CFC5 Series Coil / Solenoid Valve

Installation and Maintenance Instructions

Fluid Control Division

Bulletin R1021
Effective 2/25
Revision B

Warnings

1. Check adhesive data label for correct catalog number, pressure, voltage and service. Do not install if unsuitable.
2. Turn off electrical power supply and line pressure to the valve. Bleed trapped pressure from the lines before inspecting, cleaning, servicing or repairing the valve.

Description:

These solenoids are epoxy encapsulated with an external ½" conduit yoke that meets the requirements for NEMA Type 4 enclosures. The requirements for the following NEMA enclosure Types are also met: Type 1-General Purpose, Type 2-indoor protection against falling water and dirt, Type 3-outdoor protection against dust, rain, sleet and external ice formation, Type 3R-outdoor protection against rain, sleet and external ice formation, Type 3S-same as Type 3 but in addition provides for operation of external mechanisms when ice laden. Type 4-indoor or outdoor protection against dust, rain, splashing water, hose-directed water and damage from external ice formation, Type 4X-same as Type 4 plus protection against corrosion.

Operation:

For specific valve operation, refer to the valve I & M Instructions.

Installation:

1. Application

   Refer to Parker AC&R Master catalog for application information.

2. Positioning

   The solenoid may be mounted in any position. It is recommended that the solenoid be mounted vertical and upright to prevent accumulation of debris in the plunger tube of the valve.

3. Wiring

   Wiring must comply with local and national electrical codes. These coils have a conduit hub for connecting ½" conduit. The enclosure may be rotated to facilitate wiring.

4. Solenoid Temperature

   Standard catalog valves are supplied with coils designed for continuous duty service. When the solenoid is energized for a long period, the solenoid enclosure becomes hot and can be touched with the bare hand for only an instant. This is a safe operating temperature. Any excessive heating will be indicated by the smoke and odor of burning coil insulation. Ambient and fluid temperature limitations for a solenoid valve depend on the solenoid and the valve materials.

Maintenance:

1. Troubleshooting Guide

   a. Faulty Controls Circuit

      Check the electrical system by energizing the solenoid. A metallic click signifies the solenoid is operating. Absence of click indicates loss of power supply. Check for loose or blown out fuses, open circuit or grounded coil and broken lead wires.

   b. Burned-Out Coil

      Check for open-circuited coil. Replace coil if necessary.

c. Low Voltage

Check voltage across the coil lead. Voltage must be at least 85% of adhesive data label rating.

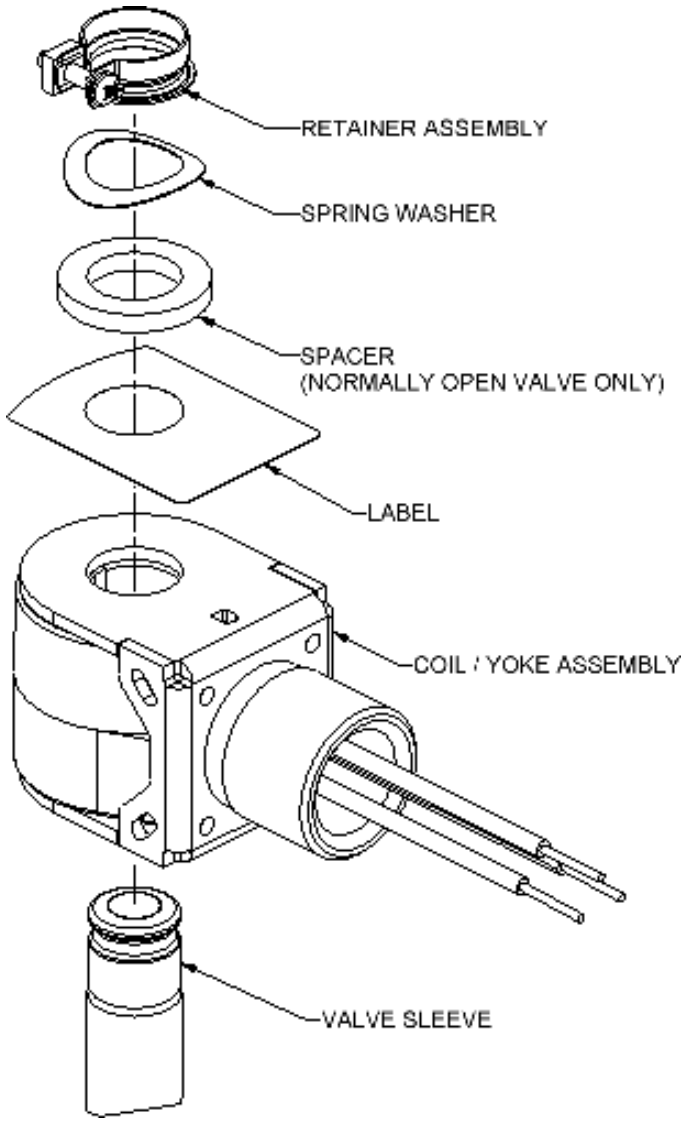
2. Coil Installation

Turn off electrical power supply and disconnect coil lead wires. Refer to exploded view.

a. Remove retainer assembly, spring washer, and spacer (normally open valve only).

b. Install new coil / yoke assembly of correct wattage, voltage and temperature class. Apply coil label to side surface of coil / yoke assembly. Apply valve label to top surface of coil / yoke assembly.

c. Reassemble by sliding new coil / yoke assembly over valve sleeve so there is contact of metallic yoke to valve sleeve bonnet. Slide spacer (normally open valve only) followed by spring washer (all valves) over valve sleeve so they are in contact with top of coil. Slide retainer assembly over valve sleeve so that it aligns with the retaining groove in the valve sleeve. Tighten screw of retainer assembly. Reconnect electrical circuit.



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