

MiraFount



**INSTALLATION INSTRUCTIONS AND
SPECIFICATIONS FOR MODEL 3330**

READ CAREFULLY

MIRACO

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SPECIFICATIONS

PART I - GENERAL

A. DESCRIPTION:

1. The MiraFont is the finest operating, lowest cost, energy-free livestock waterer on the market today. The sealed atmosphere helps prevent the formation of scum and algae. It also prevents tongue injuries from contact with frigid steel.
2. The earth temperature of the water will keep your MiraFont flowing in cold weather and also keeps the water cool in hot weather. Thermal engineering and special design of the lid closures make it work in all types of weather. Note earth tube should be an insulated tube at least 12" in diameter and below frost level.
3. All edges are curved and sloped to prevent injury to people and animals. No energy is required, eliminating the danger of electrocution and fire hazards.

B. WEIGHTS & DIMENSIONS

Model #	Capacity	Gallons	Description	Dimensions	Weight
3330	50 hd. beef 30 horses 25 hd. dairy	15	1-9" ball closure 8 ³ / ₄ " opening	26" x 28" x 16"	59#

C. MATERIAL NECESSARY FOR INSTALLATION:

1. Concrete
2. P.V.C. Glue
3. #834 insulated tube
4. Thread sealer or teflon tape



PART II - MATERIALS, PRODUCTS

A. MATERIALS:

1. High impact Rockite™ polyethylene.

B. INSULATION:

1. The base, cover and lid closures are filled with a 3" thickness of Urethane foam.

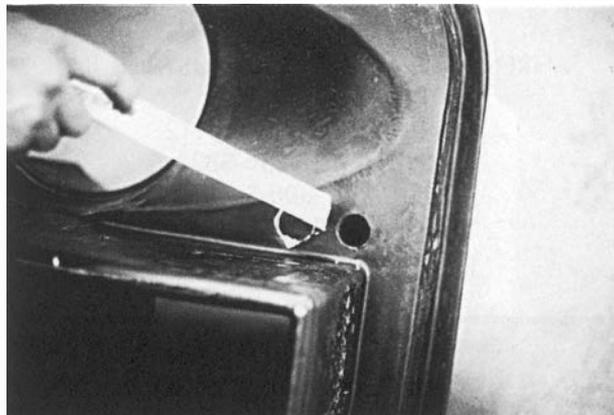
C. VALVE:

1. Miraco plastic valve with stainless steel rod and ends.

NOTE: FOR GRADE A DAIRY USE ONLY - ANTI SYPHON DEVICE.

Remove the rubber plugs from the holes on the under side of the lid and insert the ³/₄" PVC pipes provided. This will make your tank a non-syphon water supply for dairy. The PVC pipe is approximately 18" long and hangs down into the water from the top.

2 pipes are needed for Grade A Dairy operations only.



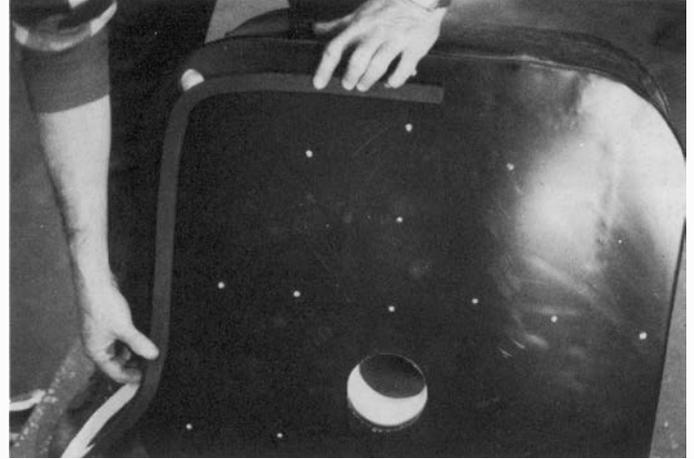
MIRAFOUNT #3330 INSTALLATION INSTRUCTIONS

NOTE: For cold climates, insulate the upper portion of your heat well with styrofoam or blue board rigid insulation.



Step 1

Install your heat well at least 1' below frost or down to your water line to insure frost free operation. Install the water line so it comes up close to the center of the heat well. Always allow the cement to harden at least 72 hours before you continue to next steps. Place the pipe insulation over the fill line leaving it about 2" above the cement and pull the nylon tie tight so the insulation doesn't slip down. For best results, use the #834 thermal heat tube available from Miraco.



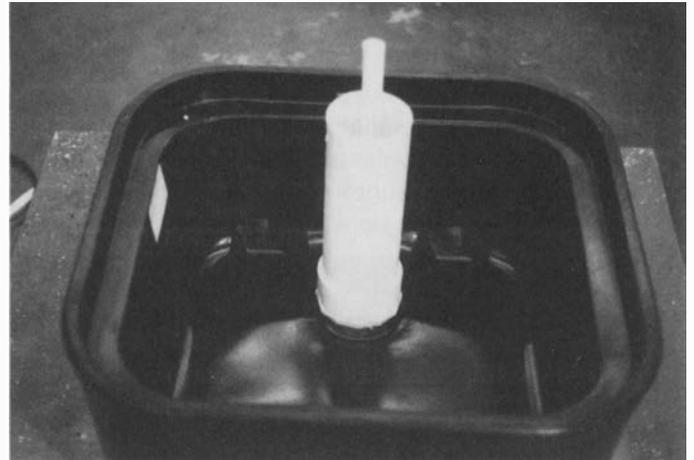
Step 2

Stick the adhesive backed gasket to the bottom of the base assembly.



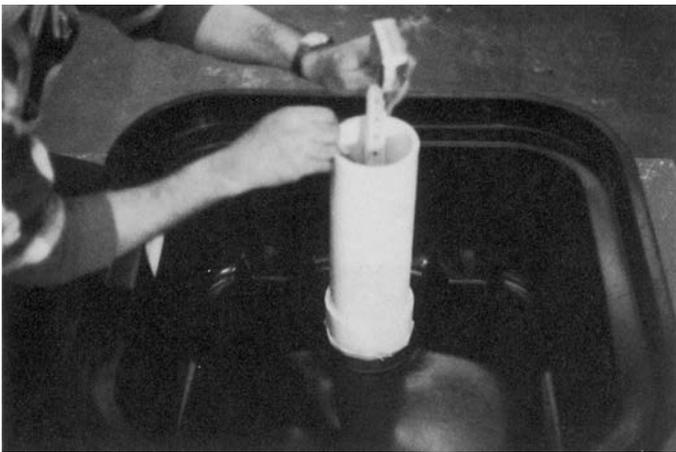
Step 3

Install the base clips with $\frac{5}{16}$ " x 1" hex head bolts. Then center the base over your hole. Once in position drill $\frac{3}{8}$ " holes in the concrete and drive the $\frac{3}{8}$ " x 3" anchor bolts into place and secure with nuts and washers.



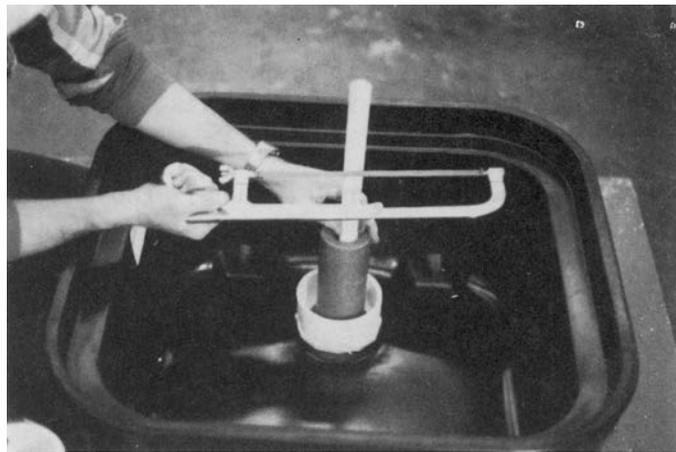
Step 4

Your fill line should be sticking above the 4" pipe as shown.



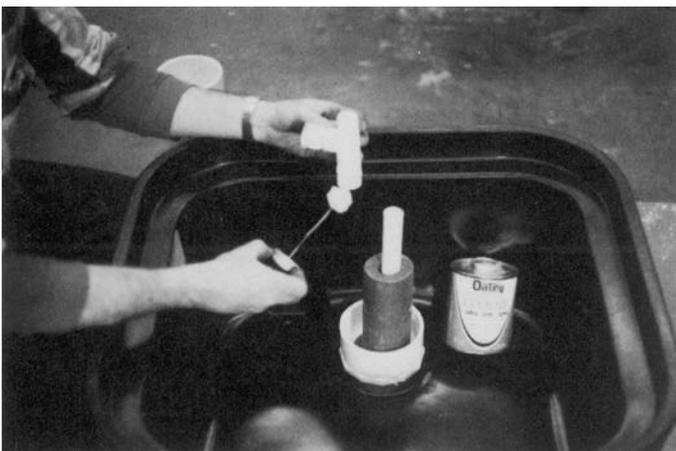
Step 5

Measure down $2\frac{3}{4}$ " and make a mark on your $\frac{3}{4}$ " fill line or make a mark flush with the top of the 4" pipe and remove the 4" pipe and measure down $2\frac{3}{4}$ " to locate the cut location.



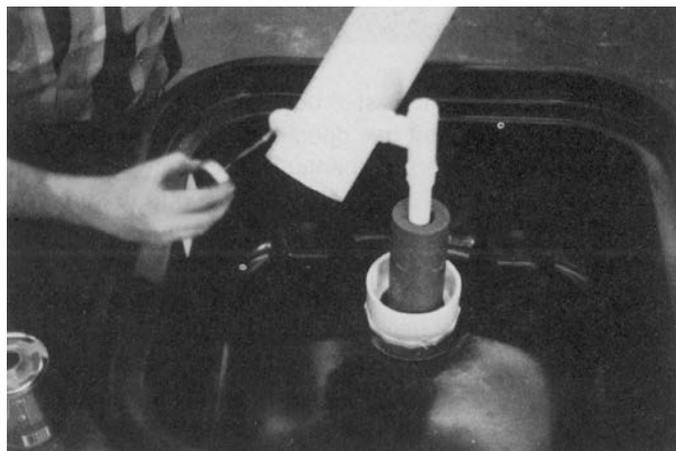
Step 6

Remove the 4" pipe and saw off the $\frac{3}{4}$ " line at your mark. Remove all filings and clean the outer surface of the pipe.



Step 7

Seal all the threaded joints with pipe sealer or teflon tape. Then glue the entire assembly onto the fill line. Point the fitting towards the near corner of the tank. Note: Looking at the tank with the fitting furthest away, fitting will point left. Before installing valve turn on water blowing out the line.



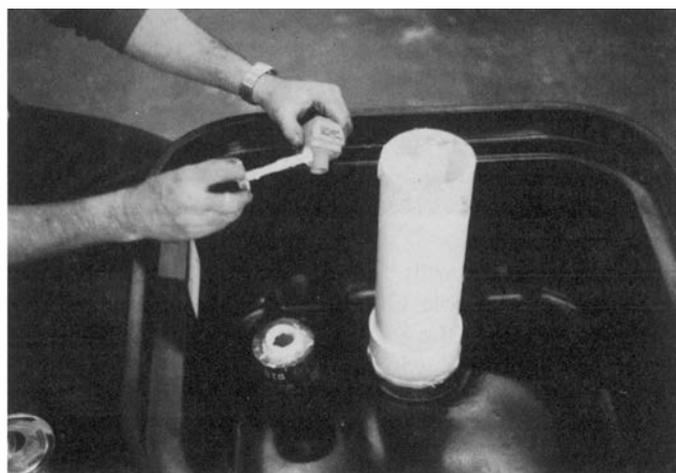
Step 8

Using PVC pipe glue, glue the 4" pipe into the bottom fitting. * NOTE (Important) PVC "T" is pointing toward the near left corner.



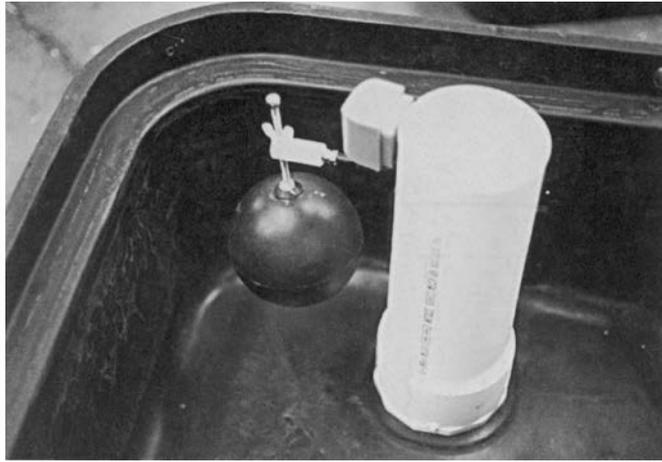
Step 9

Push the pipe down until the $\frac{3}{4}$ " fitting comes through the hole in the 4" pipe. Make sure 4" pipe is pushed clear to the bottom.



Step 10

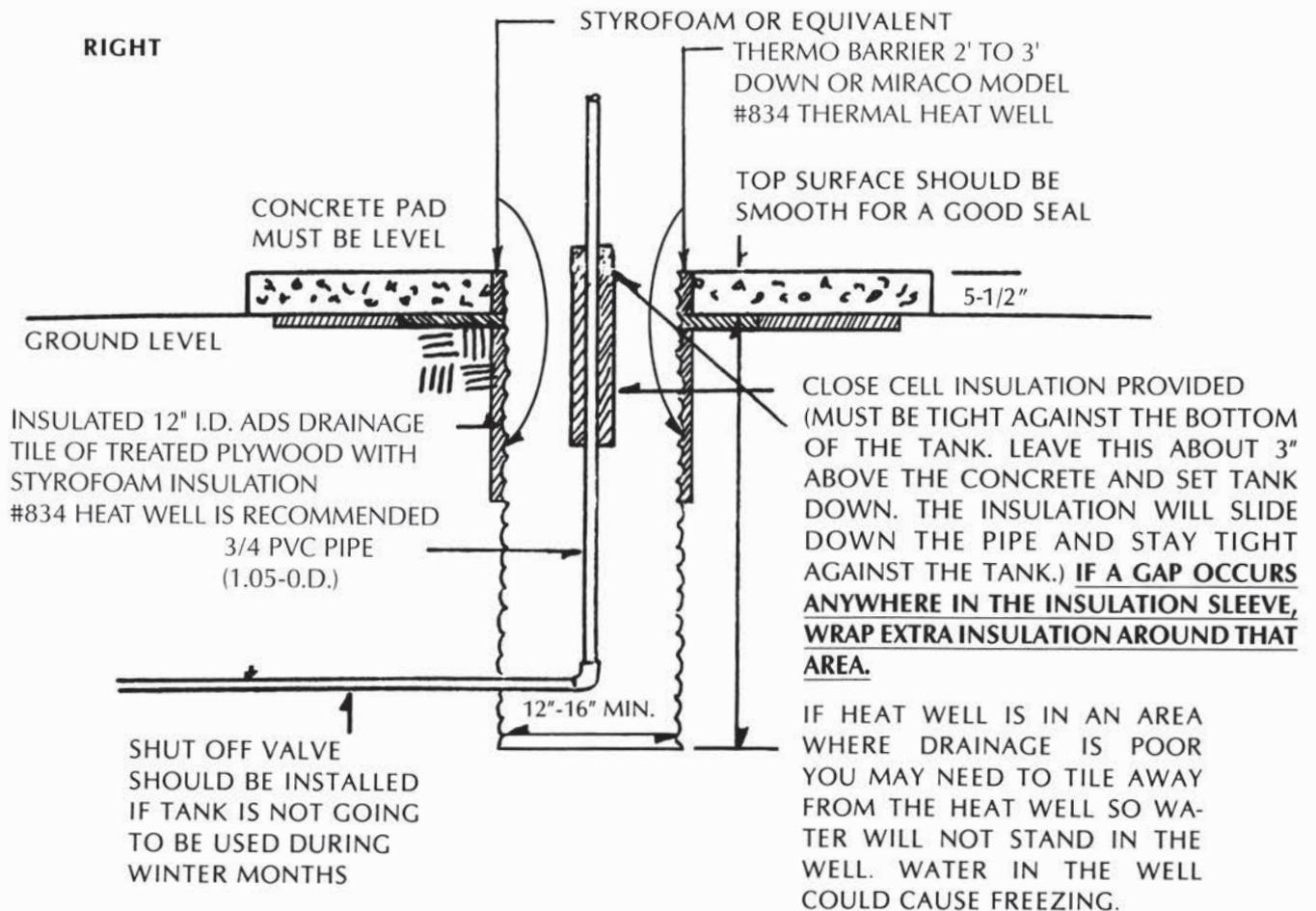
Using pipe thread sealer or teflon tape apply to the threaded end on the valve and screw the valve into the $\frac{3}{4}$ " fitting tightly. Hand tight is usually enough. Teflon tape is preferred. NOTE: There is an "O" ring inside the PVC "T" Fitting. This "O" ring will seal against the threaded end of the valve and prevent leakage.

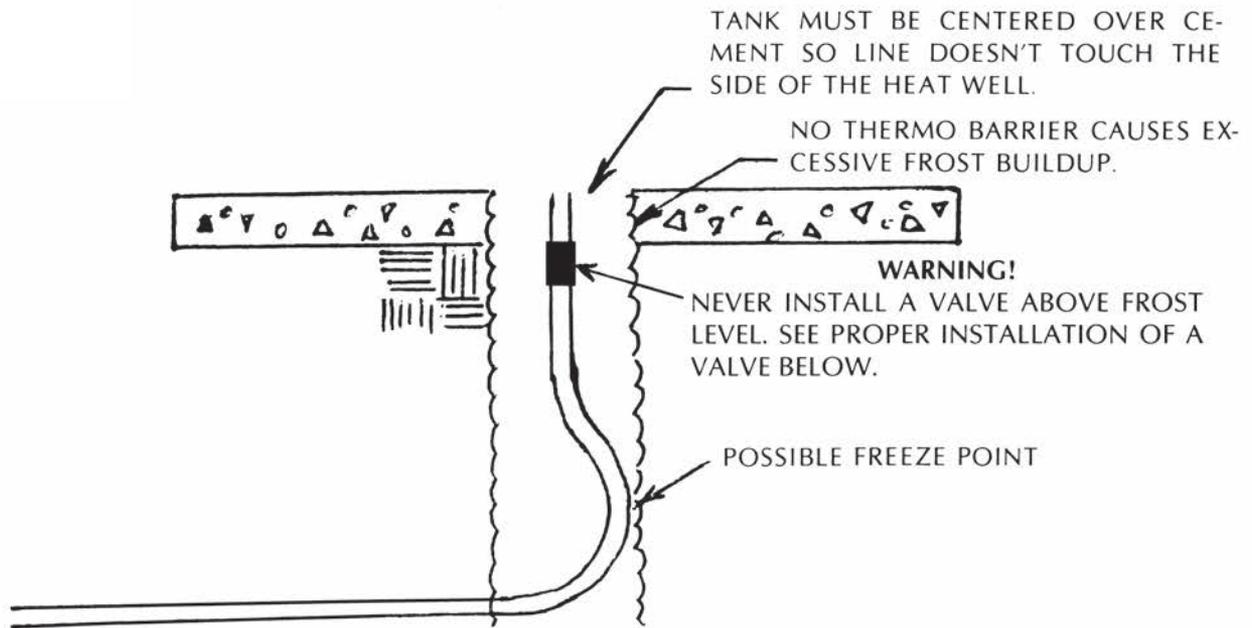


Step 11

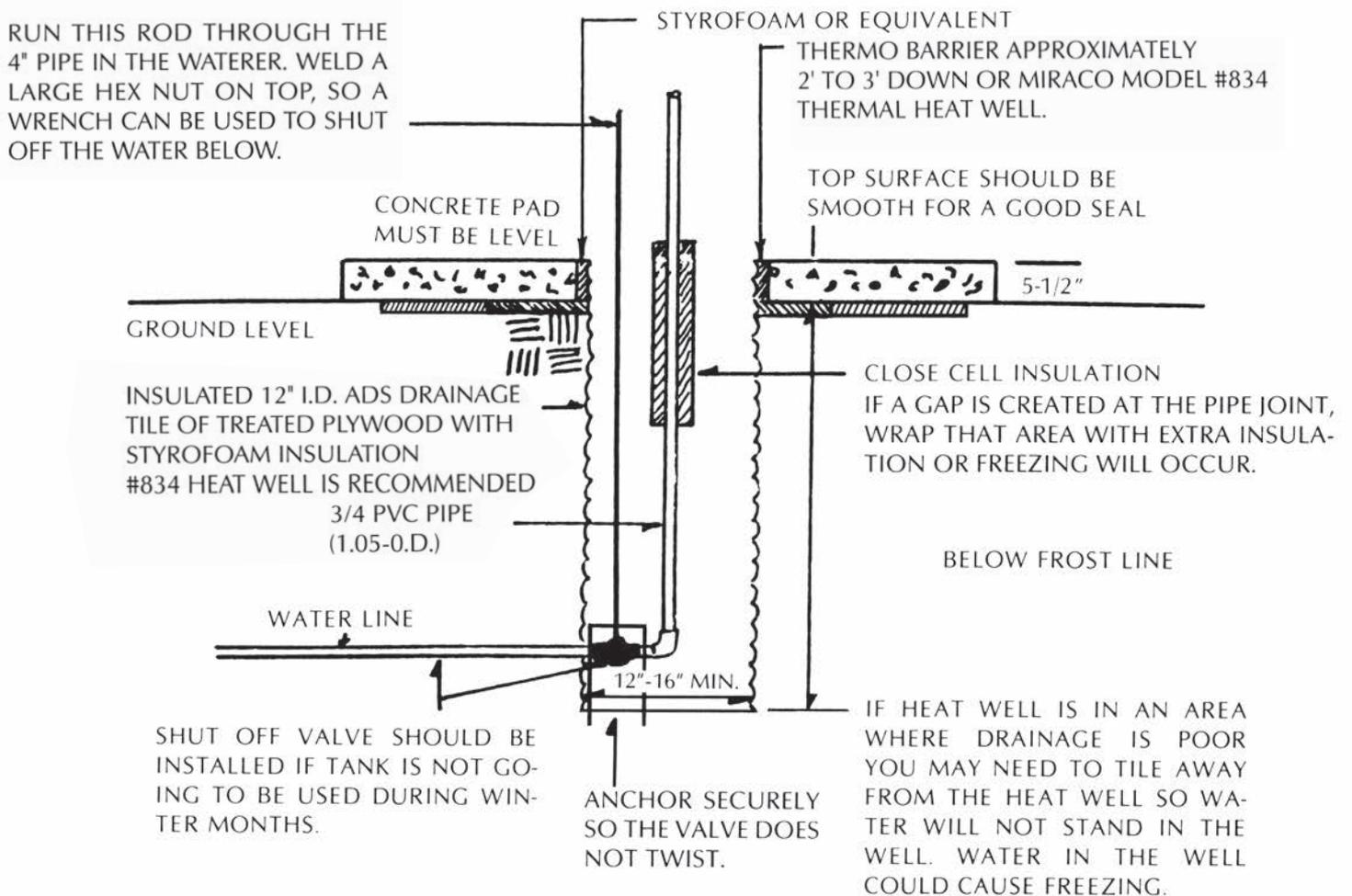
Attach the float assembly to the lower arm of valve using the 1/4" thumb screw in the parts bag. Place drain plug in drain hole from the inside only. Place ball in bottom of waterer's base, begin filling. Install top of waterer to base. The final adjustment should be made through access post in the top. Proper water level is achieved when ball just touches the top of waterer. When the tank is full the float assembly should look exactly like the picture above.

*** Important: If water pressure is above 70 psi, a pressure regulator installed in a freeze proof area is recommended.**





PROPER INSTALLATION OF DRAIN BACK SHUTOFF VALVE



Miraco Livestock waterers Express warranty and Waiver of implied warranties and consequential damages

Express Warranty

Ahrens Agricultural Industries Co. , dba Miraco, expressly warrants that the Miraco waterers (excluding valve and valve parts) will be free of defects in materials and workmanship for a period of five (5) years from delivery. The Miraco valve and valve parts are warranted to be free of defects in materials and workmanship for a period of one (1) year from delivery. Such warranty does not apply to any Miraco unit that has been subjected to misuse, or material failure to install, operate or maintain in accordance with Miraco's written instructions, or other events acts or omission, including but not limited to acts of nature, which affect the Miraco unit materially and adversely and are not attributable to Miraco.

This warranty is limited to the repair or replacement of the defective part, at the option of Miraco. Such repair or replacement part is warranted only for the unexpired portion of the original warranty period. Buyers with warranty claims should contact their local dealer immediately.

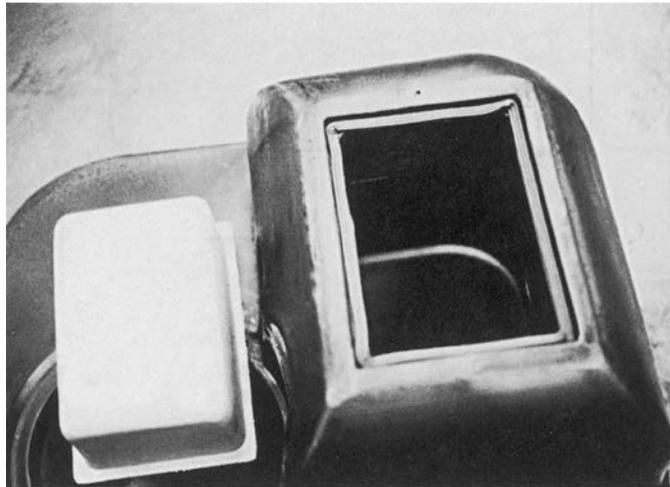
Heaters in all electrically heated units are warranted for a period of one (1) year.

Waiver of implied warranties and Consequential damages

Except for the above express warranty, this product is sold as is. Implied warranties of merchantability and fitness for a particular purpose, as well as special, indirect or consequential damages, are all waived by the buyer.

MODEL 3330 MANAGEMENT TIPS FOR THE MIRAFOUNT LIVESTOCK THERMOS

1. A 1/4" bolt is to be used to hold the ball back for training livestock. The 1/4" bolt is inserted into a threaded insert in the baffled portion of the lid. This holds the ball back for training.
2. For short periods of time when you're not using the MiraFount in winter, you can dip 3-5 gallons of water out every day and the tank will sustain itself until livestock are using it again. If you plan on not using it for a long time, merely drain it and shut off the water. This is where the shut off valve comes in handy.
3. Water level is very important. If the water is too high the ball will stick shut in the winter time and the tank will appear frozen. A kick or a small amount of hot water on the ball will fix the problem. Then lower the water level so this won't happen again. However, never lower water below the baffle or cold air could go under and freeze your valve.
4. In case of power failure, merely keep the livestock away from the waterer so they can't drink it down. If this has already happened, then a small amount of hot water is all you need. **NEVER USE AN OPEN FLAME TO THAW ICE!**
5. Management is necessary in any operation and this includes checking your waterer daily. Water is very important and any malfunction should be attended to immediately. This is good practice for any make of waterers.
6. The MiraFount should be cleaned periodically, especially the ones being used for hogs. Mud can hamper the proper operation of the MiraFount since the ball has to move freely in order to have proper operation.
7. If your valve is seeping, check the valve for foreign materials first. This is the biggest cause of seeping valves. If you have extremely rusty water or dirty water, your valve should be cleaned periodically.
8. If you have any questions give us a call at 641-236-5822.
9. If valve persists on leaking, use an allen wrench to tighten the orifice under the plunger. Turn clockwise to tighten.
10. Drain plugs are to be placed inside the tank to plug the drain holes.
11. Capacities are based on confined livestock. If pasture animals are using this product and have tendency to water all at the same time, extra water space may be needed.



Install gasket material on the ledge inside the access hole. It is important that the gasket be installed here and not on the plug. Use a little grease on top of the gasket before putting in the plug. This makes it easy to remove the plug on cold days without damage to the gasket material.

COMMON SENSE MANAGEMENT TIPS TO CONSIDER WHEN BUYING AN ENERGY FREE WATERER:

- #1 A minimum of 20 head of livestock need to be using the waterer during subzero weather.
- #2 Water lines must be buried well below the frost line so incoming water is at least 42°.
- #3 You must use an insulated heat well or supply a low wattage heat tape on the water line in areas where frost goes below 21" deep. The heat well must be free of water above the frost line.
- #4 The MiraFount must be the primary source and livestock should have access to the waterer at all times.
- #5 If less than 20 head of livestock are going to use this tank and your weather gets below zero for extended periods, then the E-fount should be your choice.