



## INSTALLATION INFORMATION WITH MB POWER SUPPLY

1. Determine the proper Automag valve for the installation based on the pipe size, pump head rating and system flow(GPM).

VALVE #	PIPE SIZE	PUMP HEAD	MAX. FLOW(GPM)
AA1/2-14	1/2"	14'	4 1/2
AA1/2-25	1/2"	25'	6
AA3/4-14	3/4"	14'	4 1/2
AA3/4-25	3/4"	25'	6
AA1-16	1"	16'	8
AB3/4-8	3/4"	8'	4 1/2

2. The MB Power Supply is available with a 50VA transformer. Determine the required VA transformer based on the following table:

VALVE #	COIL #	VA
AA1/2-14, AA3/4-14	#31	6
AA1/2-25, AA3/4-25, AA1-16	#29	8
AB3/4-8	#32	4

3. The Automag Zone Valves utilize approximately 24 volts DC to close, therefore are identified as a **normally-open** zone valve. The normally-open feature insures the home owner that hot water will circulate if there is a failure in the power to the zone valve.

4. When installed with an MB Power Supply the Automag Zone Valves require 3-wire Thermostats for each zone. The 3-wire Thermostat controls the opening and closing of the zone valve as well as maintaining Boiler control to the "T & T" connection. 2-wire Thermostats may be used with the MB Power Supply if each zone valve is wired to a CNV84 Relay.(see AUTOMAG ADDITIONAL INFORMATION sheet)

5. Install Automag AA and AB series zone valves on the **RETURN** to insure that water hammer will not occur.

6. Make sure that the direction of flow is correct as indicated by the directional arrow on the valve body.

7. Automag AA zone valves may be installed in any position. It is preferred, however, that AA zone valves be installed on a horizontal line with the coil on top. This is to facilitate gravity flow in case of circulator malfunction. For gravity systems and monoflow(one pipe) systems install coil on top.

8. **Remove coil cover and coil** prior to soldering. **Do not disassemble** the valve base.

9. **DO NOT DEFORM, SQUEEZE, MUTILATE OR OTHERWISE DAMAGE VALVE STEM! DO NOT HOLD VALVE STEM WITH PLIERS! WARRANTY WILL BE VOID IF THIS OCCURS.**

10. **Important!** Do not use excessive flux or solder or some may work its way into valve. The use of strainers reduces the possibility of solder pieces or other debris holding a valve open. These strainers are inserted in the supply side of the valve with the domed end out.

11. Some systems (e.g. systems that were converted from steam to hydronic), contain a considerable amount of loose rust which can clog a zone valve and/or strainer. For installations such as these, it is necessary to use an inline "Y" strainer in front of the zone valve with ball valves as required to isolate system.

12. **Do not exceed circulator head rating of valve!** Use the smallest circulator that will handle the job. Less powerful circulators are quieter and less expensive to buy, operate, maintain, and replace. The choice of slightly larger pipe sizes is preferable to a more powerful circulator. In general, 14' and 16' head valves are satisfactory for use with standard 2" circulators up to 1/6H.P. 25' valves may be uses with 3" circulators(1/2H.P. maximum).

13. **Anticipator Setting:**

When using a thermostat with adjustable anticipator setting, set the anticipator to 1.0.