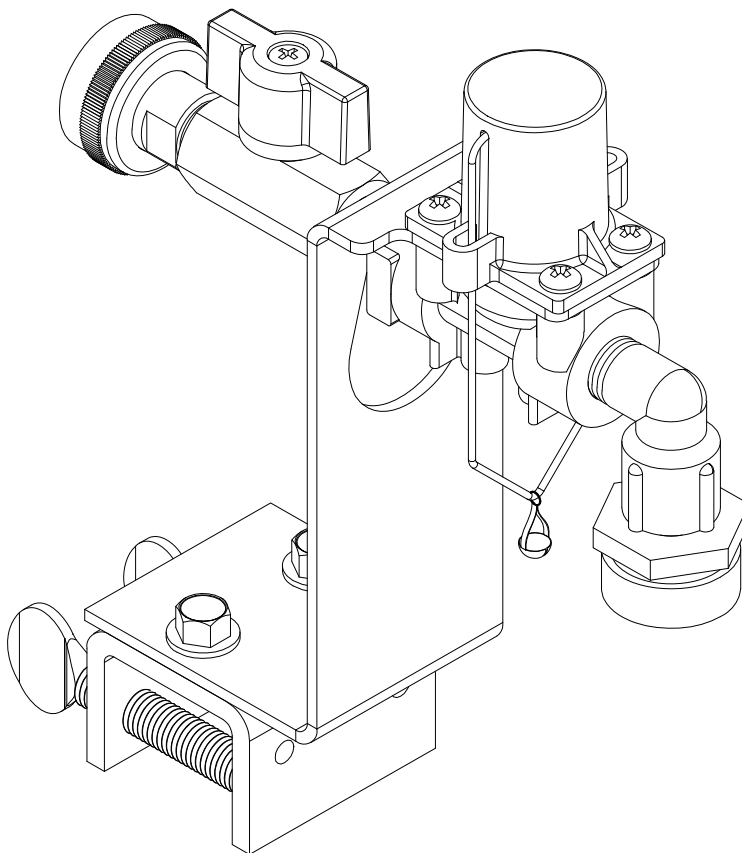


**WATCH GUARD
MODEL 440N
INSTALLATION INSTRUCTIONS**



Overview

Watch Guard 440 Series float valves are designed to automatically fill and maintain fluids in reservoirs. This model includes brackets for secure attachment and a shut-off ball valve.

Warnings



ALL ELECTRICAL POWER MUST BE TURNED OFF TO THE DISPENSER AND TO THE APPLIED MACHINE.



All installations must conform to local plumbing codes and use approved backflow prevention devices. A pressure indicating tee is to be installed with existing faucets according to local plumbing codes in the state of Wisconsin and any other state that requires the use of a pressure indicating tee.



ALWAYS WEAR PROTECTIVE CLOTHING AND EYEWEAR WHEN WORKING WITH CHEMICAL PRODUCTS.

Specifications

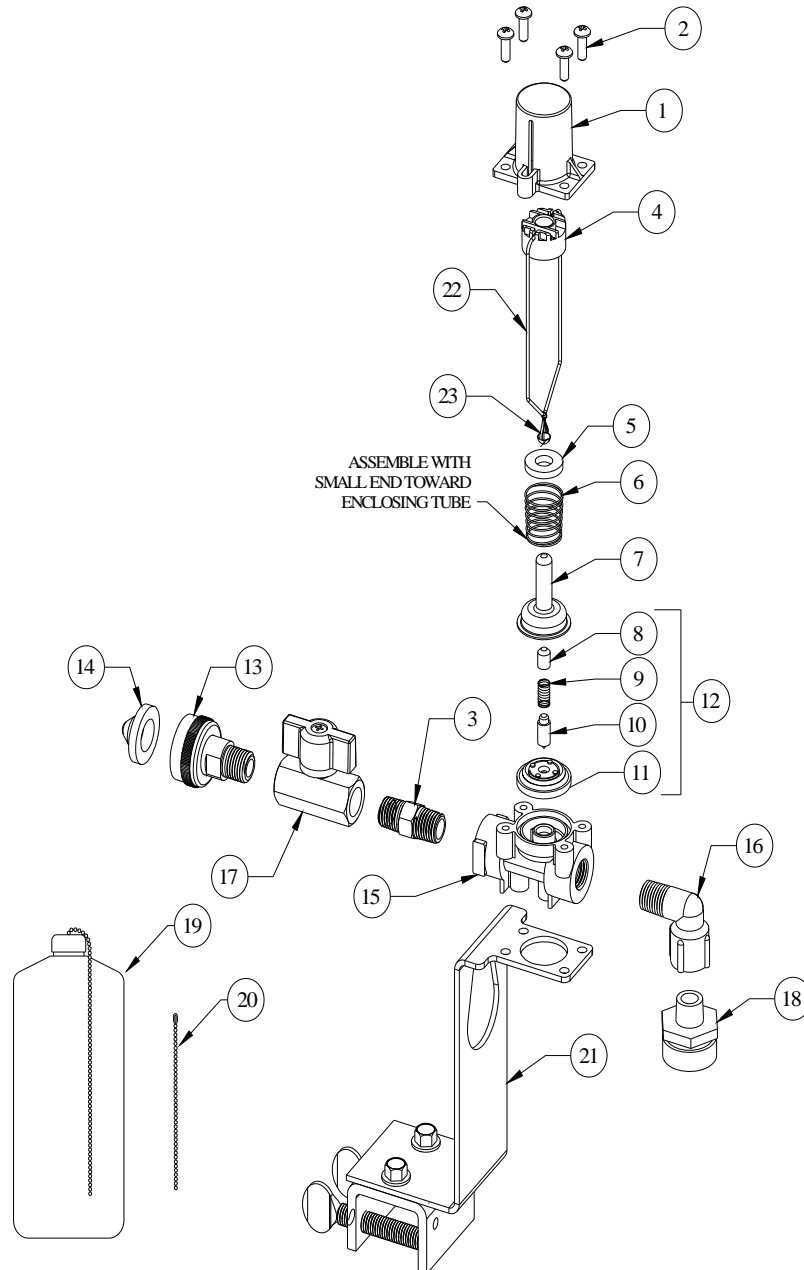
Packing List

- A. Valve Assembly with Brackets
- B. Float and chain

Operational Requirements

- 150 PSI. Max./ 15 PSI. Min. Pressure
- 120 F Max./33° F Min. Temperature
- 6 GPM Max. Flow Rate @ 50 PSI.

Parts list



NO.	PART NO.	DESCRIPTION
1	35-44	Magnet Housing
2	44-116-1	Screws
3	--	1/4" Hex Nipple
4	35-43	Magnet Holder
5	63-35	Magnet
6	35-33	Spring
7	41-7-25	Enclosing Tube
8	63-37	Spacer
9	41-1-8	Spring
10	63-38	Plunger
11	41-15-10	Diaphragm
12	63-87	Valve Repair Kit

NO.	PART NO.	DESCRIPTION
13	61-120	Inlet Hose Adapter
14	100-38	Inlet Strainer
15	35-36	Valve Body
16	50-63	Street Elbow
17	16-11	Ball Valve
18	61-122-2	Adapter (MGHT x 1/4" MNPT)
19	35-18	Float Assembly
20	34-17	16" Chain W/Connector
21	35-34	Mounting Bracket Assembly
22	35-42	Float Hanger Wire
23	35-12	Float Hanger Clip

Installation

A. Valve Assembly:

Attach bracket to tank as shown in figure #1 or #2. Connect a garden hose to the valve assembly, or mount the valve assembly directly to a 1/4" NPT pipe line by removing the inlet garden hose adapter. If using a 1/4 NPT connection, apply pipe dope or 2-3 wraps of Teflon tape, hand tighten. Then turn with a wrench until snug. **DO NOT OVER TIGHTEN.**

B. Float:

Run chain through the clip on the pull wire until the top of the float is about 1 to 2 inches above the desired maximum water level (with pull wire in "up" position.) Snap the bead into the clip to hold the chain in place. Excess chain may be cut off if so desired.

(See Figure #1)

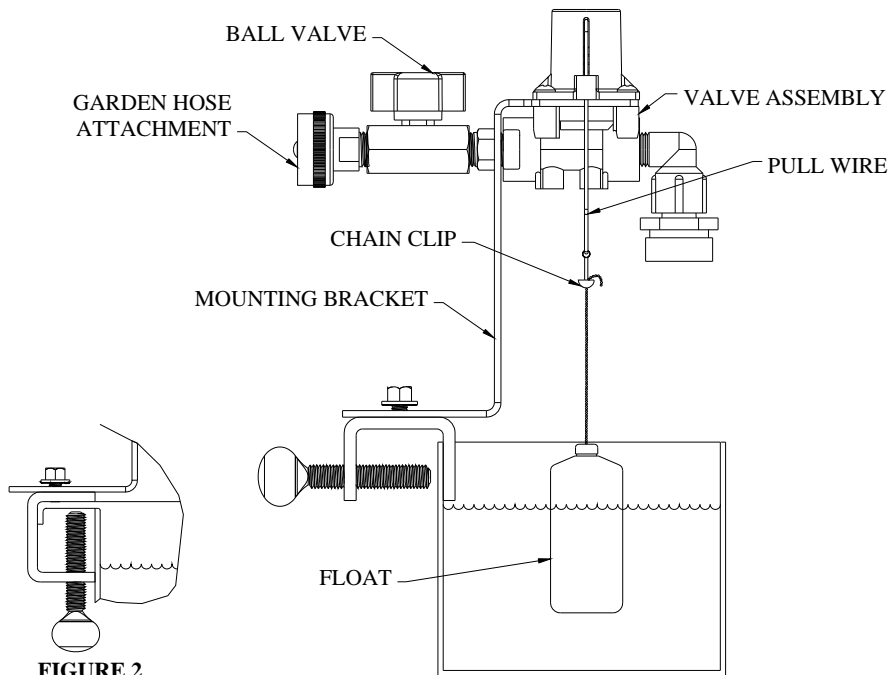


FIGURE 1

**FIGURE 2
(OPTIONAL)**

Operation

Turn on the main water valve. When the fluid level reaches about two (2) inches below the top of the float, the valve will close. When the tank level drops about four (4) inches, the valve will open again. Water flow is shown in Table 1.

TABLE 1

Cv FLOW FACTOR	GPM AT PRESSURES SHOWN				
	1 psi 0.069 Bars	2 psi 0.138 Bars	5 psi 0.345 Bars	10 psi 0.690 Bars	20 psi 1.379 Bars
1	1GPM 3.8 L/Min	1.4GPM 5.3L/Min	2.2GPM 8.3 L/Min	3.2GPM 12.1 L/Min	4.5GPM 17.0 L/Min

Troubleshooting

CAUTION: TURN OFF WATER SUPPLY BEFORE SERVICING.

If valve fails to open check that water supply does not exceed 150 psi. If valve fails to open or close, check that the wire moves freely up & down and that a "click" can be heard when the wire is pulled and released, indicating that the magnet is activating the plunger properly. To inspect internal parts, remove magnet housing and carefully pull off the enclosing tube so as not to drop the plunger, kick-off spring and spacer. Check for dirt or damage impeding plunger and kick-off spring movement. Inspect the diaphragm, making sure the two small pin holes (bleed holes) in the diaphragm convolution are clear to allow the valve to close.

CAUTION: WHEN SERVICING UNIT, BE SURE THAT REPLACEMENT PARTS HAVE BEEN INSTALLED ACCORDING TO DRAWING.

Warranty

RETURNS: NO MERCHANDISE MAY BE RETURNED FOR CREDIT WITHOUT DEMA'S WRITTEN PERMISSION. RETURN MERCHANDISE AUTHORIZATION NUMBER REQUIRED IN ADVANCE OF RETURN.

WARRANTY: DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products which have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, improper voltage supply, physical abuse, or misapplication. Rubber and synthetic rubber parts such as "o"-rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of DEMA products. If products are altered or repaired without prior approval of DEMA, this warranty will be void.

Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. DEMA assumes no liability for damages. Return merchandise authorization number, to return units for repair or replacement, must be granted in advance of return.