

# JR33 6-Way Transfer Valve

## *Operation and Maintenance Manual*



*Quality Today Insures Tomorrow*

# JR-33 6-Way Transfer Valve

## Section 1) Internal Stack Removal Procedure

Fully Loosen "T" Handle

1.1 Turn Counterclockwise

1.2 Push Operating Handle to the Down Position

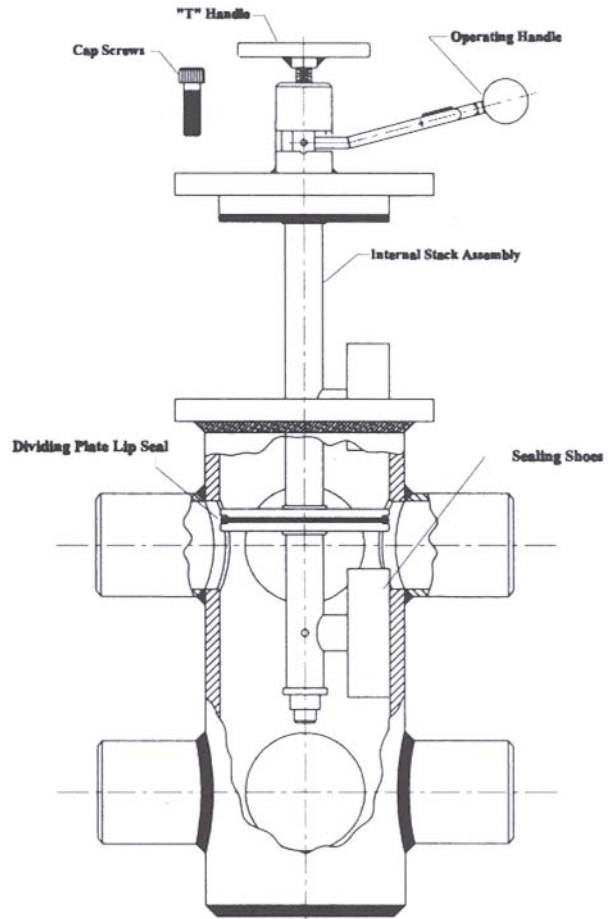
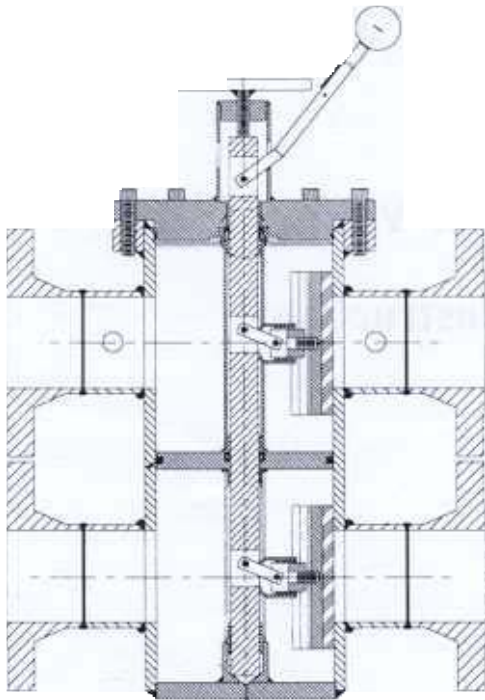
1.2.1 Place Operating Handle in middle position

1.3 Remove Socket Head Cap Screws

1.4 Pull Internal Stack Assembly Out of Valve

1.4. Do not allow Sealing Shoes to rotate about their mounting screws as Internal Stack is removed.

1.4.2 Exercise care when pulling Dividing Plate Lip Seal past edges of port openings.



## Section 2) Internal Stack Disassembly and Seal Replacement

2.1 Fully loosen "T" Handle (counterclockwise)

2.2 Push Ball Handle to the full down position

2.3 Remove Roll Pin 1 with pin punch

2.3.1 For 1½", 2" & 3" use 3/16" punch

2.3.2 For 4", 6" & 8" use 1/4" punch

2.4 Remove Ball Handle

2.5 Slide Bonnet with "T" Handle off shaft

2.5.1 Allows access to upper shaft seal

2.6 Position shaft so that Roll Pin 2 is visible in hole

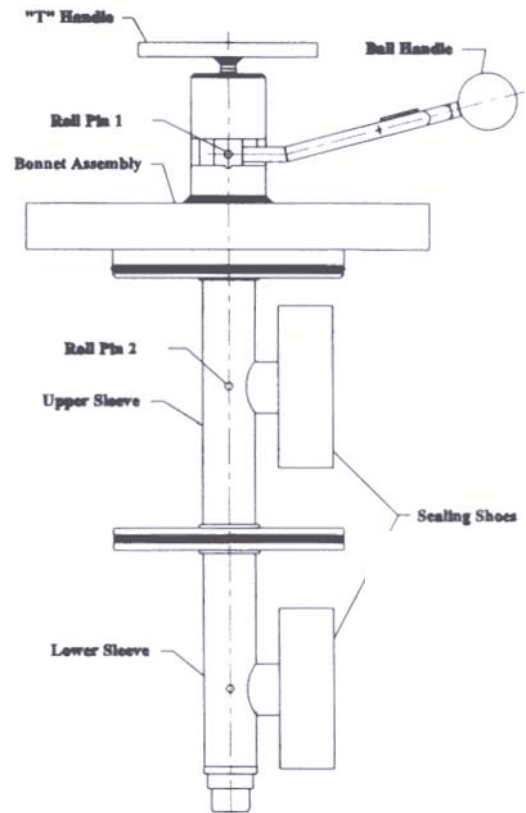
2.6.1 Remove pin with appropriate punch

2.7 Remove shoe/slide link assembly from sleeve

2.8 Slide Upper Sleeve off shaft

2.8.1 Allows access to lower shaft seal

2.8.2 There is normally no need to remove lower sleeve assembly



2.9 Replace "O" ring seals and rings

2.9.1 LUBRICATE ALL "O" RINGS/SEALS

2.9.2 Upper shaft seal "O" ring "lip" faces down

2.9.2.1 Install Delrin Seal Retainer

2.9.3 Lower shaft seal "O" ring "lip" faces up

2.9.3.1 Install Delrin Seal Retainer

2.9.4 Divider Plate Seal "O" ring "lip" faces up

2.10 Remove and replace shoes if necessary

2.10.1 Turn counterclockwise to separate shoe from slide assembly

2.10.2 Refer to Section 3 for shoe adjustment

2.11 Re-Assemble stack on stable surface to ensure proper Roll Pin replacement.

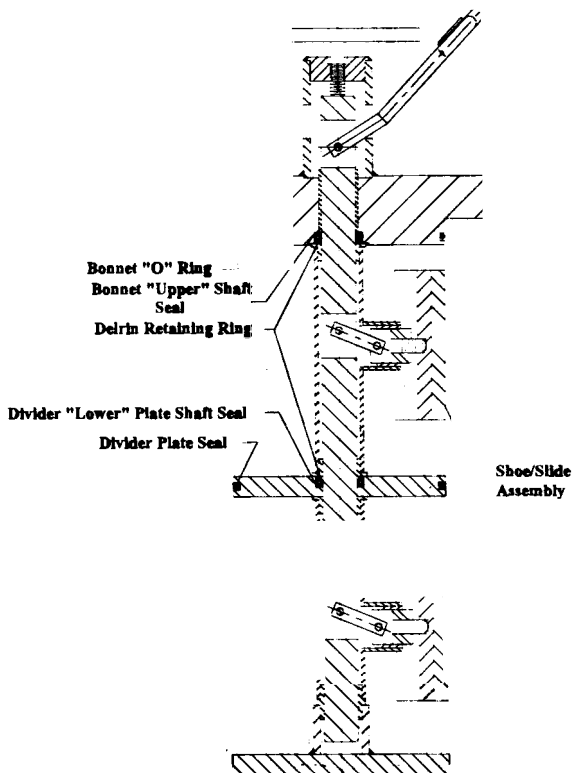
2.11.1 Ensure that there are no gaps between the Sleeve assemblies and Bonnet and Divider Plate.

2.11.2 Insert Roll Pin 2 through sleeve/shaft/link assembly

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

2.12 Re-Install Internal Stack into valve body

2.12.1 Exercise care when pushing Dividing Place Seal past edges of port openings



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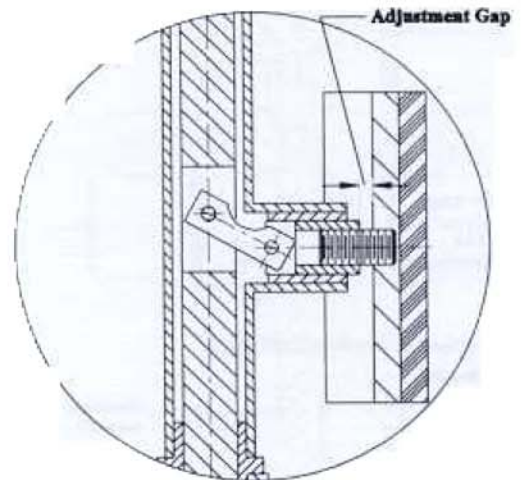
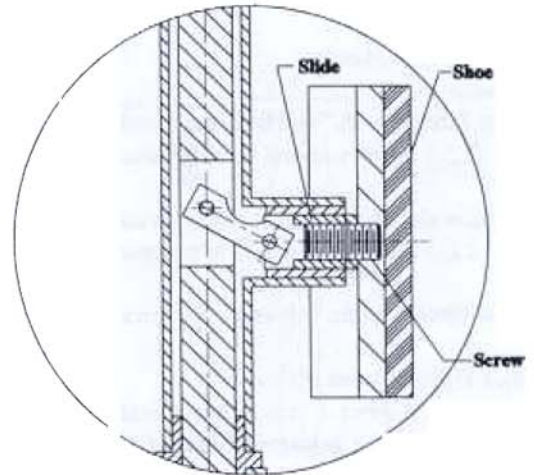
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### Section 3) Shoe Adjustment Procedure

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

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

- 3.2.1 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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# JR-33 6-Way Valve

## Changeover Operating Instructions

### 1.0 Open equalizing valve

- 1.1 Allow pressure to equalize
- 1.2 **Due to capacitance effect larger vessels may require several minutes to balance**
- 1.3 After off line vessel or piping is filled, ensure all vents, bleeds or drain lines are closed so that pressure will equalize.

### 2.0 Turn "T" Handle counterclockwise approximately 6-7 turns

#### 2.1 **DO NOT FORCE PAST STOP**

### 3.0 Push Ball Handle downward to unseat sealing shoes

### 4.0 Rotate Ball Handle 180°

#### 4.1 **Red Arrow Points to OPEN Ports**

### 5.0 Release the Ball Handle and turn "T" Handle clockwise until sealing shoes are seated

#### 5.1 **HAND TIGHTEN ONLY (20 IN-LB MAX)**

### 6.0 Close equalizing valve.

