Cheminert® Model C42R

Cleaning and Rotor Replacement

Initial Precautions

After unpacking the valve, do not remove the protective tape from the valve ports until you are ready to install the valve. As supplied, all surfaces are clean and free of contaminants, and must be kept clean to prevent valve damage. Open ports and fittings cause unnecessary risk of particulate matter entering the valve and scratching the sealing surfaces, which is the most frequent cause of premature valve failure.

Cleaning and Rotor Replacement

Cleaning a valve can often be accomplished by flushing all the lines with appropriate solvents. Do not disassemble the valve unless system malfunction is definitely isolated to the valve.

Disassembly (Refer to Figure 1)

1. Use a 7/64" hex driver to remove the socket head screws which secure the stator to the valve body. (If you wish to purchase the proper hex driver, order VICI product number HKS.)

2. To ensure that the sealing surface of the stator is not damaged, rest it on its outer face. Or, if the tubing is still connected, leave it suspended by the tubing.

3. With your fingers or a small tool, gently pry the rotor away from the driver.

4. Examine the rotor and stator sealing surfaces for scratches. If scratches are visible to the naked eye, the part must be replaced. If no scratches are visible, clean all the parts thoroughly with an appropriate solvent, taking care that no surfaces get scratched. (A common problem is the formation of buffer crystals, which are usually water-soluble.) It is not necessary to dry the parts prior to reassembly.

Figure 1: Exploded view of the Model C42R
Reassembly

1. Replace the rotor in the driver, making sure that the rotor sealing surface with its engraved flow passage is facing out. The rotor’s tab pattern is asymmetrical to prevent improper placement.

2. Replace the stator on the valve body, aligning the screw holes and carefully engaging the alignment pins.

3. Insert the socket head screws and begin to tighten them. As they begin to get snug, tighten them alternately by quarter turns to avoid any possibility of distorting the stator. *Do not over-tighten them* – the screws simply hold the assembly together and do not affect the sealing force, which is automatically set as the screws close the cap against the valve body.

4. Test the valve by pressurizing the system. If it doesn’t hold pressure, the valve should be returned to VICI for repair.