'SC-1' SSCSV 3-WAY
INTERFACE VALVE
MODEL 8200
OPERATION MANUAL
MANUAL # OMP - 8200 - 01 - 09
(SEE SPEC. SHEET 8200)

I. PRINCIPLE OF OPERATION

The Ruelco **'SC-1'** is a high pressure 3-way, Normally Closed Interface Valve operated by a low pressure control signal. Pilot pressure opens the valve and allows flow from inlet to outlet. A loss of pilot pressure actuates the piston, first blocking the inlet and venting the outlet pressure. In the second stage of closing, the shut-off piston then blocks the vent port from the outlet port. The high Cv factor of the Interface valve assures a fast response to a loss of pilot control pressure. The soft seat design assures extended life and repeatability. The SC-1 also comes in an Override model which allows the operator to manually open and close the valve without the use of pilot pressure.

II. INSTALLATION

The **'SC-1'** can be mounted either vertically, horizontally, or supported by piping from any of its ports. If it is supported by piping, care should be taken that the strength of the pipe fittings used is adequate to prevent the fitting from breaking off in the valve body should the valve be inadvertently struck.

Proper pipe thread sealant should be used on any pipe fittings threaded into the valve ports. If stainless steel fittings are used, a sealant that will prevent galling is required.

Every Interface face valve has a panel mount spacer designed into the cap to aid in panel mounting. The rotating ring design of the override model allows the operator to construct the pilot pressure line in any direction.

III. DISASSEMBLY (REFER TO SPEC. SHEET 8200)

All Control and Pilot Pressure should be vented before Disassembly

- Suitable adjustable wrench for removing the cap.
- Pick to remove the Sleeve from the body.
- Suitable adjustable wrench for unthreading the bottom cap.

Note: All Item Numbers Refer to the 8200-10000 Model unless otherwise Noted.

Spool Seals

1) To replace O-rings on the spool assembly (Item 4), the cap must be removed.

2) Unthread the cap (Item 2).

3) Pull the spool assembly (Item 4) out of the Cap. Be careful not to lose the spring.

4) The seals on the spool assembly may now be replaced as per instructions

given in the repair section of this manual.

Body Seals

1) Unthread the Bottom Cap (Item 22) and remove the ball (Item 18) and the spring (Item 16).

2) Also remove the Bottom Sleeve (Item 19) at this time.

3) Using the pick, insert the pick into the Ball seal (Item 17), being careful not to damage the inside edges and pull the Shut Off Sleeve (Item 13) out of the body. The pick will grab into the holes in the center of the sleeve. The Shut Off Piston (Item 14) and Shut Off Spring (Item 16) will come out with the Sleeve.

4) Again using the pick remove the Top Sleeve (Item 15), being careful not to damage the Block Seal (Item 12).

5) Now, also using the pick, remove the final Shaft Seal (Item 9).

IV. REPAIR AND ASSEMBLY

1) Remove the seals from the spool assembly, Sleeve, and Bottom Cap.

2) Using an appropriate safety solvent, clean all parts.

3) Inspect the shaft assembly for any major damage such as burrs, knicks. Also, inspect it for straightness. Replace the shaft assembly if damaged.

4) Examine the valve body for any damage such as burrs, nicks, etc. Replace if damaged.

5) Examine the Ball (Item 18), Ball Seal (Item 17) and Block Seal (Item 12) and replace if damaged. The seals can be removed with the pick. Insert the new seal into the cavity. Most of the seal should fall in easily. Now place the sleeve in a vice and slowly press the seal into the sleeve. This will ensure a proper seal.

6) Replacement seals for a Ruelco product repair kit are required for proper valve performance. It is recommended that all seals be lubricated before and after installation with a high quality silicon based grease.

7) Lubricate the inside of the Body (Item 6). Replace the Shaft Seal (Item 9) making sure that the face groove and lips can be seen and point away from the cap.

8) Install the Sleeves into the body making sure that the Seals are orientated away from the Cap.

9) Place the ball inside the body and resting, then place the Bottom sleeve over the ball.

10) Finally, install the spring into the bottom sleeve and screw the Bottom Cap over the spring. This cap must be tightened firmly.

V. DISASSEMBLY AND REPAIR OF OVERRIDE CAP

Note: All Item Numbers refer to the Override Model 8200-20000

1) Remove the Snap Ring (Item 6) above the Air Ring (Item 9).

2) Slide the Air Ring off of the Cap (Item 5).

3) With the cap off of the body, screw the handle and override stem (Item 3) down into the cap until the bottom of the handle is touching the top of the cap. Then, loosen the Set screw (Item 2) in the Handle (Item 1), remove the handle from the override stem and remove the override stem from the cap.

4) Now, remove the air ring from the cap by pulling upward.

5) Replace all seals. Lubricate all seals before and after installation.
6) Reassemble the Override Cap Assy. and place back onto the Body.

VI. RECOMMENDED MAINTENANCE

PROCEDURE	INTERVAL
Operate Manually.	Every 30 days.
Disassemble, inspect and lubricate.	Yearly or as required.
Replace all seals.	Every two (2) years or as required.