

## BOTTOM MOUNTED OIL DASHPOT SEQUENCE OF OPERATION

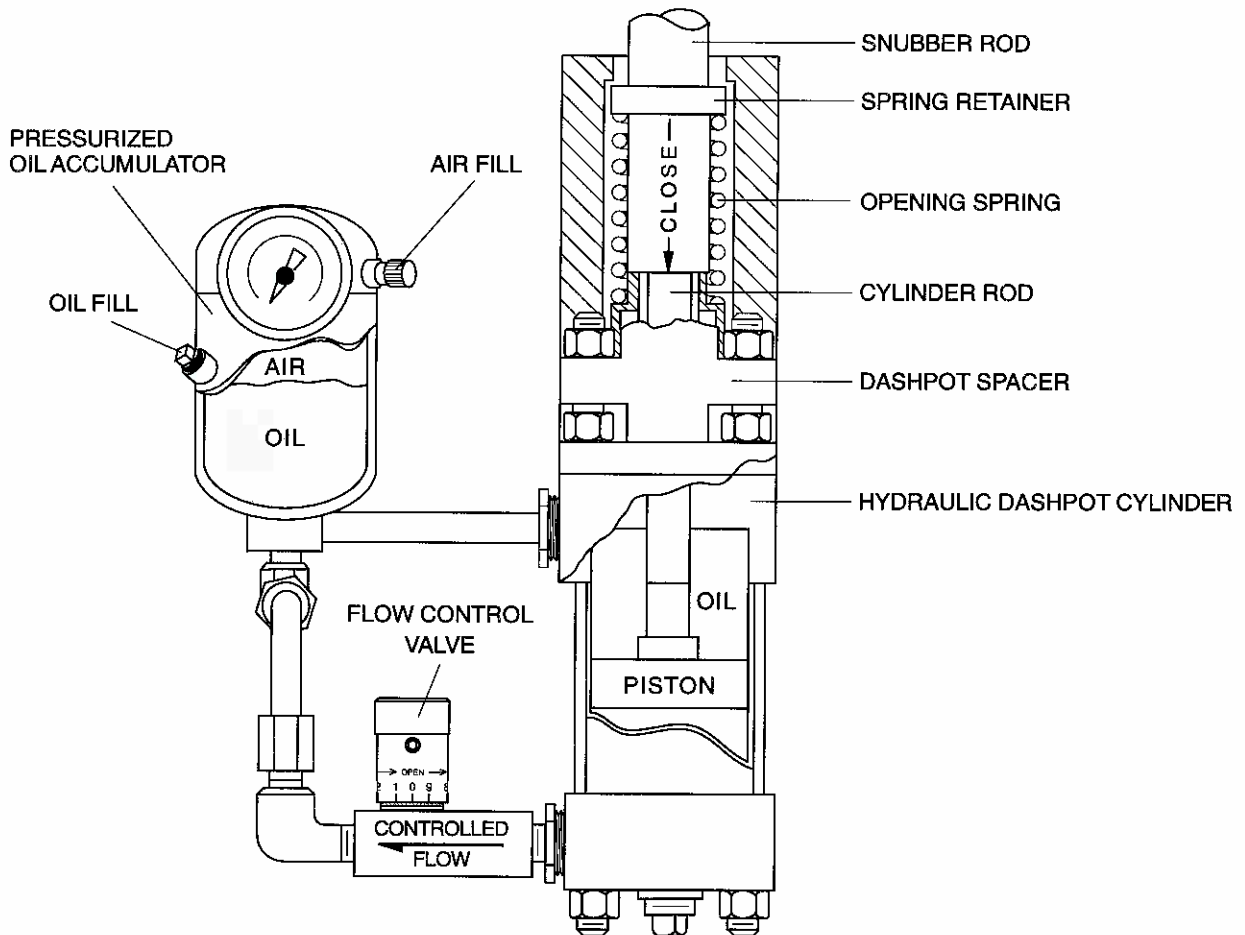
The last 10% of closing of the Tilted Disc® Check Valve can be controlled by an optional hydraulic dashpot cylinder to prevent slamming where rapid flow reversals are expected. The "Cylinder Rod" pushes against a "Snubber Rod" which in turn makes contact with the valve disc. Both sides of the "Hydraulic Cylinder" are connected to a "Pressurized Oil Accumulator" which is held at the maximum line pressure plus 50 psi. Because the cylinder "Piston" has a greater pressure area opposite the rod end, the air pressure in the accumulator will tend to extend the rod. The "Opening Spring" is also designed to extend the rod.

### OPENING STROKE:

When the water system pump is started, the water pressure will force the check valve disc open. The air pressure in the accumulator and the spring will extend the cylinder and snubber rods into the valve port.

### CLOSING STROKE:

When the water system pump is stopped, the weight of the disc and reverse flow of water will force the check valve disc closed thereby striking the "Snubber Rod". The "Snubber Rod" will push on the "Cylinder Rod" in the direction shown and force oil through the adjustable "Flow Control Valve". The "Flow Control Valve" will control the speed of closure for the last 10% of valve travel in typically 1 to 5 seconds.



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**VAL-MATIC®**

VALVE AND MANUFACTURING CORP.

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