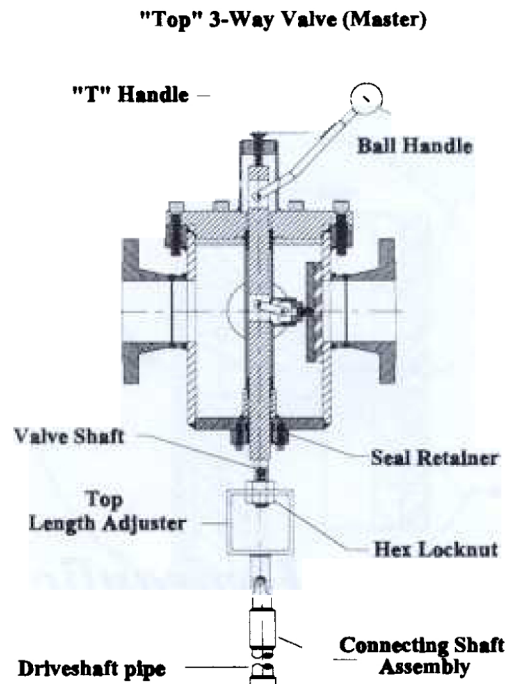


JR-33 TWINPAK Valve Maintenance/Repair Instructions

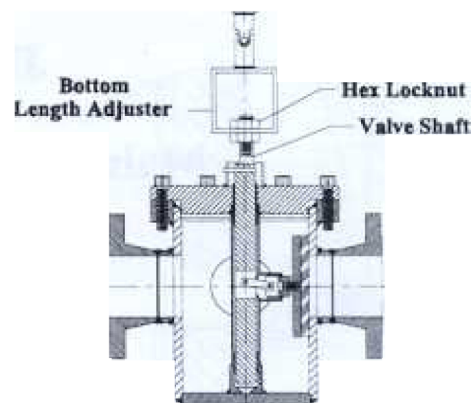
Section 1) Internal Stack Removal "Top" (Master) Valve

- 1.1 Fully Loosen "T" Handle
 - 1.1.1 Turn Counterclockwise
- 1.2 Push Operating (Ball) Handle to the Down Position
 - 1.2.1 **Place Operating Handle in middle position**
- 1.3 Remove Socket Head Cap Screws
- 1.4 Remove Hex Locknut from interior of top Length Adjuster
- 1.5 Pull Internal Stack Assembly clear of Length Adjuster
 - 1.5.1 Remove remaining Hex Locknut from shaft
- 1.6 Pull Internal Stack Assembly Out of Valve
 - 1.6.1 Do not allow Sealing Shoe to rotate about their mounting screws as Internal Stack is removed.



Section 2) Internal Stack Removal "Bottom" (Slave) Valve

- 2.1 Remove Hex Locknut from interior of bottom Length Adjuster
 - 2.1.1 Remove connecting shaft assembly
- 2.2 Manually Pull Shaft to the Up Position
- 2.3 Remove Socket Head Cap Screws
- 2.4 Pull Internal Stack Assembly Out of Valve
 - 2.4.1 Do not allow Sealing Shoe to rotate about their mounting screws as Internal Stack is removed.

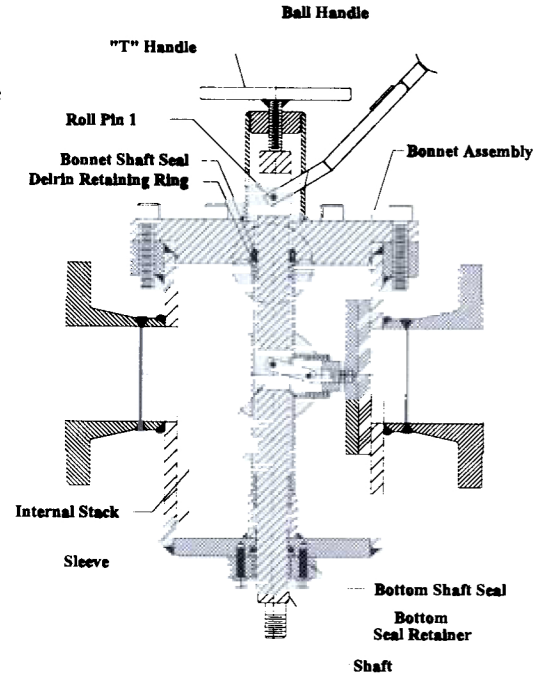


"Bottom" 3-Way Valve (Slave)



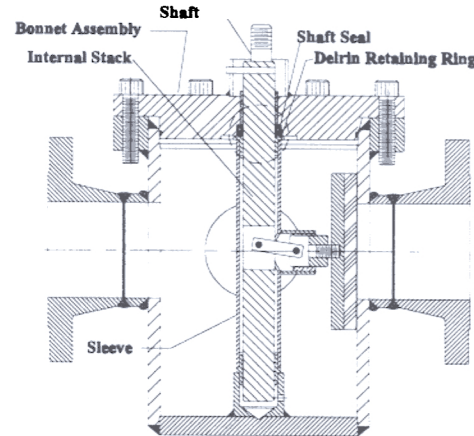
Section 3) Internal Stack Disassembly "Top" (Master) Valve

3. Ensure "T" Handle is fully loosened (counterclockwise)
- 3.2 Push Ball Handle to the full down position
- 3.3 Remove Roll Pin 1 with pin punch
 - 3.3.1 For 1½", 2" & 3" use 3/16" punch
 - 3.3.2 For 4", 6" & 8" use 1/4" punch
- 3.4 Remove Ball Handle
- 3.5 Remove Bottom Seal Retainer
- 3.6 Slide Bonnet with "T" Handle off shaft
 - 3.6.1 Allows access to Bonnet shaft seal
 - 3.6.2 There is normally no need to remove sleeve assembly



Section 4) Internal Stack Disassembly "Bottom" (Slave) Valve

4. Slide Bonnet off shaft
 - 4.1.1 Allows access to Bonnet shaft seal
 - 4.1.2 There is normally no need to remove sleeve assembly



Section 5) Seal Replacement

5.1 Replace "O" ring seals and rings

5.1.1 LUBRICATE ALL "O" RINGS

5.1.2 Bonnet Shaft seal "O" rings "lip" face down

2.6.2.1 Install Delrin Seal Retainers

5.1.3 Bottom Shaft Seal on Master Valve "O" ring "lip" faces up

2.6.3.1 Re-Install Seal Retainer

5.2 Remove and replace shoe if necessary

5.2.1 Turn counterclockwise to separate shoe from slide assembly

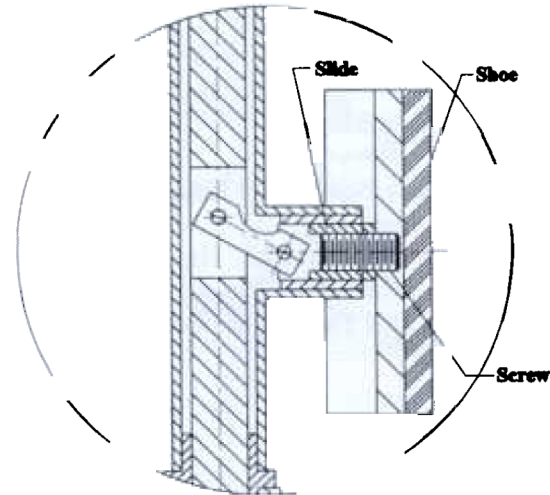
5.2.2 Refer to Section 6 for shoe adjustment

5.3 Re-Assemble stack on stable surface to ensure proper roll Pin replacement.

5.3.1 Ensure that there are no gaps between the Sleeve Assemblies and Bonnets.

5.3.2 Replace Bonnet Assembly and insert Roll Pin 1 through shaft and Ball Handle

5.4 Re-Install Internal Stack Assemblies into valve bodies

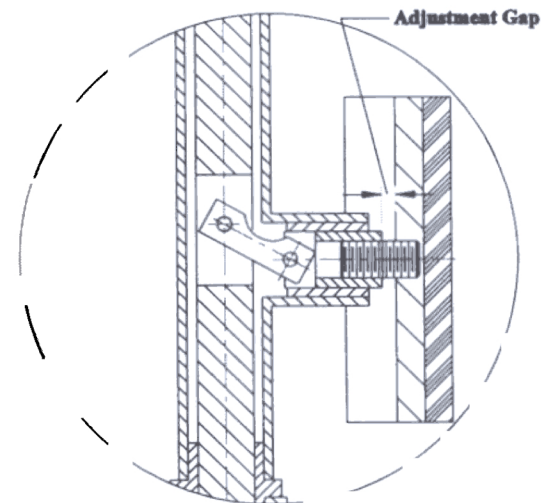


Section 6) Shoe Adjustment Procedure

6.1 Turn new shoe clockwise (tighten) until shoe is tight against the slide then turn shoe counterclockwise to vertical position (minimal partial turn)

6.2 Turn shoe counterclockwise per the following table to properly align shaft/shoe assembly

- | | |
|----------------------|---------------|
| 6.2.1 For 1.5" Valve | - (1.5) Turns |
| For 2" Valve | - (1.5) Turns |
| For 3" Valve | - (5) Turns |
| For 4" Valve | - (5) Turns |
| For 6" Valve | - (5) Turns |
| For 8" Valve | - (5) Turns |



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