

Electric Valve Package Kits for ThinLine Vertical and Horizontal Series Fan-coil Units

Installation and maintenance are to be performed only by qualified personnel who are familiar with and in compliance with state, local and national codes and regulations, and experienced with this type of equipment. **Caution: Sharp edges and coil surfaces are a potential injury hazards. Avoid contact with them.**

The electric valve package kits are furnished completely soldered and leak tested at the factory. Four (4) solder connections are required to complete the installation of the valve package into the system (two at the coil supply and return connections and two at the supply and return runouts).

Installation

1. Clean all connections before assembly with fine sandpaper. A good grade solder flux will help ensure a proper bond. **A general purpose 50/50 solder is recommended. Do not silver solder or braze the valves or copper fittings in this kit.** A chill block, or equivalent, must be used to prevent leaks in the factory connection or overheating the valve.
2. Position the valve package on the unit by moving the kit piping slightly. **Do not try to move the coil connections.**
3. The 2" x 4" indentation in the back of the secondary drain pan on the TSF and TSB units is provided for the supply and return runouts if they are brought up from below the pan. We recommend removing or covering the secondary drain pan

on these units before soldering the coil connections as hot solder or the torch flame could damage the pan. Be careful not to burn wire insulation during soldering.

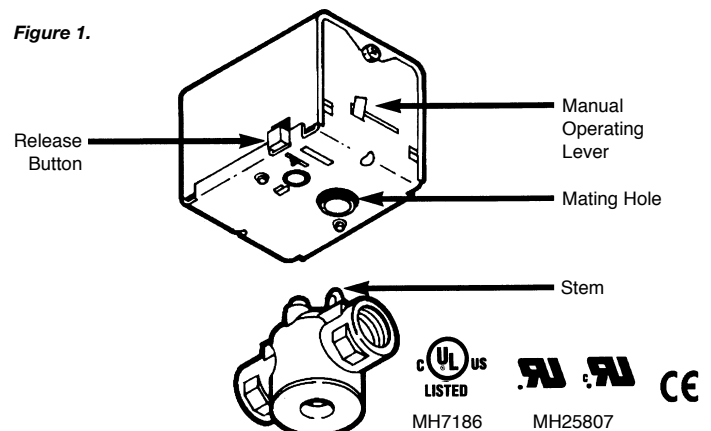
4. **Caution: The electric valve and gate valves are to be in the open position, ball valves in the closed position while soldering. Do not move the valve handles until the tubing has cooled for three (3) minutes.**
5. A hydrostatic test on all piping is recommended after all connections are complete.
6. All piping not over the secondary drain pan must be well insulated to prevent sweating. There is an 0.840 O.D. condensate drain connection on the TSF and TSB drain pan suitable for a 1/2" plastic pipe fitting (by others).
7. Field wiring must be in accordance with local codes and/ or the National Electrical Code. Wiring should be routed in such a manner to prevent the possibility of condensate dripping from the valve package piping onto the electrical conduit.

Caution

To prevent electrical shock, disconnect electric power to system at main fuse or circuit breaker box until installation is complete.

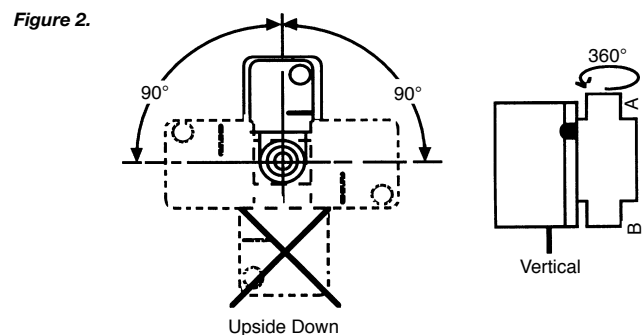
Valve Actuator Installation

Latch the manual operating lever in the engaged position (N.C. only). Depress the release button (See Fig. 1). Align the body with the actuator to ensure the stem is inserted into the large mating hole on the bottom side of the actuator. Engage the actuator on the body and release the button. Actuator AG2 is used for normally open operation. Actuator AG1 is used for normally closed operation.



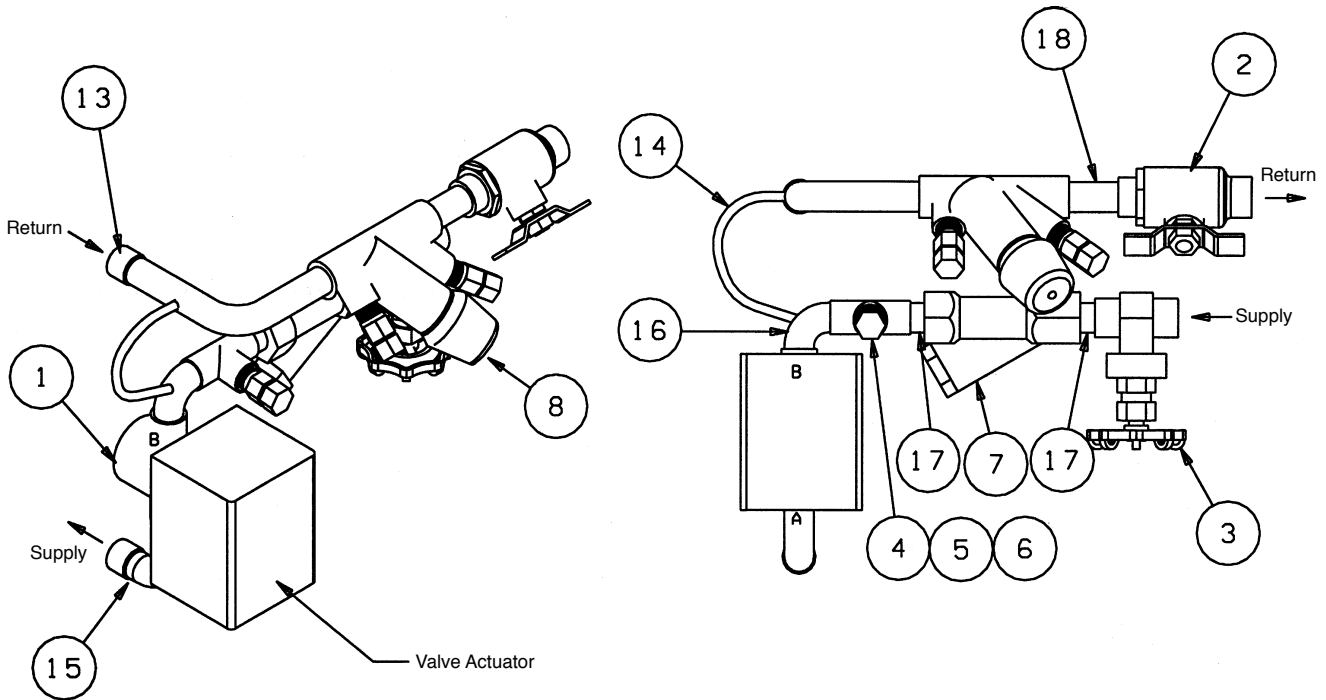
Mounting

The PopTop™ valve can be mounted vertically or horizontally. If mounted horizontally, the valve should be mounted within 90° of upright position (See Fig. 2). If mounted vertically, care should be taken to ensure moisture does not drip onto motor. The valve actuator should not be mounted upside down.



Typical Valve Assembly Instruction (Deluxe 2-Way, Right Hand, Cooling Valve Package Shown)

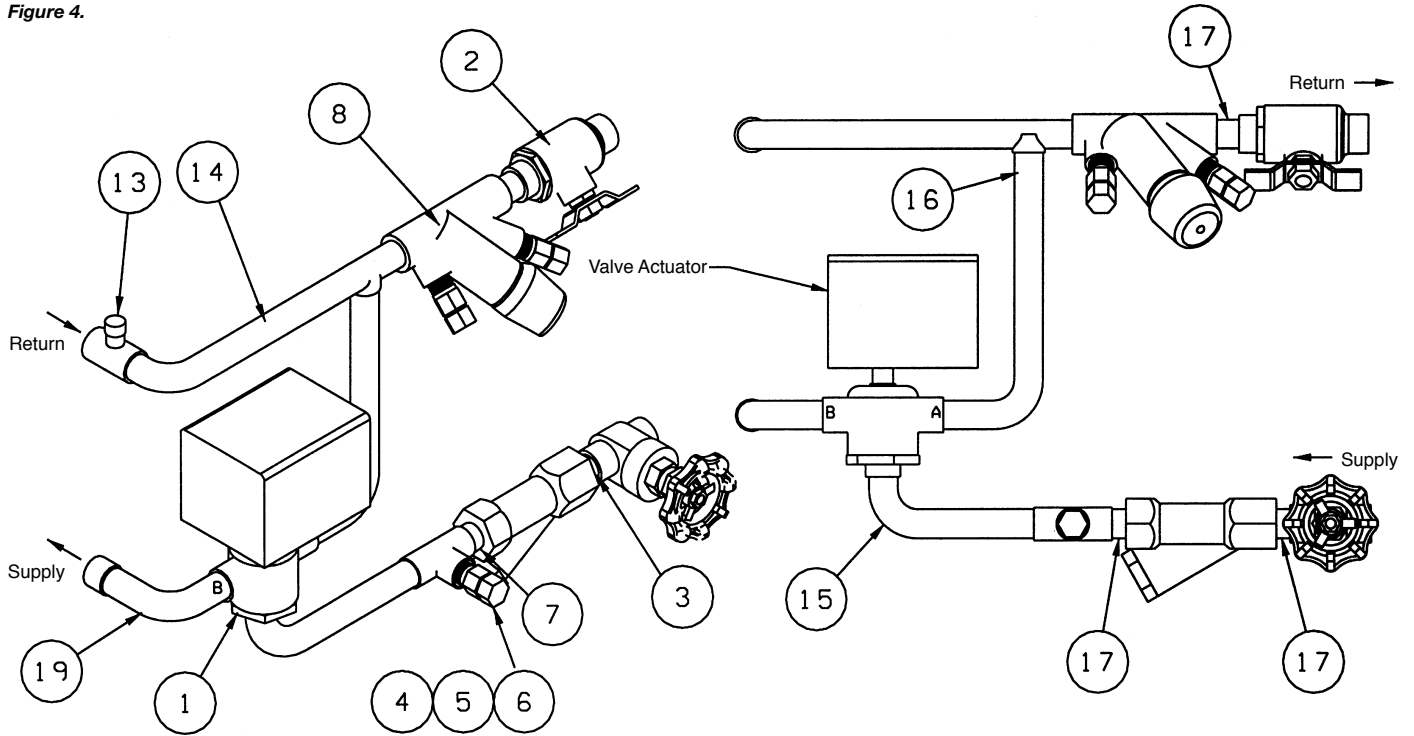
Figure 3.



Bubble No.	Description	Quantity
1	Valve, Body 2-Way	1
2	Valve, Ball T-Hand	1
3	Valve, Manual Gate	1
4	Petes Plug	1
5	Flush Bushing	1
6	Tee-Tube, Non Reducing	1
7	Strainer, Water	1
8	Valve, Circuit Balance	1
9	Not Used	
10	Not Used	
11	Not Used	
12	Not Used	
13	Tube, Elbow W/Hole	1
14	Tube, Capacity Copper 5.0" Long	1
15	Tube, Coil To Valve, Copper	1
16	Tube, Supply	1
17	Tube, Straight, Copper	2
18	Tube, Straight, Copper	1

Typical Valve Assembly Instruction (Deluxe 3-Way, Right Hand, Valve Package Heating Shown)

Figure 4.



Bubble No.	Description	Quantity
1	Valve, Body 3-Way	1
2	Valve, Ball T-Hand	1
3	Valve, Manual Gate	1
4	Petes Plug	1
5	Flush Bushing	1
6	Tee-Tube, Non Reducing	1
7	Strainer, Water	1
8	Valve, Circuit Balance	1
9	Label Information Coil Connection	1
10	Label Information Supply/Return Connection	1
11	Tag - Caution Installing Valves	
12	Not Used	
13	Tube - Coupling, Vent, NIBCO	1
14	Tube, Elbow W/Hole	1
15	Tube	1
16	Tube, Elbow	1
17	Tube, Straight, Copper	3
19	Tube, Elbow	1
	Actuator	1

