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# CHEMINERT<sup>®</sup> MODELS C22(Z), C24(Z) & C25(Z) CLEANING AND ROTOR REPLACEMENT

Technical Note 811

## **INITIAL PRECAUTIONS**

After unpacking the valve, do not remove the protective cap or 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.



WARNING: The use of any metal or non-Valco nuts and ferrules in Models C22Z, C24Z, or C25Z valves may cause irreparable damage, and therefore voids the warranty.

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.* 

# VALVE BODY ROTOR BODY RING STATOR

### FIGURE 1: Exploded view of a Model C22Z

# CLEANING

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 on the valve. Start by rotating among the three screws, loosening them in quarter-turn (90°) increments until all load is removed.
- 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(s) 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.

### REASSEMBLY

- 1. Replace the rotor in the driver, making sure that the rotor sealing surface with its engraved flow passages is facing out. The tab pattern is asymmetrical to prevent improper placement.
- 2. Replace the stator. Insert the three socket head screws and tighten them gently until they start to get snug. Then alternate among the three screws, tightening them in quarter-turn (90°) increments until the stator is flush against the valve body.

Do not over-tighten the screws – they hold the assembly together and do not affect the sealing force, which is automatically set as the screws close the stator against the valve body.

3. Test the valve by pressurizing the system. If it doesn't hold pressure, the valve should be returned to Valco for repair.