

## INTERNAL VALVE ROLL-PIN

Symptoms of a sheared roll-pin: Excess-flow valve slugging with increased pump speed, reduced flow-rate, absence of pump pressure, or cannot pump. Here is a simple procedure to check for sheared roll-pin.

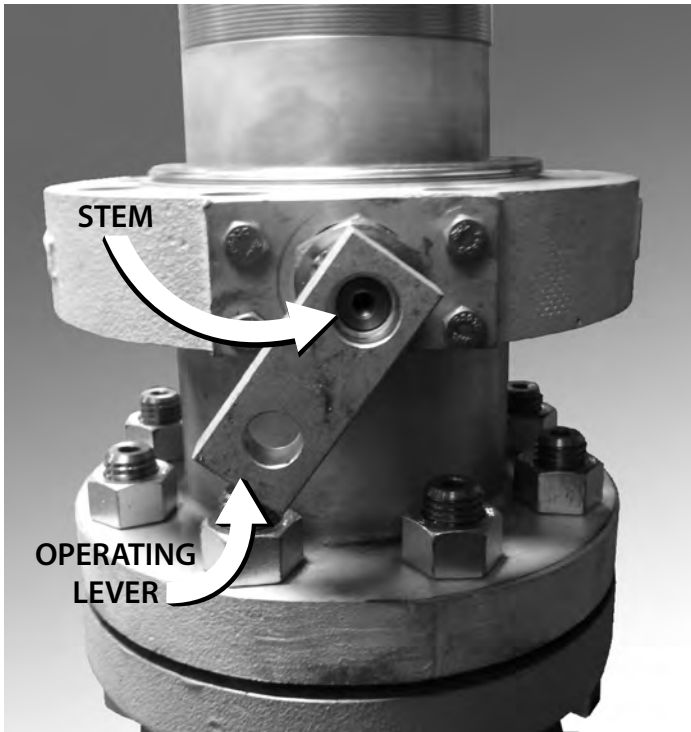


Figure 1

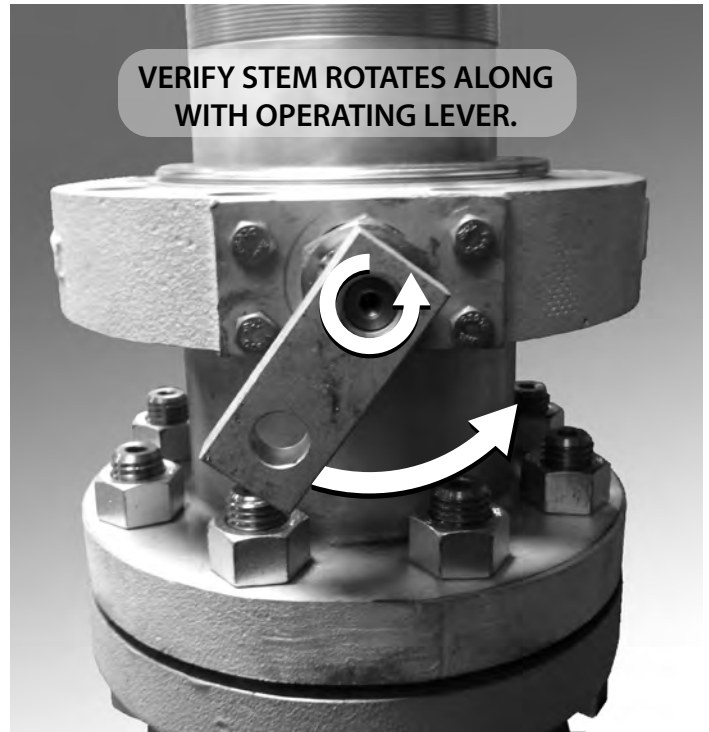


Figure 2

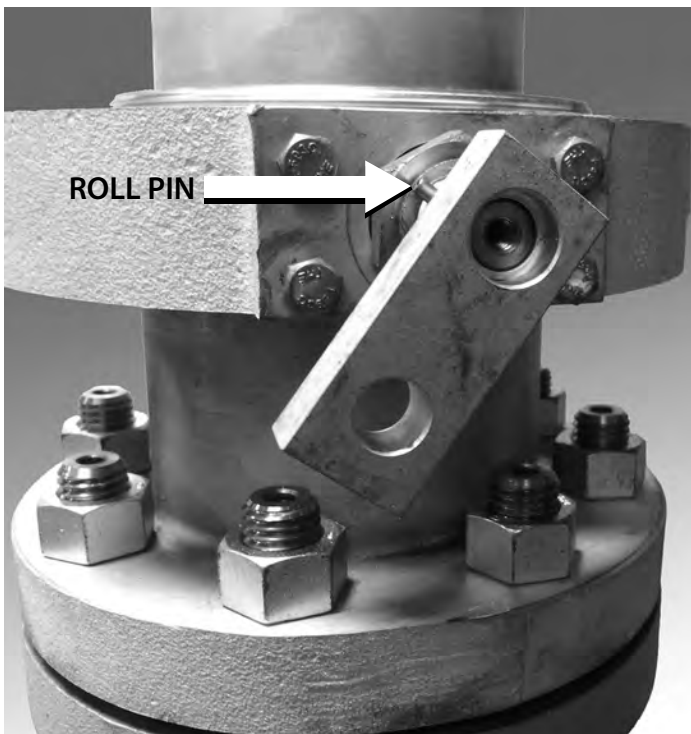


Figure 3

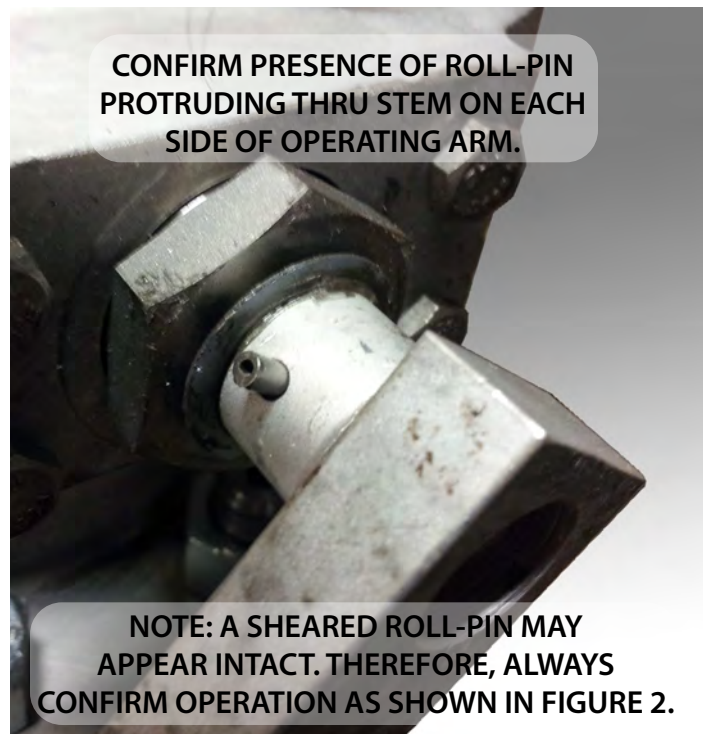


Figure 4