

# ENERGY - FREE LIVESTOCK DRINKER INSTALLATION INSTRUCTIONS, WARRANTY INFORMATION, AND REPAIR PARTS LISTS

READ ALL DIRECTIONS CAREFULLY BEFORE BEGINNING INSTALLATION

FIRST OF ALL – PURCHASE AN ANTI-SEIZE COMPOUND (BY PERMATEX OR EQUIVALENT) AVAILABLE AT MOST AUTOMOTIVE SUPPLY STORES. USE ON THE MOUNTING LAG BOLTS AND USE ON YOUR VALVE COVER FASTENERS.

EXHIBIT A

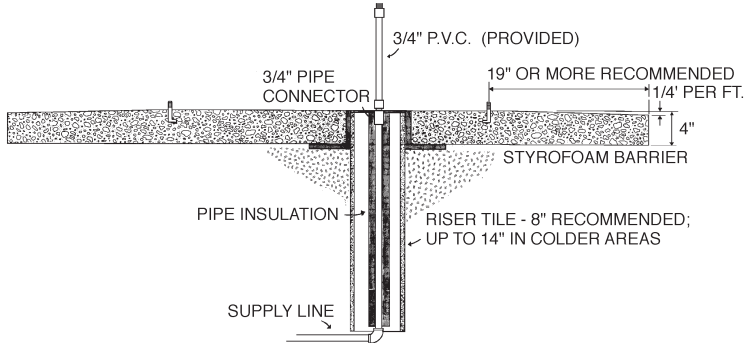


EXHIBIT B

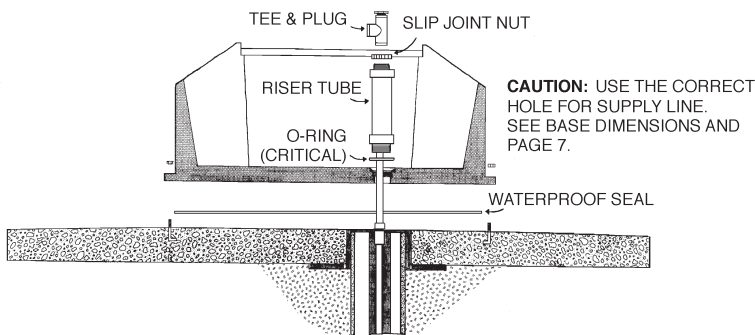


EXHIBIT C

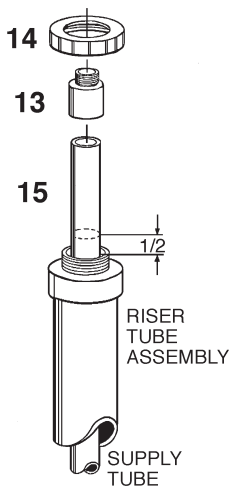
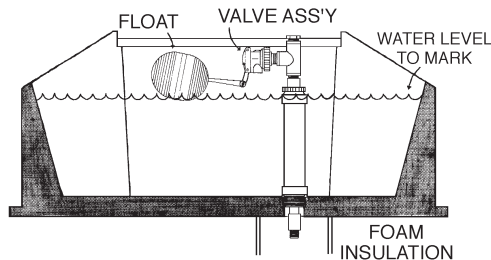


EXHIBIT D



**MOUNTING THE VALVE - Review Exhibit D.** Adjust the float so water fills the reservoir approximately 1 inch (2.54 cm) from the overflow of the drink opening. There is a "FILL TO THIS LINE" mark in each drink opening. If necessary, mount flaps to the cover using the 13 inch (33 cm) hinge rod and OF121 washer on each end of the rod and the OF78 cotter pin on each flap. On some models, the flaps are already attached. Mount the cover assembly to the base. Use the OF448 hex machine screws and OF127SS washer to mount the cover assembly to the base. LIGHTLY SNUG THE SCREWS ONLY. DO NOT OVERTIGHTEN. **WE HIGHLY RECOMMEND USE OF ANTI-SEIZE COMPOUND (BY PERMATEX OR EQUIVALENT) ON THE OF448 HEX MACHINE SCREWS.**

The valve comes assembled. Refer to Exhibit F for valve repair parts.

**NOTE: MAKE SURE MACHIN-ED 3/4 INCH MPT TO PVC ADAPTER IS UP. THE NON-MACHINED STANDARD ADAP-TER IS GLUED TO THE BOTTOM END OF THE SUPPLY TUBE. ALLOW SUPPLY TUBE TO EXTEND 1/2 INCH (1.27 cm) BEYOND THE RISER TUBE ASSEMBLY.**

**RISER TILE -** The ideal size of riser tile depends on the installation, source of water and geography. If you are replacing an existing waterer and have had no supply line freezing problems and have been using no supplemental heat on your supply line, you can probably use your existing tile. For best protection, we recommend that a new riser tile of at least 8 inches (20.3 cm) diameter be installed. INSTALLATION MUST BE MADE WITHOUT THE SUPPLY LINE TOUCHING THE RISER TILE AND THERE MUST BE NO DEBRIS OR DIRT IN THE RISER TILE. DO NOT STUFF YOUR RISER TILE WITH INSULATION AS IT CAN BECOME WATER LOGGED RESULTING IN FROST PENETRATION. If the installation is north of Interstate 90 or if frost heaving is a problem in your area, use a flexible supply line, such as 3/4 inch (1.9 cm) braided vinyl tubing available at most plumbing supply outlets. If your water supply line is flexible and you are concerned that the flex may cause it to touch the riser tile, use a deep well submersible cable guard (a nylon plate that slips over the supply line and keeps it centered). Ask for a deep well submersible pump cable guard at your local plumbing supply outlet. Be sure to use the foam pipe insulation (provided) and make sure the insulation does not touch the riser tile as well. Review Exhibit E on page 2. Where entering water is 54°F (12°C) or higher, you will probably not need to use a tile larger than 8 inches (20.3 cm) diameter. If entering water is 50°F (10°C) or colder, we recommend a tile of about 12 inches (30.5 cm) diameter. If incoming water has a temperature of the lower 40's°F (about 4°C), use a 14 inch (35.6 cm) tile.

**MOUNTING PAD -** Review Exhibit A. Concrete pad should be about 4 inches (10.2 cm) thick. Surface area where drinker sits should be smooth and level to provide a good seal. From the edge of the drinker, pad should slope about one-quarter inch per foot (about 1 cm per 48 cm). The size of the pad is left to the user's discretion but we suggest you pour a pad large enough for livestock to stand on while drinking (about 19 inches (48 cm) beyond the edge of unit on all four sides). A rough broom finish provides better livestock footing. NOTE: The area where drinker sits should be smooth. A styrofoam barrier should be provided around the riser tile. Supply line should be at least 3/4 inch (1.9 cm) diameter. However, line should be sized to account for any pressure drop relating to distance. Water lines over 50 feet (15 meters) should be one inch (2.54 cm) or larger. Use of undersized supply line may cause loss of recovery capability. Attach a 3/4 inch (1.9 cm) N.P.T. female connector (not included) to your supply line. Make sure top of riser tile is flush with top of pad. Also, make sure the top of the female connector is flush with top of the pad. Connect the provided 3/4 inch (1.9 cm) STANDARD MPT to PVC ADAPTER (Ref. No. 18). Glue 3/4 inch (1.9 cm) PVC tube (provided) to the STANDARD 3/4 inch (1.9 cm) MPT to PVC adapter (Ref. No. 18).

**MOUNTING DRINKER -** Review Exhibit B.

- Slide pipe insulation down over supply tube making it even with the top of the riser tile. Hold in place at the top with tywrap provided.
  - Stick base seal to reservoir bottom, about 1 inch (2.54 cm) in from the edge on the sides and just inside the anchor slots across the ends.
  - Set reservoir over supply tube keeping supply tube centered in the tile. Anchor drinker at this time.
  - Slip riser tube over supply tube and tighten into reservoir base. Make sure O-ring is in place on the riser tube.
- Review Exhibit C.
- Mark supply tube so that 1/2 inch (1.27 cm) extends above the top of riser tube and cut supply tube at mark. Removing riser tube before cutting supply tube may make this step easier. Glue MACHINED 3/4 inch (1.9 cm) MPT to PVC adapter (Ref. No. 13) to top of supply tube. Replace and tighten riser tube if you have removed it.
  - Tighten slip joint nut, (Ref. No. 14) at top of riser tube, against the biggest diameter of the 3/4 inch (1.9 cm) MPT to PVC adapter (Ref. No. 13) on the supply tube. This should be centered on the smooth surface.
  - Tighten 3/4 inch (1.9 cm) tee on supply tube with the pipe plug up.
  - Lag drinker to pad. Use an anti-seize compound on the lag bolt threads and nuts.

Use of an anti-seize compound will extend the life of the inserts used to hold your valve cover in place. Should your inserts become non-useable, order the following replacement parts.

**OF406**—Insert, 3/8"-16 Internal Thread, Zn

**OF445**—3/8"-16 x 1 1/2" Hex Head Cap Screw, SS

**MANAGEMENT SUGGESTIONS:**

Locate drinker in a sheltered place if possible. Install unit 25 feet (7.5 meters) or so from feed sources to reduce the amount of feed dropped into the tank.

If making a new installation, a stop and waste valve should be considered for a shut off valve.

Water will probably enter the unit at 44°F to 56°F (6.7°C to 13.3°C) depending on your geographic area. See Exhibit E. ALSO, NOTE PARAGRAPH 7 BELOW CONCERNING POND WATER OR OTHER COLD SOURCE WATER. Water inside the unit will lose 10-12°F (5°-6°C) per day with no usage (when windchill temperature is 0°F (-17°C)). When you see ice, the drinker is telling you it's running out of energy. To avoid icing, follow these tips.

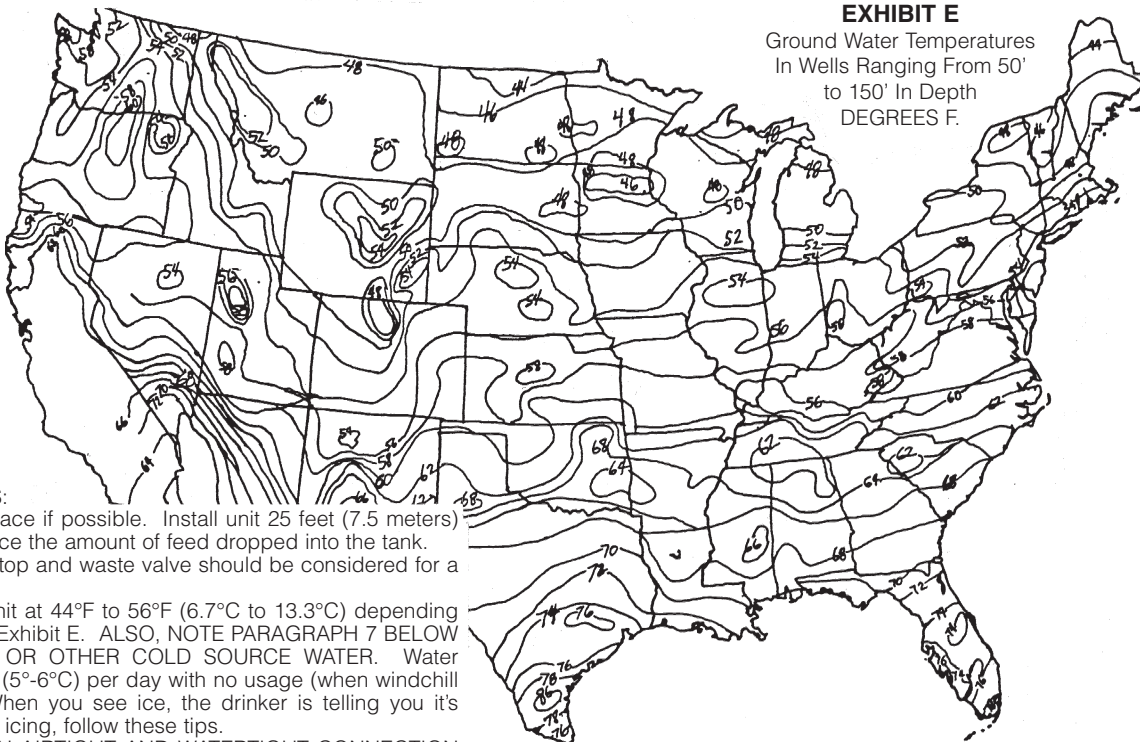
1. MAKE SURE YOU HAVE AN AIRTIGHT AND WATERTIGHT CONNECTION BETWEEN THE MOUNTING PAD AND DRINKER BASE.
2. MAKE SURE YOUR RISER TILE IS FLUSH WITH THE TOP OF THE PLATFORM.
3. MAKE SURE THERE IS NO OTHER SOURCE OF WATER IN THE FEEDLOT - ABSOLUTELY NONE. BE SURE THERE ARE NO PONDS, STREAMS, STOCK TANKS OR ANY ALTERNATIVE SOURCE OF WATER OTHER THAN YOUR ENERGY FREE DRINKER.
4. MAINTAIN THE WATER LEVEL AT 1 INCH (2.54 cm) BELOW THE TOP OF THE DRINK OPENING. In the event of water supply failure, cover the drinker so animals cannot drink from it. If water has already dropped below the bottom end of the baffle in the drinking opening, add water to within 1 inch (2.54 cm) from drinker opening.
5. Under the most extreme conditions and with little drinking activity, you may see ice in the drinker openings. Should this occur, simply break the ice, dip out a couple of gallons (8 liters) and listen for the valve to open. If supply line freezes, remove plug at top of supply line and use rod to dislodge any ice or pour hot water down supply line. You can also use rock salt.
6. Check drinker flaps daily. Remove any ice from drinker opening.
7. PLEASE NOTE: As we say on our literature, IF ENTERING WATER IS LESS THAN ABOUT 40°F (4.4°C), SUCH AS WATER FROM A POND, MOUNTAIN SPRING WATER OR COLDER GROUND WATER, YOU MAY EXPERIENCE ICING IN THE DRINKER OPENINGS. Most pond water is less than 40°F (4.4°C) (as low as 34°F (1.1°C)) after the pond is iced over. We do not guarantee results where the entering water is less than 40°F (4.4°C). Drinkers can work in such cases. Chances for success increase if the drinker is sheltered and if you have an abundance of drinking activity (50 head +). Most likely, the valve will stay open but - under severe conditions - you may have to remove ice from your drinker openings daily. Severe conditions are where windchills or actual temperatures are consistently below about 10°F (-12°C) day and night.

ALSO, please note that this paragraph applies primarily to our units with less than 15 gallons (56.8 liters) capacity; i.e. WPM10/MPM10/WPM14. Our 20 gallon (75.7 liter) and larger capacity units tend to work better with colder incoming water. However, even with these, you may still experience occasional icing. Follow these additional tips for ease of management.

8. If drinker is not being used for short periods in the winter, dip out or drain 3-5 gallons (11-19 liters) each day to prevent eventual freezing.
9. If unit is not being used for extended periods, drain unit completely, shut off the water and drain water line below frost level.
10. If you experience any difficulty in getting animals to drink, invert flaps for a few days. See our brochure.
11. When tank needs to be cleaned, stir up solids so they are in suspension. Reach through drinker openings and remove plugs (or push plugs through outside openings). The valve will activate giving a flushing action.
12. When servicing during cold weather, use artificial inseminator's plastic sleeve to keep hands and clothing dry.
13. If drinker is used inside and if animals drink continuously, you may not need to use flaps. Before removing, however, tie them open or invert to see if any icing occurs.
14. If ice buildup occurs from animals slobbering around the opening, lower the water level slightly (not more than 1 inch).

**EXHIBIT E**

Ground Water Temperatures  
In Wells Ranging From 50'  
to 150' In Depth  
DEGREES F.

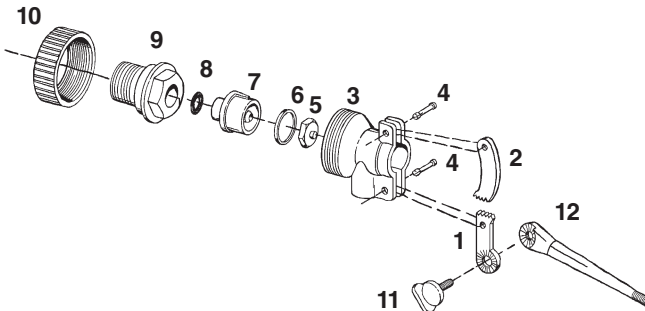


**VP VALVE CAPACITIES**  
Gallons per Minute  
(Liters)

	VP114 5/32" Orifice	VP16 1/4" Orifice	VP17 3/8" Orifice
PS			
20	2.44 (9.2)	3.70 (14.0)	5.00 (18.9)
40	3.70 (14.0)	6.25 (23.7)	8.33 (31.5)
60	4.55 (17.2)	7.69 (29.1)	9.62 (36.4)
80	5.00 (18.9)	7.94 (30.0)	9.62 (36.4)

Model VP16 1/4 inch orifice comes standard with Model VP124 valve, the standard valve on all energy free drinkers. For rural water/high water pressure situations, consider adding a water pressure regulator.

Ref. No.	Part No.	Description	Qty.
1	VP19	Power Link	1
2	VP110	Cam Link	1
3	VP11	Valve Body	1
4	VP111	Link Pin	2
5	VP18	Plunger	1
6	VP113	Diaphragm, Rubber	1
7	VP16	Orifice 1/4	1
8	VP112	O Ring 5/8 x .103 Neoprene	1
9	VP13	Base 3/4 OD x 1/4 ID, Plastic	1
10	VP15	Assembly Nut	1
11	VP115*	Adjust Screw	1
12	WC726P*	Float Arm Plastic	1



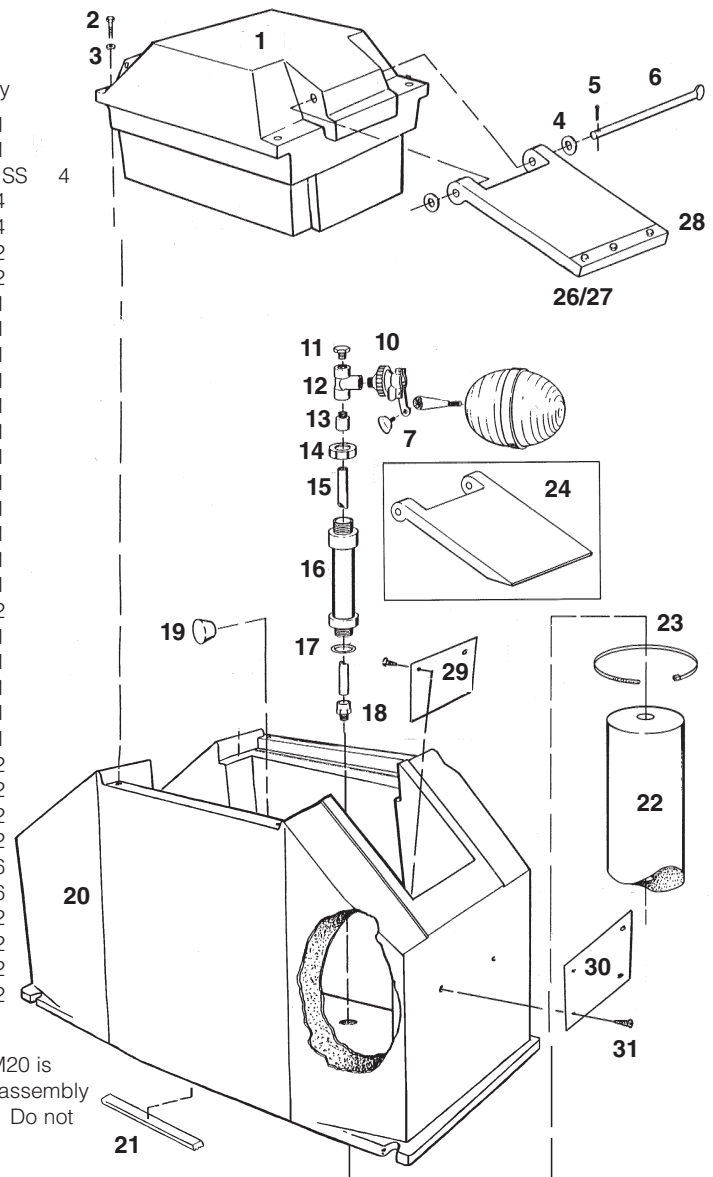
**EXHIBIT F**

\*VP115 and WC726P are not included with VP124 valve.

# Assembly Schematic, Repair Parts List, Base Dimensions

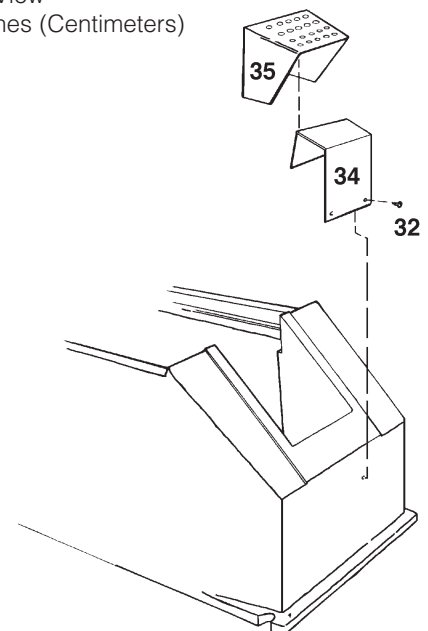
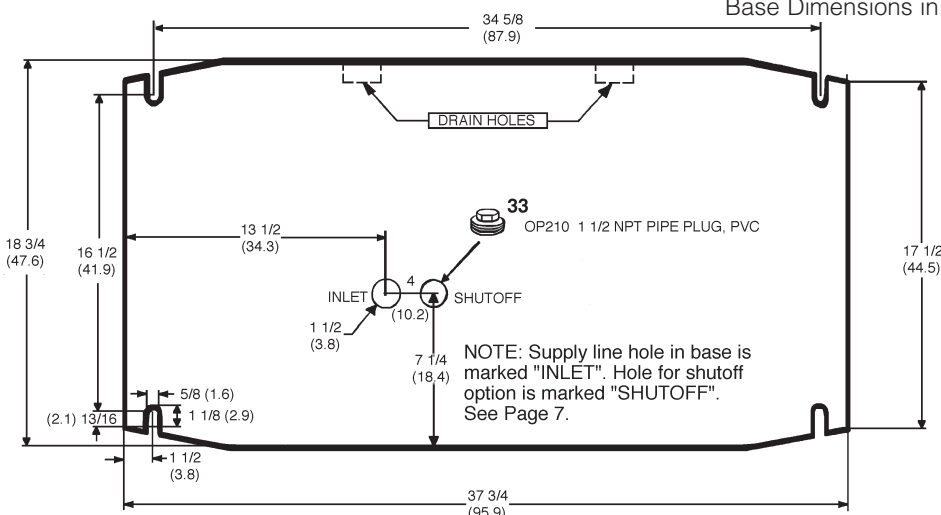
## Models WPM10, WPM10A, MPM10, MPM10A

Ref. No.	Part No.	Description	Qty
1	WPM103	Cover, Blue	1
1	MPM103	Cover, Red	1
2	OF448	1/4"-20 x 1 1/2" Slotted Indented Hex Head Machine Screw, SS	4
3	OF127SS	1.10" OD x .280" ID Washer, SS, 1"	4
4	OF351	5/16" ID x 3/4" OD Washer, SS - 5/16"	4
5	OF78SS	1/8" x 3/4" Cotter Pin, SS	2
6	WPM107	.311" x 13.187" Lid Hinge Rod, Zinc	2
7	VP115	Adjusting Screw	1
8	WC726P	Float Arm, 3 5/8" Plastic	1
9	OP321	Poly Float, Plastic	1
10	VP124	Valve Assembly, 1/4" Orifice	1
11	OP223	3/4" Schedule 40 Plug, PVC	1
12	OP114	3/4" x 3/4" x 3/4" Schedule 80 Tee, PVC	1
13	OP116	3/4" Schedule 40 Male Adapter, Machined, PVC	1
14	OP117SJN	1 1/4" Slip Joint Nut	1
15	WPM112	3/4" PVC Pipe x 14-3/4" (Supply Tube)	1
16	WPM113	Riser Tube Assembly, 10"	1
17	OP119	1 3/4" ID x 2 1/8" OD "O" Ring, Rubber	1
18	OP116P	3/4" Schedule 40 Male Adapter, Standard, PVC	1
19	OP120	#11 Rubber Stopper	2
20	WPM100	Base Reservoir 10 Gal., Blue	1
20	MPM100	Base Reservoir 10 Gal., Red	1
21	WPM110	Base Seal 8 1/2'	1
22	WT208	Foam Pipe Insulation 36"	1
23	OP93	10 1/2" Tywrap	1
24	WPM205	Flap for WPM10A, Sheep, Blue	2
24	MPM205	Flap for MPM10A, Sheep, Red	2
25	WPM105	Flap for WPM10, Hog, Blue, Plastic Only	2
25	MPM105	Flap for MPM10, Hog, Red, Plastic Only	2
26	OF460	1/4"-20 x 1 1/2" Slotted Truss Head Machine Screw SS	6
27	OF449	Nylon Lock Nut	6
28	WPM106	Flap Guard	2
29	WPM124	Inner Lip Guard	2
30	WPM125	Outer Lip Guard	2
31	OF476	10 x 5/8" Tapping Screw, SS	12
	WPM108	Hardware Bag	



**NOTE:** Base dimensions of models are not the same. For example: WPM20 is longer than WPM10. Also, the threaded access for the riser tube assembly is not in the same location on all drinkers. Consult each diagram. Do not assume models are similar.

Top Down View  
Base Dimensions in Inches (Centimeters)

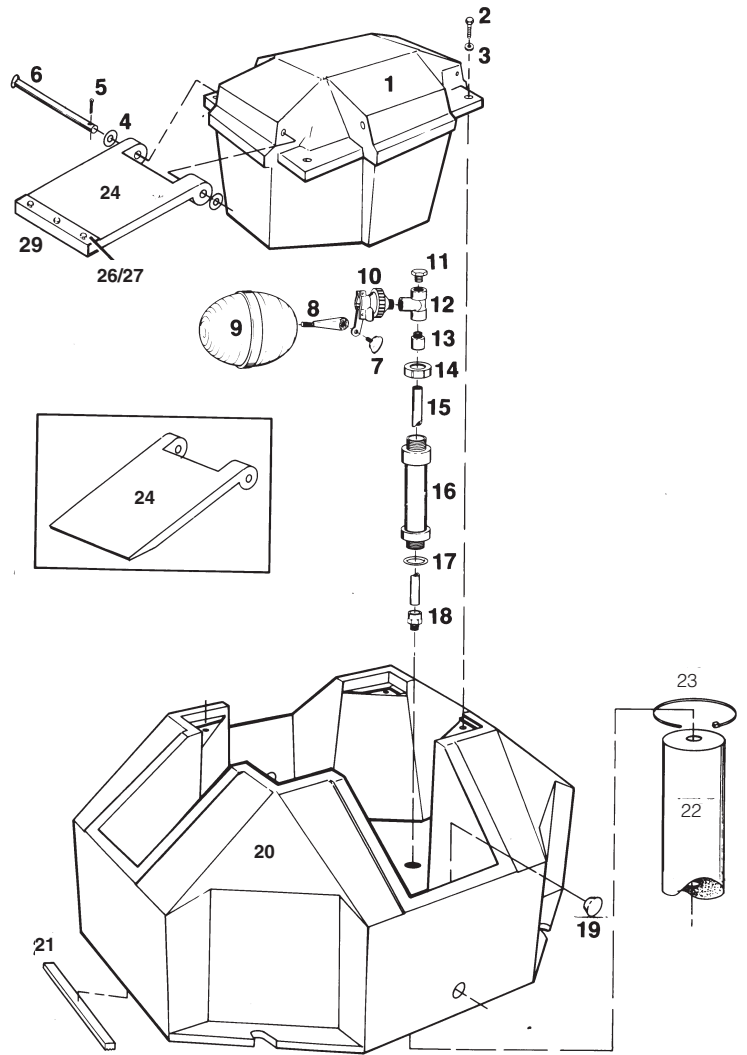


For models WPM10's and MPM10's sold without Inner and Outer Lip Guards (Ref. Nos. 30 and 31), you can retrofit Part No. WPM122 Lip Guard (Ref. No. 34). Also Part No. WPM123 Mud Grate (Ref. No. 35) will prevent small pigs from crawling into drinker. Two WPM122 and two WPM123 required per drinker.

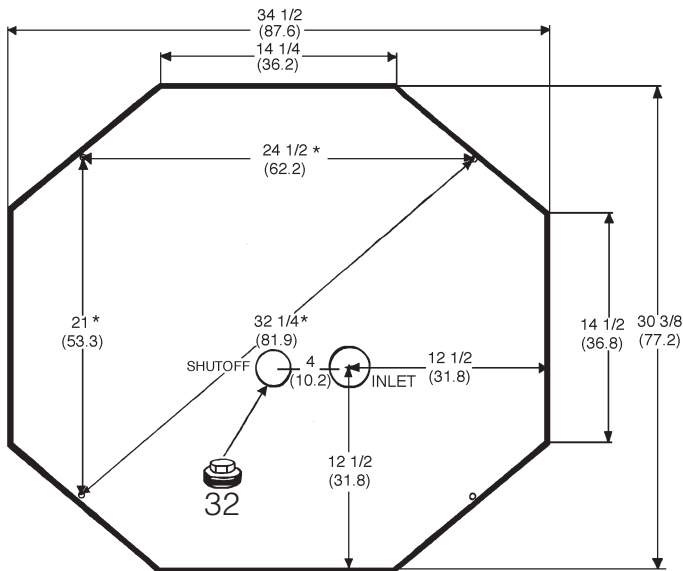
# Assembly Schematic, Repair Parts List, Base Dimensions

## Models WPM14 & WPM14A

Ref. No.	Part No.	Description	Qty
1	WPM1403	Cover, Blue for WPM14	1
2	OF448	1/4"-20 x 1 1/2" Slotted Indented Hex Head Screw, SS 4	4
3	OF127SS	1.10" OD x .280" ID Washer, SS, 1"	4
4	OF351	5/16" ID x 3/4" OD Washer, SS - 5/16"	8
5	OF78SS	1/8" x 3/4" Cotter Pin, SS	4
6	WPM107	.311" x 13.187" Lid Hinge Rod, Zinc	4
7	VP115	Adjusting Screw, Plastic	1
8	WC725P	Float Arm, 3 5/8" Plastic	1
9	OP321	Poly Float, Plastic	1
10	VP124	Valve Assembly, 1/4 Orifice	1
11	OP223	3/4" Schedule 40 Plug, PVC	1
12	OP114	3/4" x 3/4" x 3/4" Schedule 80 Tee, PVC	1
13	OP116	3/4" Schedule 40 Male Adapter, Machined, PVC1	1
14	OP117SJJN	1 1/4" Slip Joint Nut	1
15	WPM112	3/4" PVC Pipe x 14-3/4" (Supply Tube)	1
16	WPM1407	Riser Tube Assembly, 9"	1
17	OP119	1 3/4" ID x 2 1/8" OD "O" Ring, Rubber	1
18	OP116P	3/4" Schedule 40 Male Adapter, Standard, PVC1	1
19	OP120	#11 Rubber Stopper	2
20	WPM1400	Base Reservoir 14 Gal., Blue	1
21	WPM110	Base Seal 8-1/2"	1
22	WT208	Foam Pipe Insulation 36"	1
23	OP93	10 1/2" Tywrap	1
24	WPM205	Flap for WPM14A, Sheep, Blue	4
25	WPM105	Flap for WPM14, Hog, Blue, Plastic Only	4
25	WPM104	Flap Assembly Guard, Blue	4
26	OF460	1/4"-20 x 1 1/2" Slotted Truss Head Machine Screw, SS	12
27	OF449	Nylon Lock Nut	12
28	WPM106	Flap Guard	4
29	WPM124	Inner Lip Guard	4
30	WPM125	Outer Lip Guard	4
31	OF476	10" x 5/8" Tapping Screw, SS	24
32	OP210	1 1/2" NPT Pipe Plug	1
	WPM1408	Hardware Bag	1

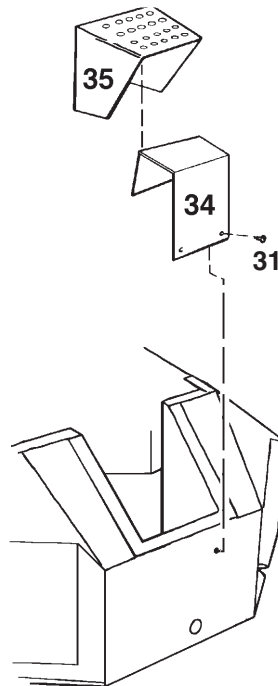


Top Down View  
Base Dimensions in Inches (Centimeters)



\* Distance from center of notch to center of notch.

For model WPM14's sold without Inner and Outer Lip Guards (Ref. No. 30 and 31), you can retrofit Part No. WPM122 Lip Guard (Ref. No. 34). Also Part No. WPM123 Mud Grate (Ref. No. 35) will prevent small pigs from crawling into drinker. Four WPM122 and four WPM123 required per drinker.



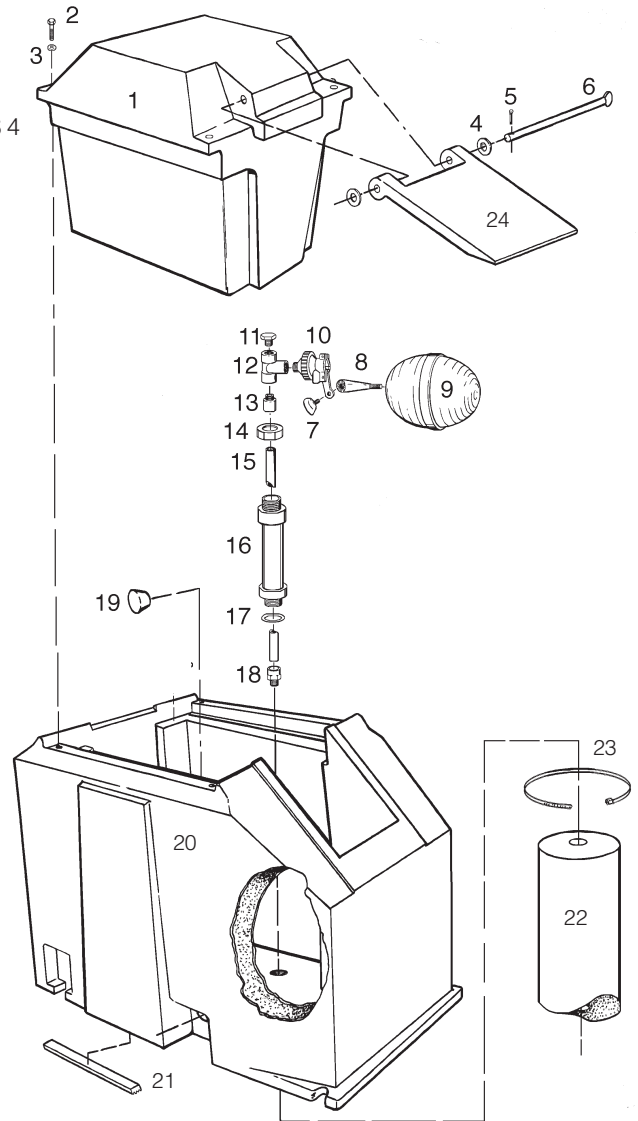
NOTE: Supply line hole in base is marked "INLET". Hole for shutoff option is marked "SHUTOFF". See Page 7.

The dimensions shown are as accurate as we can show them. However, the molding process is affected by the temperature and humidity conditions on the day the part is molded. As the material cools, there can be uneven and unpredictable shrink which can affect the dimensions shown. It is usually best to wait until you have the actual drinker you are going to install before installing all four mounting studs.

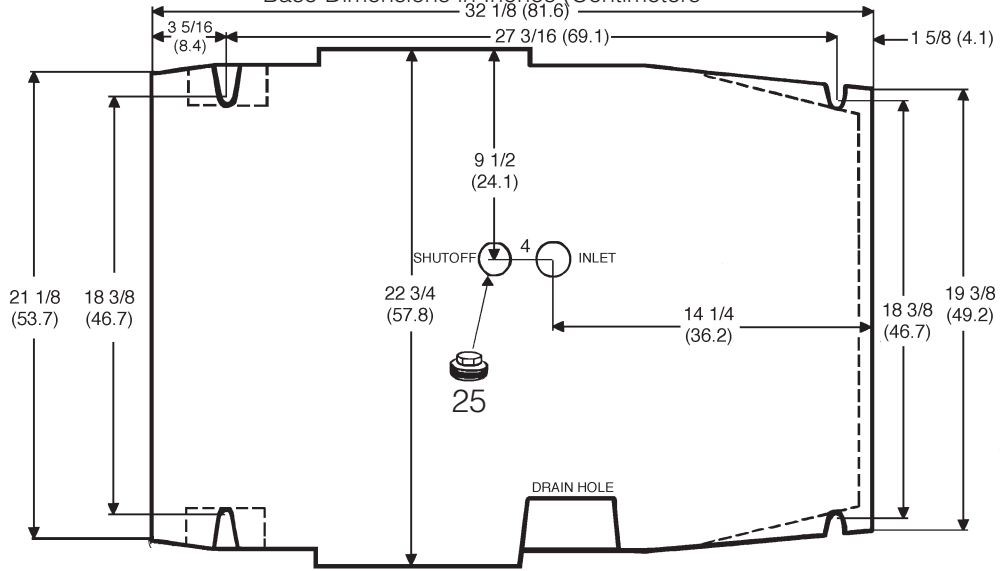
# Assembly Schematic, Repair Parts List, Base Dimensions

## Model WPM16

Ref. No.	Part No.	Description	Qty
1	WPM16103	Cover, Single Sleeve, Blue	1
2	OF448	1/4"-20x1 1/2" Slotted Indented Hex head Machine Screw, SS 4	4
3	OF127SS	1.10" OD x .280" ID Washer, SS, 1"	4
4	OF351	5/16" ID x 3/4" OD Washer, SS - 5/16"	2
5	OF78SS	1/8" x 3/4" Cotter Pin, SS	1
6	WPM107	.311 x 13.187 Lid Hinge Rod, Zinc	1
7	VP115	Adjusting Screw, Plastic	1
8	WC726P	Float Arm, 3 5/8" Plastic	1
9	OP321	Poly Float, Plastic	1
10	VP124	Valve Assembly, 1/4 Orifice	1
11	OP223	3/4" Schedule 40 Plug, PVC	1
12	OP114	3/4" x 3/4" x 3/4" Schedule 80 Tee, PVC	1
13	OP116	3/4" Schedule 40 Male Adapter, Machined, PVC	1
14	OP117SJN	1 1/4" Slip Joint Nut	1
15	WPM212	3/4" PVC Pipe x 19-1/4" (Supply Tube)	1
16	WPM1613	Riser Tube Assembly, 16 3/4"	1
17	OP119	1 3/4" ID x 2 1/8" OD "O" Ring, Rubber	1
18	OP116P	3/4" Schedule 40 Male Adapter, SStandard, PVC	1
19	OP120	#11 Rubber Stopper	2
20	WPM1600	Base Reservoir 16 Gal., 1-Drink	1
21	WPM110	Base Seal 8 1/2"	1
22	WT208	Foam Pipe Insulation 36"	1
23	OP93	10 1/2" Tywrap	1
24	WPM205H	Flap, Blue, w/Horse Logo	1
24	MPM205	Flap, Blue, Cattle	1
25	OP210	1 1/2" NPT Pipe Plug, PVC	1
	WPM1608	Hardware Bag	



Top Down View  
Base Dimensions in Inches (Centimeters)



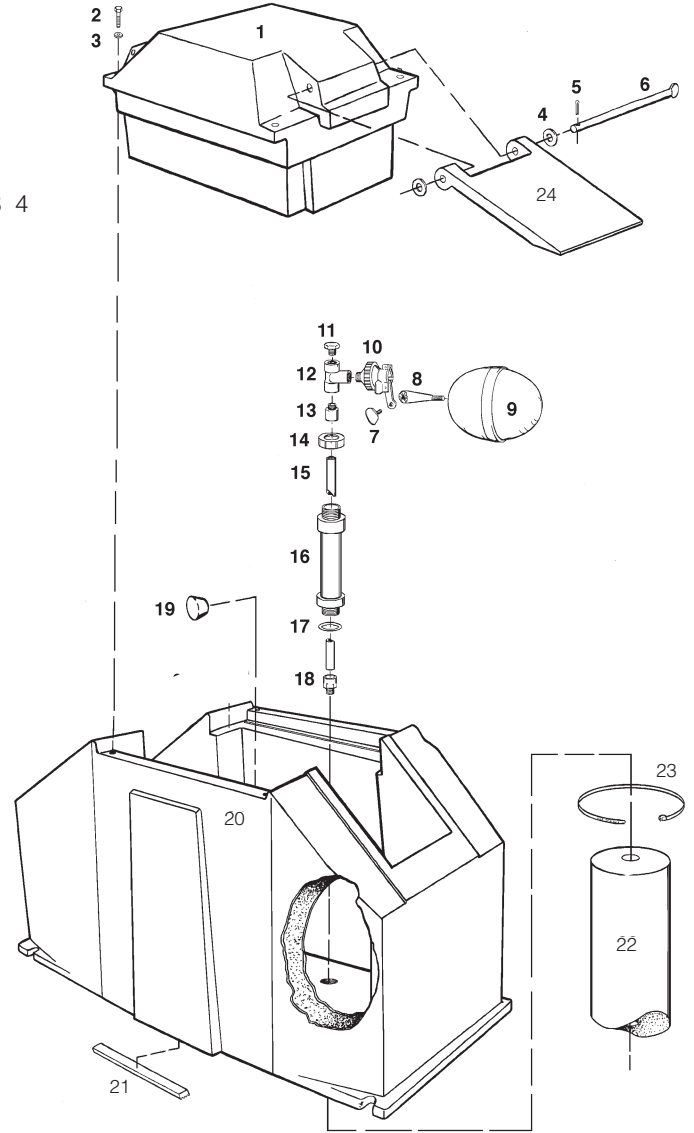
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# Assembly Schematic, Repair Parts List, Base Dimensions

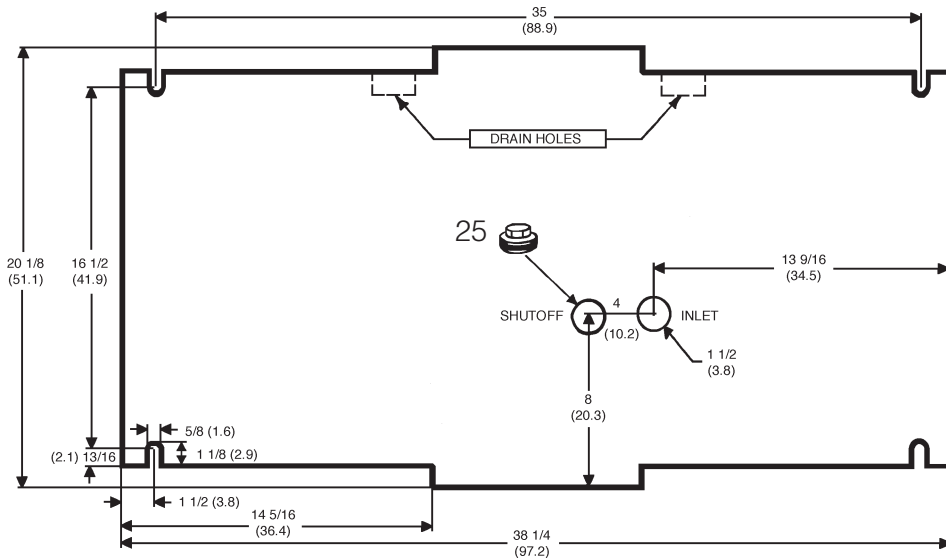
## Model WPM20 and MPM20

Ref. No.	Part No.	Description	Qty
1	WPM103	Cover, Blue	1
1	MPM103	Cover, Red	1
2	OF448	1/4"-20 x 1 1/2" Slotted Indented Hex head Machine Screw, SS	4
3	OF127SS	1.10" OD x .280" ID Washer, SS, 1"	4
4	OF351	5/16" ID x 3/4" OD Washer, SS - 5/16"	4
5	OF78SS	1/8" x 3/4" Cotter Pin, SS	2
6	WPM107	.311 x 13.187 Lid Hinge Rod, Zinc	2
7	VP115	Adjusting Screw, Plastics	1
8	WC726P	Float Arm, 3 5/8" Plastic	1
9	OP321	Poly Float, Plastic	1
10	VP124	Valve Assembly, 1/4" Orifice	1
11	OP223	3/4" Schedule 40 Plug, PVC	1
12	OP114	3/4" x 3/4" x 3/4" Schedule 80 Tee, PVC	1
13	OP116	3/4" Schedule 40 Male Adapter, Machined, PVC	1
14	OP117SJM	1 1/4" Slip Joint Nut	1
15	WPM212	3/4" PVC Pipe x 19-1/4" (Supply Tube)	1
16	WPM213	Riser Tube Assembly, 17 1/2"	1
17	OP119	1 3/4" ID x 2 1/8" OD "O" Ring, Rubber	1
18	OP116P	3/4" Schedule 40 Male Adapter, Standard, PVC	1
19	OP120	#11 Rubber Stopper	2
20	WPM200	Base Reservoir 20 Gal., Blue	1
20	MPM200	Base Reservoir 20 Gal., Red	1
21	WPM110	Base Seal 8 1/2" Ft.	1
22	WT208	Foam Pipe Insulation 36"	1
23	OP93	10 1/2" Tywrap	1
24	WPM205	Flap, Cattle, Blue	1
24	MPM205	Flap, Cattle, Red	1
25	OP210	1 1/2" NPT Pipe Plug, PVC	1
	WPM208	Hardware Bag	



**NOTE:** Base dimensions of models are not the same. For example: WPM20 is longer than WPM10. Also, the threaded access for the riser tube assembly is not in the same location on all drinkers. Do not assume models are similar.

Top Down View  
Base Dimensions in Inches (Centimeters)



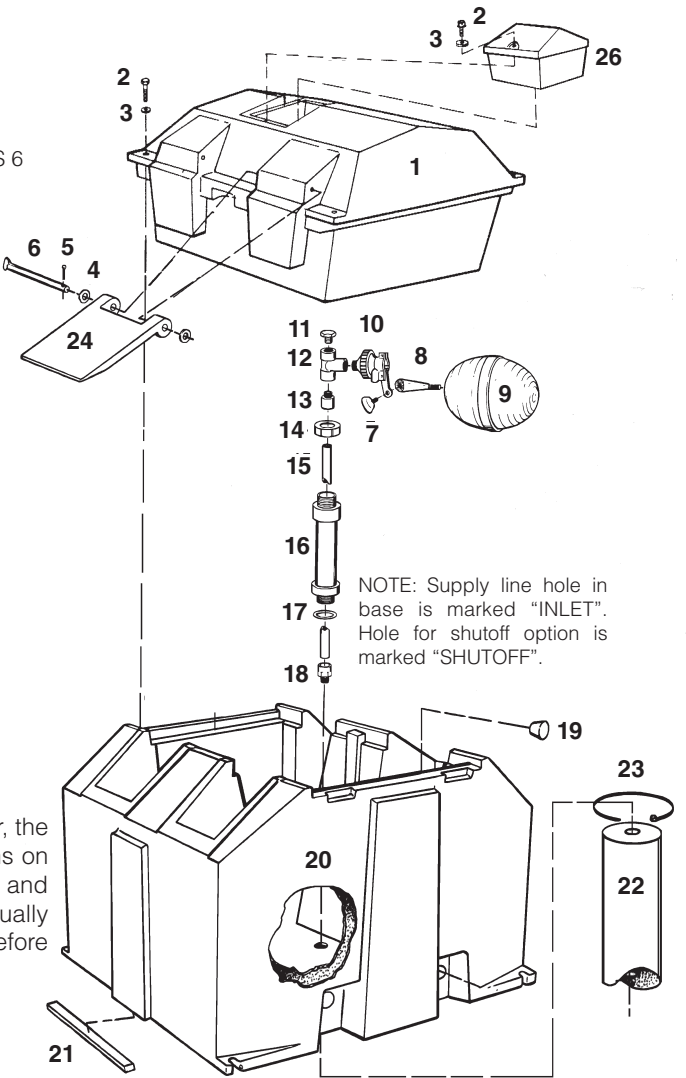
NOTE: Supply line hole in base is marked "INLET". Hole for shutoff option is marked "SHUTOFF". See Page 7.

The dimensions shown are as accurate as we can show them. However, the molding process is affected by the temperature and humidity conditions on the day the part is molded. As the material cools, there can be uneven and unpredictable shrink which can affect the dimensions shown. It is usually best to wait until you have the actual drinker you are going to install before installing all four mounting studs.

# Assembly Schematic, Repair Parts List, Base Dimensions

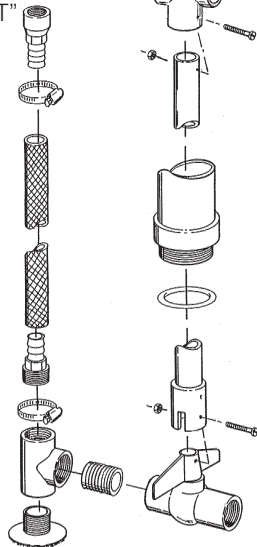
## Model WPM80

Ref. No.	Part No.	Description	Qty
1	WPM7503	Cover, Blue	1
2	OF448	1/4-20 x 1 1/2 Slotted Indented Hex Head Machine Screw, SS 6	1
3	OF127SS	1.10" OD x .280" ID Washer, SS, 1"	6
4	OF351	3/8" ID x 7/8" OD Washer, SS - 5/16"	8
5	OF78SS	1/8 x 3/4 Cotter Pin, SS	4
6	WPM107	.311 x 13.187 Lid Hinge Rod, Zinc	4
7	VP115	Adjusting Screw	1
8	WC726P	Float Arm, 3 3/8" Plastic	1
9	OP321	Poly Float, Plastic	1
10	VP124	Valve Assembly, 1/4 Orifice	1
11	OP223	3/4" Schedule 40 Plug, PVC	1
12	OP114	3/4" x 3/4" x 3/4" Schedule 80 Tee, PVC	1
13	OP116	3/4" Schedule 40 Male Adapter, Machined, PVC	1
14	OP117SUN	1 1/4" Slip Joint Nut	1
15	WPM7512	3/4" PVC Pipe x 24 3/4" (Supply Tube)	1
16	WPM7513	Riser Tube Assembly, 21 1/2"	1
17	OP119	1 3/4" ID x 2 1/8" OD "O" Ring, Rubber	1
18	OP116P	3/4" Schedule 40 Male Adapter, Standard, PVC	1
19	OP120	#11 Rubber Stopper	2
20	WPM200	Base Reservoir 80 Gal., Blue	1
21	WPM7510	Base Seal 14"	2
22	WT208	Foam Pipe Insulation 36"	1
23	OP93	10 1/2" Tywrap	1
24	WPM205	Flap, Cattle, Blue	4
25	OP210	1 1/2" NPT Pipe Plug, PVC	1
26	WPM7519	Access Cover	1
	WPM1508	Hardware Bag	1



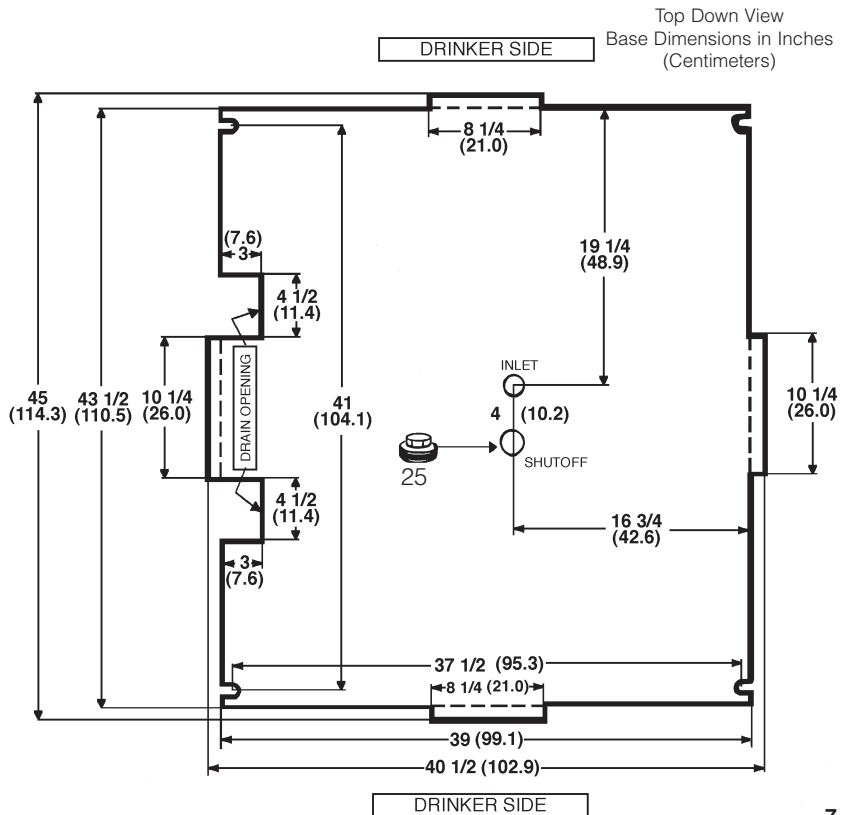
The dimensions shown are as accurate as we can show them. However, the molding process is affected by the temperature and humidity conditions on the day the part is molded. As the material cools, there can be uneven and unpredictable shrink which can affect the dimensions shown. It is usually best to wait until you have the actual drinker you are going to install before installing all four mounting studs.

Connects to Ref. No. 18  
Adapter thru hole marked  
"INLET"



Insert thru hole marked  
"SHUTOFF"

SOK10 SHUTOFF AND DRAIN  
KIT OPTION

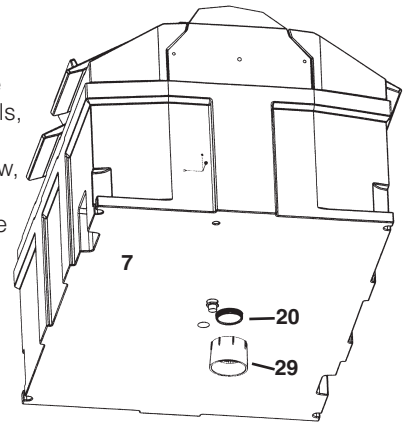
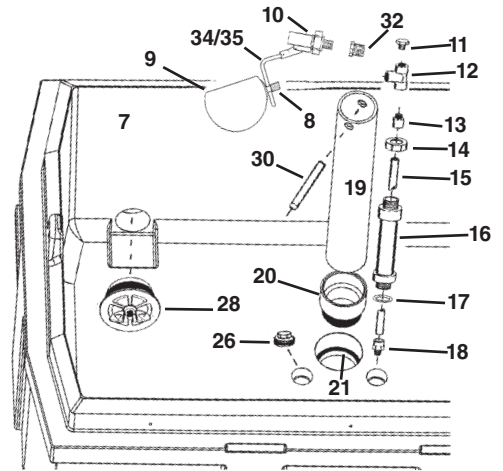
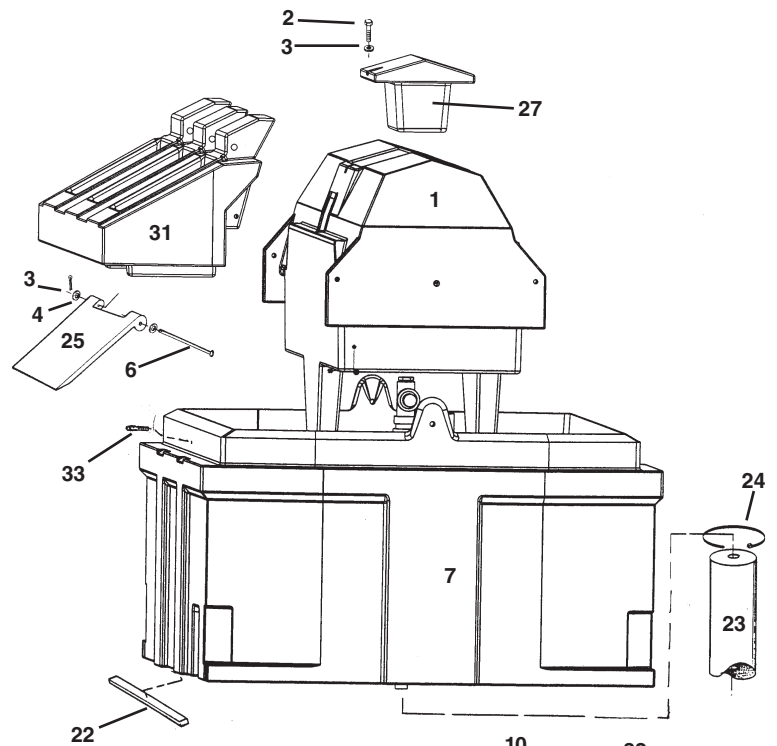


Top Down View  
Base Dimensions in Inches  
(Centimeters)

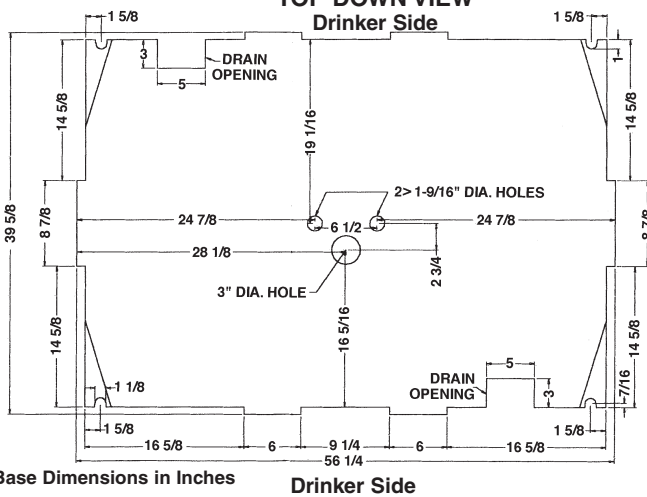
# Assembly Schematic, Repair Parts List,

## Base Dimensions Models WPM120/WPM120-O

1	WPM1224	Cover, Blue	1
2	OF448	1/4"-20 x 1 1/2" Slotted Indented Hex Head Machine Screw, SS	55
2			
3	OF127SS	1.10" OD x .280" ID Washer, SS 1"	2
4	OF351	.345" ID x .752" OD Washer, SS - 5/16"	12
5	OF78SS	1/8" x 3/4" Cotter Pin, SS	6
6	WPM107	.311" x 13.187" Lid Hinge Rod, Zinc	6
7	WPM1221	Base Reservoir, 100 Gal., Blue	1
8	VQ31	Float Nut	1
9	VQ30	Float	1
10	VQ150	Valve Assembly, 1/4" Orifice	1
11	OP223	Plug, 3/4", Nylon	1
12	OP114	3/4" x 3/4" x 3/4" Schedule 80 Tee, PVC	1
13	OP116	3/4" Schedule 40 Male Adapter, Machined, PVC	1
14	OP117SJJN	1 1/4" Slip Joint Nut	1
15	WPM1207	3/4" PVC Pipe x 24"	1
16	WPM1208	Riser Tube Assembly, 20"	1
17	OP119	1 3/4" ID x 2 1/8" OD "O" Ring, Rubber	1
18	OP116P	3/4" Schedule 40 Male Adapter, Standard, PVC	1
19	WPM1232	3" x 21" PVC Drain Pipe	1
20	OP296	3" Male Adapter, Hub MIPT	1
21	OP297	3" O-ring	1
22	WPM1210	Base Seal, 15"	1
23	WT208	Foam Pipe Insulation, 36"	1
24	OP93	10 1/2" Tywrap	1
25	WPM205	Flap, Cattle, Blue	6
26	OP210	1 1/2" NPT Pipe Plug, PVC	1
27	WPM1211	Access Cover	1
28	OP299	3" Hole Plug	2
29	OP298	3" Female Adapter Hub FIPT	1
30	WPM1233	3/4" x 6" PVC Pipe (Handle)	1
31	WPM1226	Wing Assembly	2
32	OP295	3/4" x 1/2" Bushing TXT	1
33	OF520	1/4"-20 x 2" Wing Stud, WPM120	2
34	VQ28	9 1/2" Float Arm	1
35	OF97	3/32" x Cotter Pin, SS	1
	WPM1230	Hardware	1



### TOP DOWN VIEW



### TOP DOWN VIEW

The dimensions shown are as accurate as we can show them. However, the molding process is affected by the temperature and humidity conditions on the day the part is molded. As the material cools, there can be uneven and unpredictable shrink which can affect the dimensions show. It is usually best to wait until you have the actual drinker you are going to install before installing all four mounting studs.

NOTE: Supply line hole and shutoff hole in base are not marked. You can use either hole for supply and likewise either hole for shutoff.

### WARRANTY

From the date of purchase, all components, of our energy free drinkers except our valve parts, are covered by a five year warranty for all defects in material and workmanship. After the 5 year warranty period, all components, except valve parts are covered by an additional 6 year pro-rated warranty. Valve parts are warranted for 18 months. Warranty is limited to the replacement of components. Warranty does not cover animal chewed components where stainless steel guards are not used. Warranty does not cover drowned piglets where mud grates are not used. All provisions stated on the back of Hawkeye Steel Products, Inc.'s invoice apply and Hawkeye Steel Products, Inc. assumes no contingent liabilities.



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### WHEN ORDERING PARTS

- (1) Show NAME and MODEL NUMBER: Example - WPM80
- (2) Show PART NUMBER and FULL DESCRIPTION of part: Example: WPM7503 Cover

### HOW TO ORDER PARTS

Repair parts may be ordered from your dealer.

website: [www.hawkeysteel.com](http://www.hawkeysteel.com)

email: [sales@hawkeysteel.com](mailto:sales@hawkeysteel.com)

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