

# HydroMinder Water Valves

## Models 502, 503, 570 & 571

**PACKAGE CONTAINS:**

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

**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 No. 5030-K. Retrofit bracket for model 571: Part No. 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. Make sure this is taken 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 13mm water inlet between unit and water supply. Models 570 and 571 should be hard plumbed with minimum 25mm pipe. Minimum 15 PSID pressure is required for correct 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:	13mm ID	18mm 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:	25mm ID or larger
10		13.0
20		25.8
35		44.0
40+		Subject to building water system constraints

**OPERATION:**

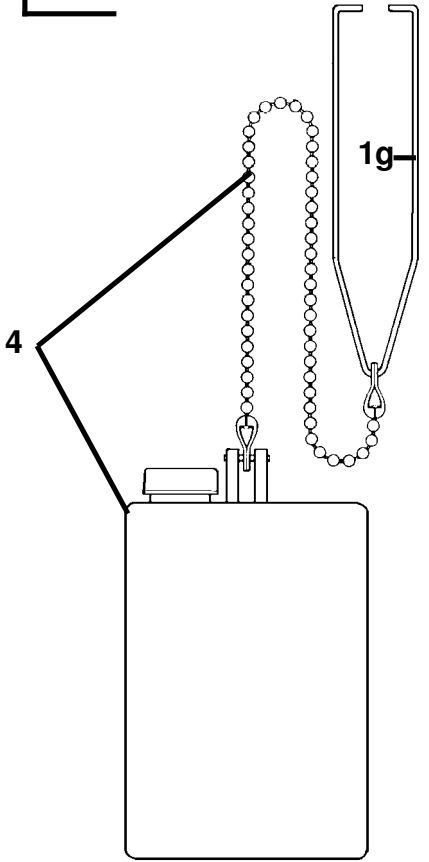
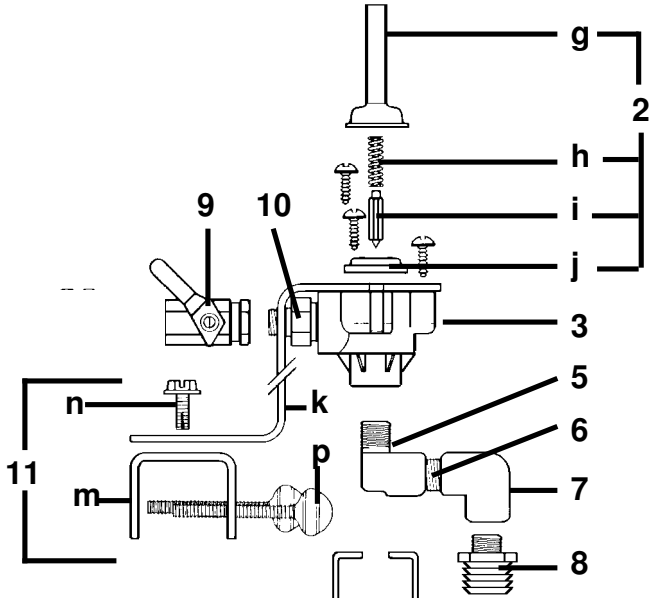
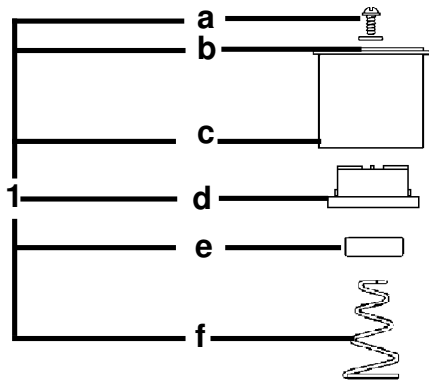
Turn water source to valve on. If using Model 502, open water supply inlet ball valve. When the solution in the reservoir reaches the level set by the float, the magnetic valve on the HydroMinder will close. This will stop the water flow. When withdrawal from the reservoir causes the level to drop more than 37.5mm, 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 6 bar
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 6 bar 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	10080500	magnet parts kit
		a. screw
		b. washer
		c. magnet cover
		d. magnet cap
		e. magnet
		f. magnet spring
		g. magnet yoke
2	665520	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, 6mm MPT x 13mm
<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 502 & 570 Parts Diagram and List

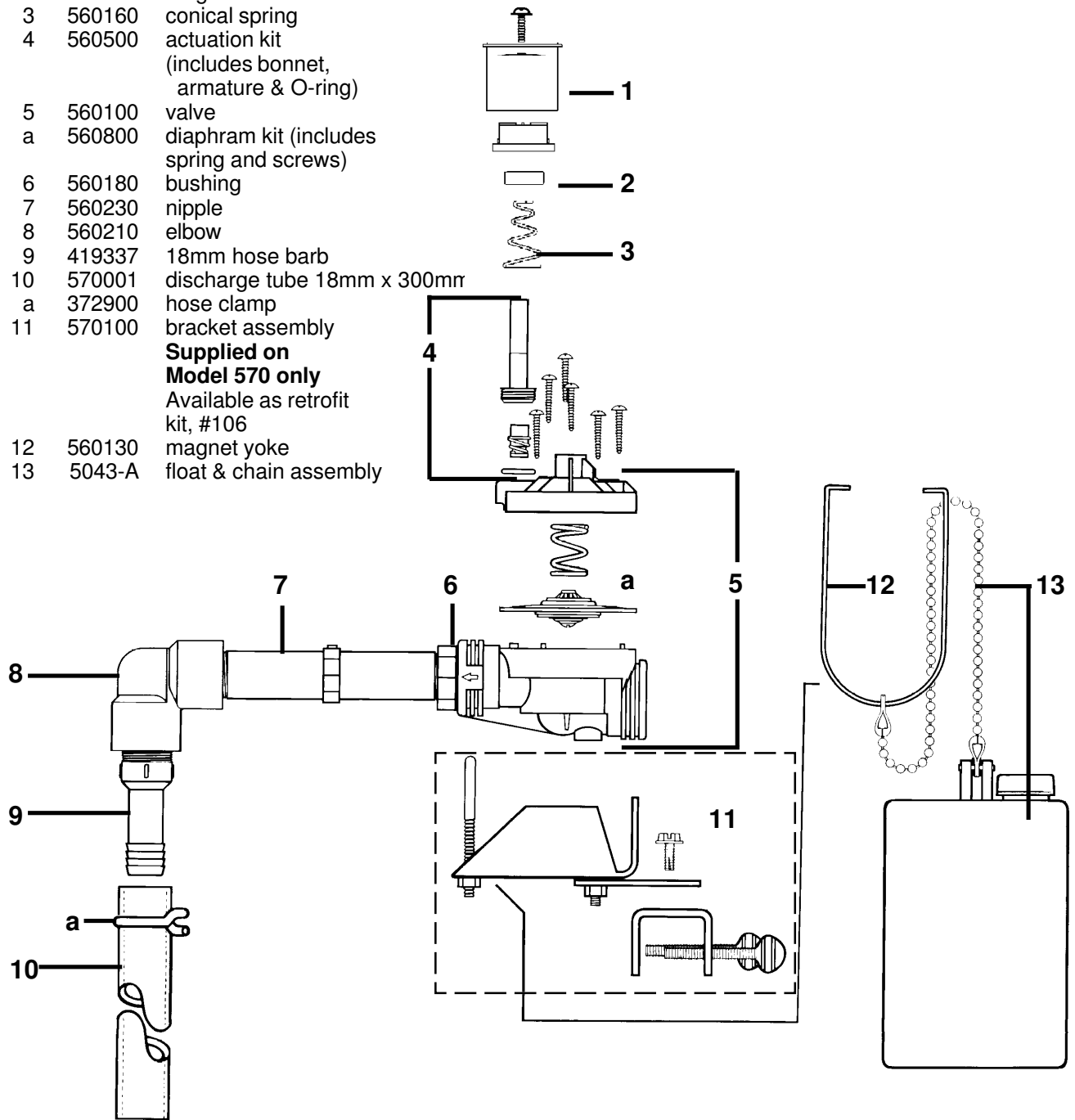
Key Part No. Description

(Model 570 shown)

- 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
- 7 560230 nipple
- 8 560210 elbow
- 9 419337 18mm hose barb
- 10 570001 discharge tube 18mm x 300mm
- a 372900 hose clamp
- 11 570100 bracket assembly

**Supplied on  
Model 570 only**  
Available as retrofit  
kit, #106

- 12 560130 magnet yoke
- 13 5043-A float & chain assembly





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