. Note: Bonnet **retaining pin** should be installed to prevent inadvertent **bonnet** removal.

Caution: Stem should not hit rod during assembly.

Packing Adjustment

1. Loosen the **packing nut** and rotate the **stem** back and forth a few times before making any adjustments to the packing compression.
2. After tightening the **packing nut**, again rotate the **stem** back and forth.

Repairing Soft Valve Seats

1. Remove the **bonnet** from the **body**. Using a 3/16" diameter rod, remove the old soft **seat** by placing the end of the rod through the center flow hole of the seat and with the rod pivoting on top of the body, popping the **seat** out through the bonnet port.
2. Install new soft **seat** in **body**, lining up the holes in the center of the seat and the body waterway. Put the rod through the seat hole and body waterway to keep the holes aligned when the **bonnet** is installed.