



# INSTALLATION INSTRUCTIONS

## Ceramic SEV Flow Control/Port Retro-Fit Procedure

Before beginning retro-fit procedure, check kit to ensure that it contains the following components:

P/N 22660-001C	(1) Syrup Flow Control Kit (Pink Bubble Bag)
P/N 23264-C	(1) Water Flow Control Kit (Clear Bubble Bag)
P/N 39501-006	(1) Water Port Assembly
P/N 48520	(1) Bobbin, Red
P/N 38475-004	(3) Cap, Black
P/N 31525-009	(2) Bonnet O-Rings
P/N 31525-012	(1) Mounting Block O-Ring, Water Side
P/N 60000-010	(1) Mounting Block O-Ring, Syrup Side

The following tools are recommended to complete retro-fit procedure:

- Medium Flat Head Screw Driver
- SEV Sleeve Removal Tool, CCUSA P/N 11208
- Food Grade Lubricant (Glycerine or equivalent)
- 10-32 Socket Wrench or Nozzle Grip Tool, CCUSA P/N 11354
- Needle Nose Pliers
- RTV Sealant

The following procedure is recommended to ensure optimal ratio performance when retro-fitting Ceramic SEV Flow Controls (FC), new water port, and water solenoid (bobbin) in existing valves. Failure to follow this procedure could cause the retro-fitted valves to perform incorrectly.

1. Remove lid holder and tower cover, set aside.
2. Shut off valve at Mounting Block.
3. Activate valve to release pressure and flush out fluid that remains in the valve.
4. Disconnect power supply spade connector to touch panel.
5. Lift retaining bracket and remove valve from unit.

6. Place valve on flat surface, nozzle side down, bonnet screws pointing up, as shown in Figure 1.

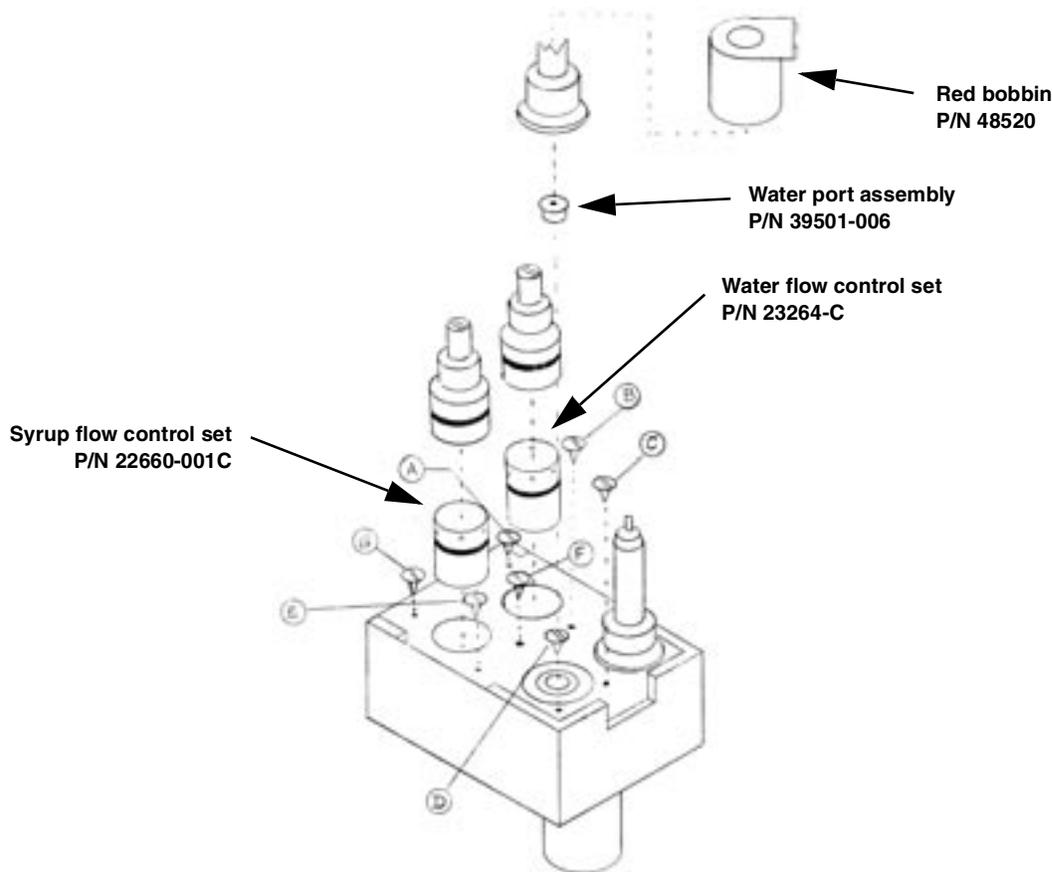
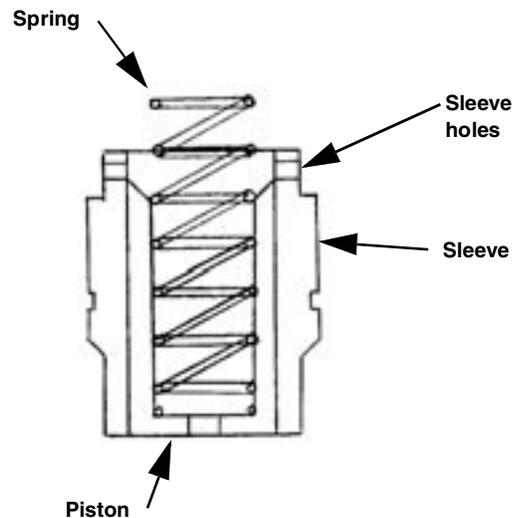


FIGURE 1

**NOTE: To ensure proper flow controls are replaced in the correct flow control cavity in the valve body, water and syrup flow control retro-fit should be completed on one side before replacement of the other side is started.**

7. Remove nuts and cover bracket from valve. Set aside for later use.
8. Remove Solenoid and C-Frames from valve Guides. Set aside for later use.
9. Starting with syrup side flow control, remove the two (2) screws (reference A & B in Figure 1) and Bonnet Retaining Plates. Retain the plates and screws for reuse when installing the ceramic FC.
10. Remove bonnet assembly. Set aside for later use.
11. Remove old flow control assembly (sleeve, piston, and spring) from valve body and discard. Use sleeve removal tool CCUSA P/N 11208.
12. Open Syrup Ceramic FC kit (pink bubble pack) and remove parts.
  - The syrup Ceramic FC kit is packaged in a pink bubble pack bag.
  - The water Ceramic FC kit is packaged in a clear bubble pack bag.
13. Lightly lubricate o-ring on FC sleeve. Use a food grade lubricant (i.e., glycerine or equivalent).
14. Insert sleeve into valve body, with the sleeve holes facing upward.
15. Insert piston into sleeve with open end upward.

16. Insert spring into piston. Assembly should be as shown in Figure 2:
  17. Inspect o-ring on bonnet; if damaged or worn, replace. Lightly lubricate o-ring on bonnet assembly. Use food grade lubricant (i.e., glycerine or equivalent).
  18. Install bonnet assembly into flow control cavity in the valve body.
  19. Replace bonnet retaining plates and secure with screws. Screws should be tightened alternately to ensure proper position of retaining plates.
- CAUTION** - Improper tightening of retaining plate screws on valve body could cause leakage.


**FIGURE 2**

20. Remove four (4) screws (C, D, E, and F in Figure 1) holding water side Guide assembly. Retain plate and screws for reuse when re-assembling Guide.
21. Remove old port from valve body and discard.
22. Open Water Ceramic FC Kit (clear bubble pack) and remove new Water Port assembly.
23. Lightly lubricate o-ring on Port. Use food grade lubricant (i.e., glycerine or equivalent).
24. Insert Water Port into valve body; press down to ensure port is properly seated.
25. Place Armature assembly and Tetraseal into Guide and position onto valve and secure using screws C, D, and E shown in Figure 1.
26. Remove one (1) screw (G in Figure 1) and Bonnet Retaining Plate. Retain the screw and Plate for reuse when installing ceramic FC.
27. Remove Ceramic FC parts from Kit.
28. Repeat Steps 13 through 19 for Water FC.
29. Remove Pink Solenoid from water side Solenoid assembly (reference Figure 1).
30. Remove Red Solenoid from Ceramic Kit.
31. Assemble Red Solenoid onto water side Solenoid assembly.
32. Replace Solenoid and C-Frame assemblies onto Guides. **NOTE:** Red Bobbin on water side.
33. Replace cover bracket on valve and secure with nuts.
34. Inspect o-rings on Mounting Block; if worn or damaged, replace. Lightly lubricate o-ring on Mounting Block outlet tubes. Use food grade lubricant (i.e., glycerine or equivalent).
35. Replace valve on unit and engage retaining bracket.
36. Turn on valve at Mounting Block and check for leaks between the valve and block.
37. Reconnect wire harness to equipment.
38. Adjust valve water flow rate to McDonalds specifications using the McDonalds Volume Cup. Adjust water-syrup ratio to specifications using the new McCann Ratio Cup (green letters).
39. Check valve for leaks in Bonnet and water Guide area.
40. Fill black cap, P/N 38475-004, with RTV sealant.

41. Using needle nose pliers, for the black cap over Adjusting Screw head on water side (see Figure 3), ensuring cap covers entire screw head.
42. Repeat procedure 40 through 41 for syrup side.
43. Replace lid holder and tower cover.

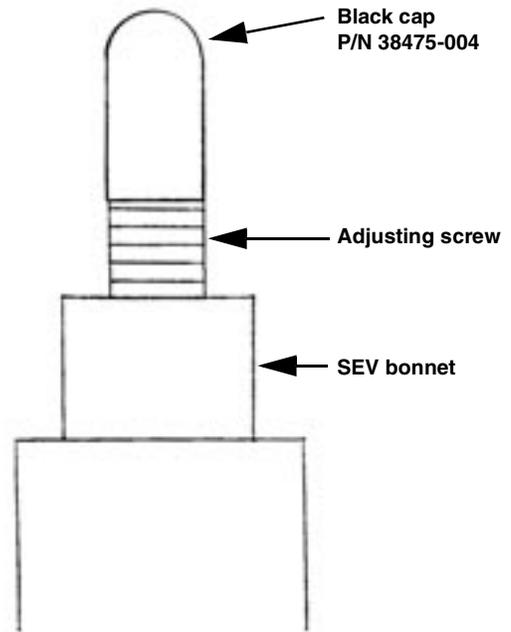


FIGURE 3