Commercial Mixing Valve Installation, Operation & Maintenance Instructions MODEL MVC (34C/34CLF SERIES)



INSTALLATION

- 1. The Apollo MVC should be installed by a licensed contractor in accordance with these instructions and local plumbing codes.
- 2. Flush the water supply lines prior to installation.
- 3. The valve can be installed vertically or horizontally. A balancing valve is necessary only if the pressure differential between the hot and cold inlet lines is greater than 30 psi.
- 4. Make sure the cold water supply is open to mixing valve to prevent excessive hot water temperatures from damaging the thermostat.

OPERATION

The Apollo MVC is designed in accordance with ASSE 1017 to control the mixed water temperature during pressure and temperature fluctuations, providing a safe and consistent mixed water temperature. Once the desired temperature is set, the valve will automatically maintain desired water temperature without large fluctuations. Periodic inspection and cleaning by a licensed contractor is recommended.

ADJUSTMENT

Open fixture downstream as the valve must be set under flowing conditions. Turn the adjusting knob/bolt accordingly to increase or decrease temperature at the fixture or measurement port. Turn the knob/bolt clockwise for lower temperatures or counterclockwise for higher temperatures. The water should be flowing while adjusting the valve. Use a thermometer or temperature gauge (not supplied) near the point of use to accurately set the valve to desired setpoint.

MAINTENANCE

The Apollo MVC will need to be inspected periodically depending on usage and water conditions. If cleaning and relubrication does not provide satisfactory temperature control, repair kits can be easily installed.

Repair Instructions (3/4" and 1")

- 1. Turn off hot and cold water supply to the valve.
- 2. Remove the top retainer and discard O-ring (Item 2).
- 3. Remove shuttle and spring (Item 3 & 4) from the body and discard.
- 4. Using a screwdriver or pliers, remove the retaining clip from the adjustment bolt.
- 5. Remove adjustment bolt from the top retainer and discard the O-ring (Item 1).
- 6. Replace discarded items with items from the repair kit

34C104RK*

ITEM	PART NO.	DESCRIPTION		
1	D503200	O-RING, -228, EPDM, NSF61		
2	D503100	O-RING, -213, EPDM		
3	W436200	SHUTTLE, S-ASSY, 3/4"-1" LOW TEMP		
4	A243400	SPRING,CONICAL, 3/4"-1"		
5*	1901600	LUBRICANT, DOW CORNING 111, 6 GMS.		

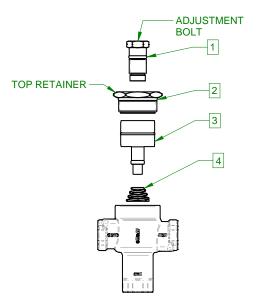
34C104RK1*

ITEM	PART NO.	DESCRIPTION		
1	D503200	O-RING, -228, EPDM, NSF61		
2	D503100	O-RING, -213, EPDM		
3	W437200 SHUTTLE, S-ASSY, 3/4"-1" HIGH TEMP			
4	A243400	SPRING,CONICAL, 3/4"-1"		
5*	1901600	LUBRICANT, DOW CORNING 111, 6 GMS.		

*34C Repair Kits are Lead Free

(34C104RK for low temp and 34C104RK1 for high temp) and re-assemble in reverse order. IMPORTANT- Silicone based lubricant, supplied with repair kit, or lubricant compatible with o-ring material must be used.

7. After re-assembling purge air from the system and adjust the valve setpoint to desired temperature.



Repair Instructions (1-1/4", 1-1/2" & 2")

- 1. Turn off hot and cold water supply to the valve.
- Remove the bottom retainer and discard O-ring (Item 5). Warning: Spring is in compression against retainer so expect sudden release while loosening.
- 3. Remove spring (Item 4) and discard.
- 4. Remove shuttle and thermal element (Items 2 & 3) and discard.
- Remove brass plug inside top of valve and discard the O-ring (Item 1)
- Replace discarded items with items from the repair kit (34C106RK for low temp and 34C106RK1 for high temp) and re-assemble in reverse order. IMPORTANT- Silicone based lubricant, supplied with repair

34C106RK*

ITEM	PART NO.	DESCRIPTION	
1	D435400	O-RING, -116, EPDM	
2	1844600	ELEMENT, THERMAL (90°F - 140°F)	
3	W885005	SHUTTLE, S-ASSY, 1-1/4" - 2" LOW/HIGH TEMP	
4	A245500	SPRING, 0.738ID, 0.131WD, 4.138FL	
5	D251000	O-RING, -236, BUNA-N	
6	1901600	LUBRICANT, DOW CORNING 111, 6 GMS.	

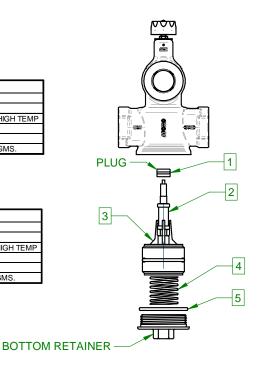
34C106RK1*

ITEM	PART NO.	ART NO. DESCRIPTION			
1	D435400	O-RING, -116, EPDM			
2	1844700	ELEMENT, THERMAL (130°F - 180°F)			
3	W885005	SHUTTLE, S-ASSY, 1-1/4" - 2" LOW/HIGH TEMP			
4	A245500	SPRING, 0.738ID, 0.131WD, 4.138FL			
5	D251000	O-RING, -236, BUNA-N			
6	1901600	LUBRICANT, DOW CORNING 111, 6 GMS.			

*34C Repair Kits are Lead Free

kit, or lubricant compatible with o-ring material must be used.

7. After re-assembling reset the temperature setting to desired temperature.



WARNING

This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires that this warning be given to the consumers in the State of California.)

NON-LEAD FREE VALVES, it is illegal to use this product in the United States for potable water services (water intended for human consumption).

LEAD FREE: The 34CLF Model is ANSI certified lead free and meets the requirements of the EPA Safe Drinking Water Act.

Amendment Register

Date	ECN	Revision	Page	Description	Initiator	Reviewed
7/7/2015	M15199	G	1-2	Added repair instructions and updated format	TH	GDG