

# HydroMinderWaterValves Models 502, 503, 570 & 571

**PACKAGE CONTAINS:**

- 1. Water valve assembly
- 2. Bracket for mounting (Models 502 and 570 only)
- 3. Float with chain
- 4. Product information sheet

**THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS**

Hydro Systems manufactures quality chemical proportioners. Please use this equipment carefully and observe all warnings and cautions.

\*\*\*\*\* NOTE \*\*\*\*\*

<b>WEAR</b>	protective clothing and eyewear when dispensing chemicals or other materials.
<b>ALWAYS</b>	observe safety and handling instructions of the chemical manufacturers.
<b>ALWAYS</b>	direct discharge away from you or other persons or into approved containers.
<b>ALWAYS</b>	dispense cleaners and chemicals in accordance with manufacturer's instructions. Exercise CAUTION equipment after each use in accordance with instruction sheet.
<b>CLEAN</b>	equipment after each use to maintain proper operation.
<b>WEAR</b>	protective clothing and eyewear when working in the vicinity of all chemicals, filling or emptying equipment or changing metering tips.
<b>ALWAYS</b>	re-assemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
<b>ATTACH</b>	only to tap water outlets (85 PSI maximum).

**INSTALLATION:**

1. Mount the unit in a level position on the side of a reservoir. If unit is supplied with a bracket, it may be repositioned or removed as necessary. (Retrofit mounting bracket for model 503: Part #5030-K. Retrofit bracket for model 571: Part #106.)
2. Adjust chain length to position float at the desired highest level of water. NOTE: The high volume HydroMinder Water Valves, models 570 and 571, are designed to shut off slowly to help reduce water hammer. Be sure to take this into account when setting the high water level to prevent inadvertent tank overflow. Position the float so that the water discharge does not cause turbulence around the float. It may be necessary to baffle the float from the discharge, or to connect a hose to the HydroMinder discharge fitting so that water is discharged under the water level in the tank.
3. For models 502 and 503, install minimum 1/2-inch water inlet between unit and water supply. Models 570 and 571 should be hard plumbed with minimum 1-inch pipe. Minimum 15 PSID pressure is required for proper operation of the water valves. See flow chart for further information. Larger water lines may be used. They should be plumbed directly into the black valve.

Approx. Flow Rates for Models 502 and 503 (GPM)		
PSID	Inlet: 1/2" ID	3/4" ID or larger
30	5.8	6.0
40	6.8	9.4
50	7.7	
65	8.7	

Approx. Flow Rates for Models 570 and 571 (GPM)	
PSID	Inlet: 1" ID or larger
10	13.0
20	25.8
35	44.0
40+	Subject to building water system constraints

**OPERATION:**

Turn water source to valve on. If using Model 502, open water supply inlet ball valve. When the solution in the reservoir reaches the level set by the float, the magnetic valve on the HydroMinder will close. This will stop the water flow. When withdrawal from the reservoir causes the level to drop more than 1 1/2 inches, the valve will open and the reservoir will be refilled to the previous level. This cycle will be repeated automatically as long as the water supply is on. The shut-off valve on the 502 and any water source control valves should be **fully closed** when reservoir is drained or when the unit is not in use.

**TROUBLESHOOTING:**

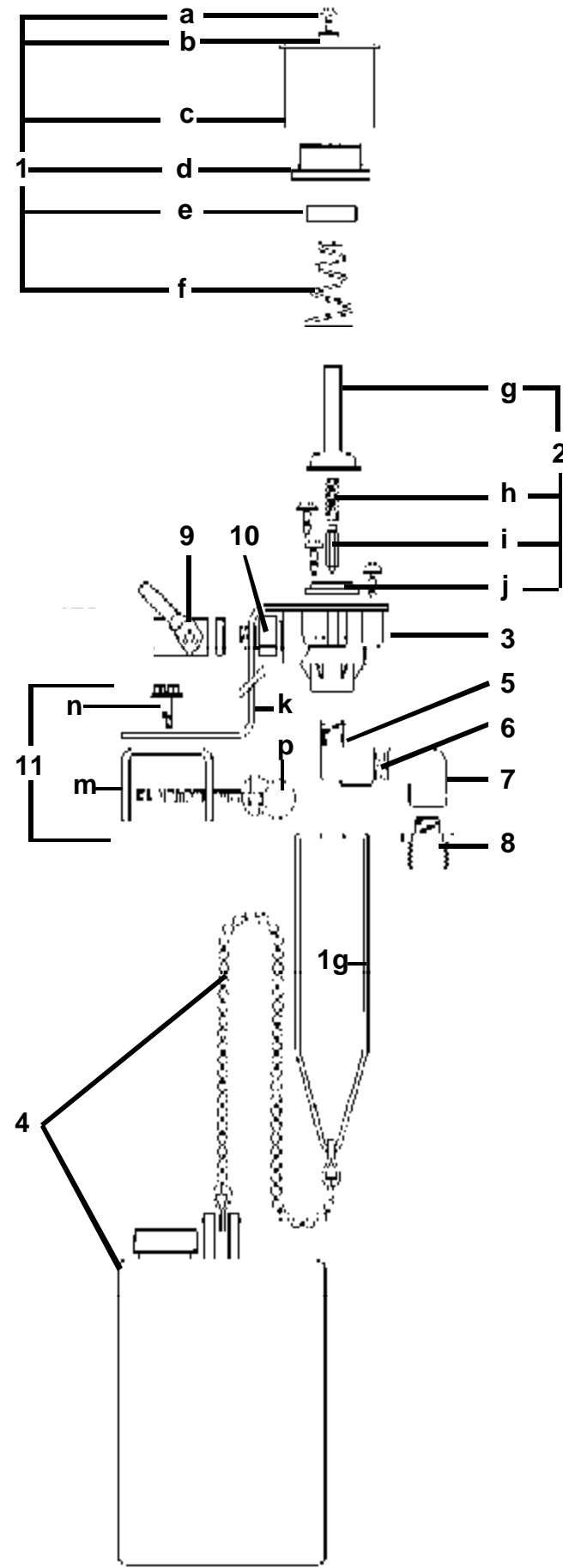
PROBLEM	CAUSE	SOLUTION
1. No discharge	a. No water b. Defective magnetic valve assembly c. Excessive water pressure	a. Open water inlet valve (applies only to 502) b. Replace assembly c. Install regulator if pressure exceeds 85 PSI
2. Failure of unit to turn off	a. Valve parts dirty or defective b. Magnet spring too short c. Clogged valve orifice d. Water pressure too high e. Diaphragm stretched	a. Clean or replace* b. Replace spring c. Clean or replace d. Install regulator if pressure exceeds 85 PSI e. Replace

\* Hard water may cause build-up of mineral deposits in water valve. Remove deposits by soaking the valve parts in a deliming solution.



### HydroMinder Water Valve Models 502 & 503: Parts Diagram and List

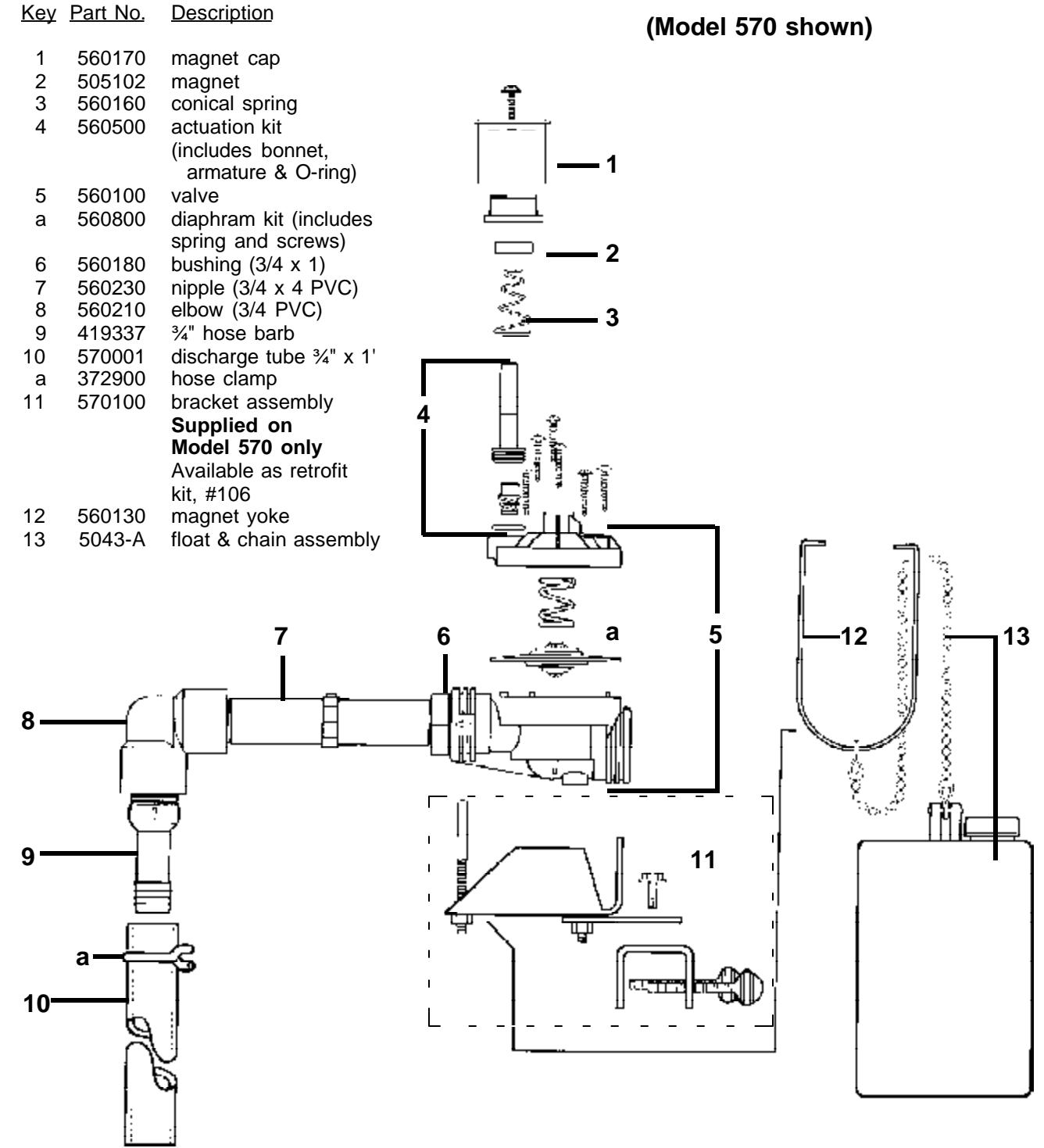
(Model 502 shown)



Key	Part No.	Description
1	5051-K	magnet parts kit
	a.	screw
	b.	washer
	c.	magnet cover
	d.	magnet cap
	e.	magnet
	f.	magnet spring
	g.	magnet yoke
2	6655-K	valve parts kit
	g.	valve guide assembly
	h.	armature spring
	i.	armature
	j.	diaphragm
3	520000	water valve body
4	5043-A	float & chain assembly
	507200	bead chain only
5	505600	elbow (male x female)
6	519000	close nipple
7	506000	elbow (female x female)
8	351500	barb, 1/4" MPT x 1/2"
<b>MODEL 502 ONLY:</b>		
9	502000	ball valve
10	360900	nipple
11	5030-K	mounting bracket kit
	(specify model 502)	k. Z-bracket
		m. U-clamp
		n. screw
		p. thumbscrew

### HydroMinder High Volume Water Valve Models 570 & 571: Parts Diagram and List

(Model 570 shown)



Key	Part No.	Description
1	560170	magnet cap
2	505102	magnet
3	560160	conical spring
4	560500	actuation kit (includes bonnet, armature & O-ring)
5	560100	valve
a	560800	diaphragm kit (includes spring and screws)
6	560180	bushing (3/4 x 1)
7	560230	nipple (3/4 x 4 PVC)
8	560210	elbow (3/4 PVC)
9	419337	3/4" hose barb
10	570001	discharge tube 3/4" x 1'
a	372900	hose clamp
11	570100	bracket assembly
<b>Supplied on Model 570 only</b>		
Available as retrofit kit, #106		
12	560130	magnet yoke
13	5043-A	float & chain assembly