



**RUELCO CHECK VALVE  
MODEL 7800  
OPERATIONS MANUAL  
MANUAL #OMP – 7800 – 6/12  
(SEE SPEC. SHEET 7800)**

## **I. PRINCIPLE OF OPERATION**

The Ruelco “CV-1” is a spring assisted poppet style in-line check valve. The maximum rated pressure is 10,000 psi. (690 BAR). The check valve will allow fluid to flow only from the inlet to outlet and not back. A pressure differential of 5 psi. is required to shift the poppet and allow flow. When the differential falls below 5 psi., the spring will close the valve and allow no further flow.

## **II. INSTALLATION**

The Check valve is installed in-line of the piping system. Proper thread sealant should be used to install the check valve. It is also important that the fluid be properly filtered to remove debris from the flow. Damage to the soft seals can occur if the debris is not removed prior to entering the valve.

## **III. DISASSEMBLY (REFER TO SPEC SHEET 7800)**

Tools required are as follows:

- Qty. (2) 1-1/8” open end wrench or suitable adjustable wrench.
  - Silicone based lubricant
- 1) Prior to disassembly it is important that all pressure be bled from the piping on both sides of the check valve. Failure to do so may result in injury.
  - 2) Using the two wrenches, one of each end of the valve, unthread the Cap (Item 1) from the Body (Item 2).

- 3) Carefully unscrew the Cap (Item 1), being sure not to lose the Spring (Item 6).
- 4) Both the Cap Seal (Item 3) and Poppet Seal (Item 4) can now be removed. adequate inspection and
- 5) Using the two wrenches, one of each end of the valve, unthread the Cap (Item 1) from the Body (Item 2).
- 6) Carefully unscrew the Cap (Item 1), being sure not to lose the Spring (Item 6).
- 7) Both the Cap Seal (Item 3) and Poppet Seal (Item 4) can now be removed. adequate inspection and

## **IV. REPAIR AND ASSEMBLY**

- 1) Clean all of the parts and look for debris or burrs.
- 2) Replace the Poppet Seal (Item 4) and Cap Seal (Item 3).
- 3) Properly align the Poppet (Item 5) and Spring (Item 6) into position in the Body (Item 2) as shown in the cut sheet.
- 4) Thread the Cap (Item 1) into the Body (Item 2) by hand until it stops.
- 5) Once it has been verified that the Cap (Item 1) fits properly into the Body (Item 2) tighten using the two wrenches.

## V. RECOMMENDED MAINTENANCE

### PROCEDURE

Operate manually.  
Disassembly, inspect and lubricate.  
Replace all seals.

### INTERVAL

Every 30 days.  
Yearly or as required.  
Every 2 years or as required.