

MiraFount



**INSTALLATION INSTRUCTIONS AND
SPECIFICATIONS FOR
MODEL 3410-4**

READ CAREFULLY

MIRACO

A DIVISION OF
AHRENS AGRICULTURAL INDUSTRIES, INC.
BOX 686
GRINNELL, IOWA 50112
PHONE 641-236-5822
TOLL FREE 1-800-541-7866
FAX 1-641-236-3341

SPECIFICATIONS

PART 1 - GENERAL

A. DESCRIPTION:

1. The MiraFount 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 MiraFount 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.
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
3410-4	200 hd. hogs 80 hd. sows	15	4 lift up lids	34" x 36 ¹ / ₂ " x 16"	85#

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.

MIRAFOUNT #3410-4 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.

Miraco has an insulated tube for heat wells. This 30" long unit provides maximum protection for your water line.



Step 2

Pull the paper backing off the rubber gasket furnished in your parts carton. Stick this gasket on the bottom of your tank. Keep the gasket as close to the edge as possible. This is necessary to keep air out and keep your heat well dry.



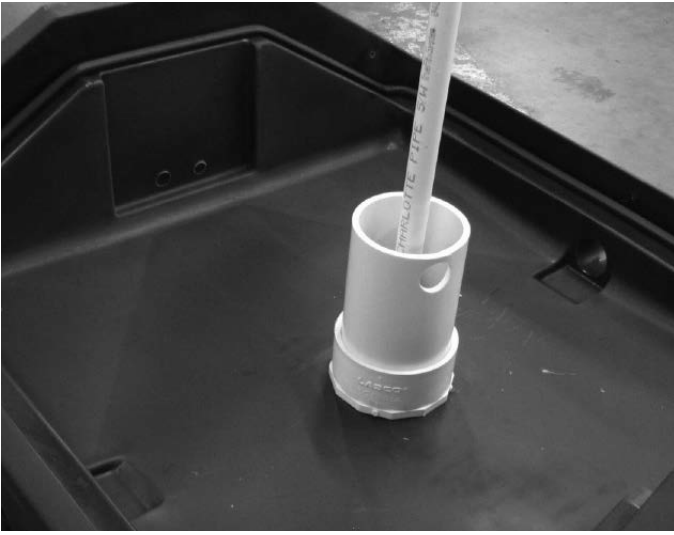
Step 3

Attach anchor chips with $\frac{5}{16}$ " x 1" stainless steel bolts and tighten.



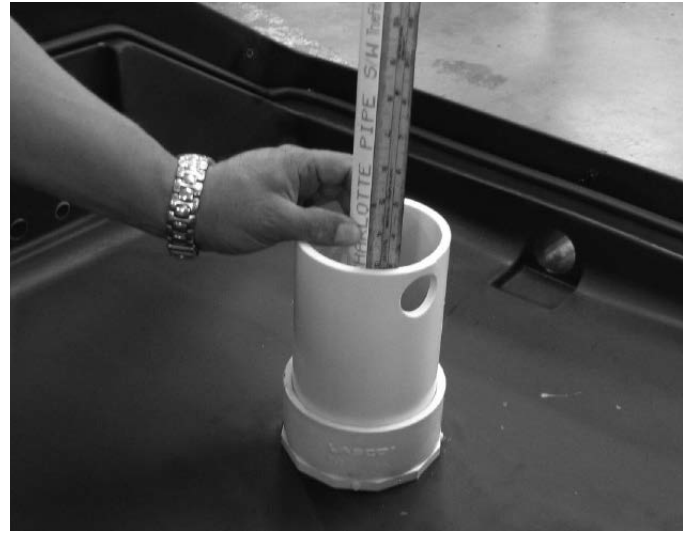
Step 4

Place the tank over the fill line and position the tank so the fill line is centered in the pit. Using a $\frac{3}{8}$ " cement drill, drill the anchor holes. Note on some tanks it is necessary to be off center a little to make sure the tank covers the hole.



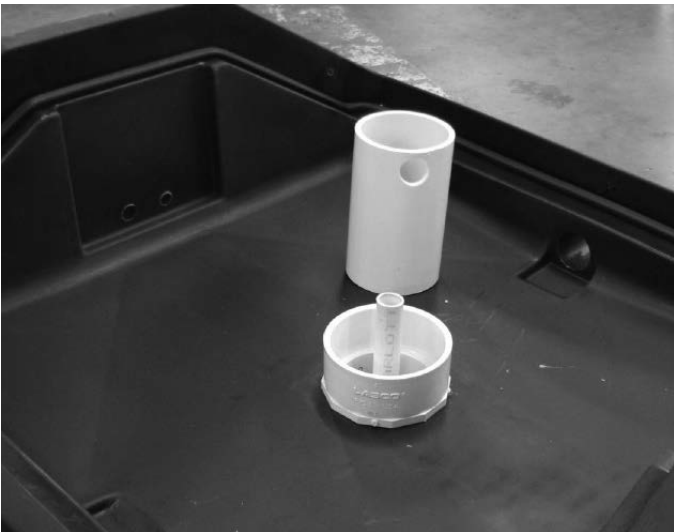
Step 5

After you have completed steps 1 thru 4 in the installation booklet, your fill line will be standing above the 4" riser pipe.



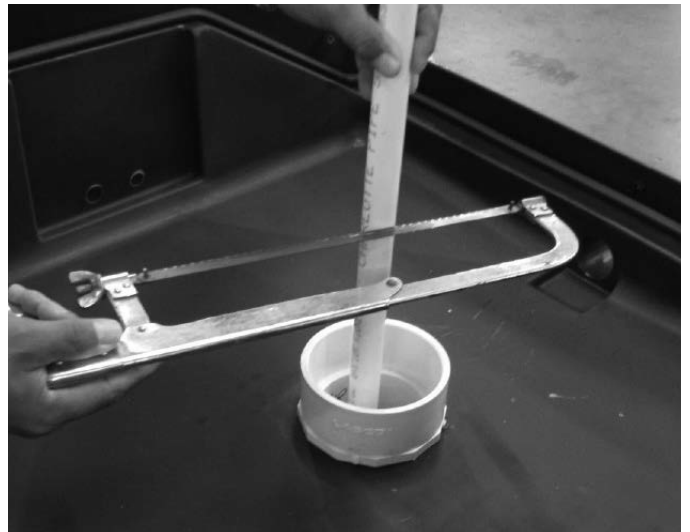
Step 6

With a pen or pencil, make a mark on the fill line $2\frac{3}{4}$ " below the top of the 4" outer fill pipe.



Step 7

The riser pipe is not glued into the bottom fitting. Pull the riser pipe out of the bottom fitting.



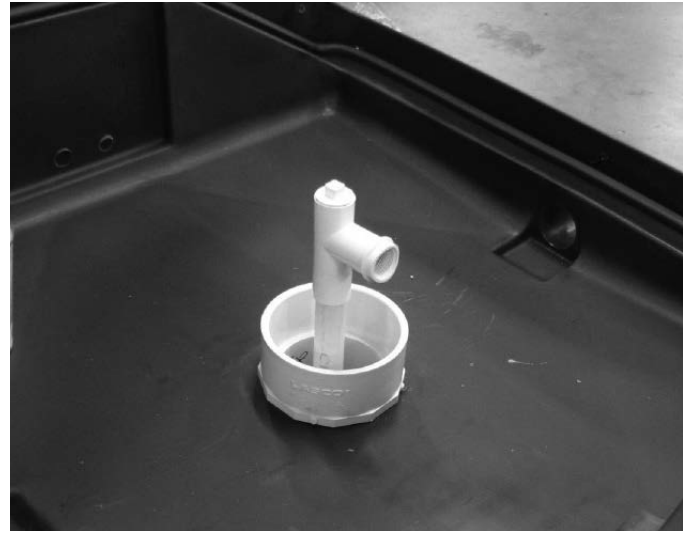
Step 8

With a hack saw, cut off the fill line where you made your mark previously.



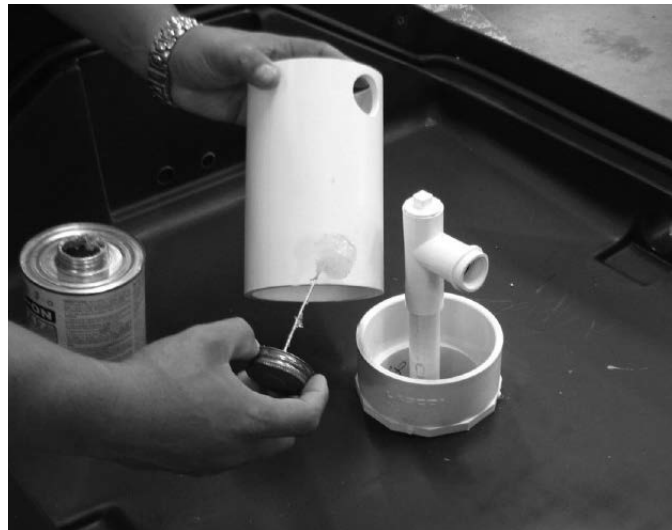
Step 9

AFTER applying pipe sealer to all the male fittings and plug in the $\frac{3}{4}$ " "T," glue the "T" assembly to the fill line with the threaded fitting pointed at 90° pointing to the short end of the tank. Point the fitting toward the wall that's closest.



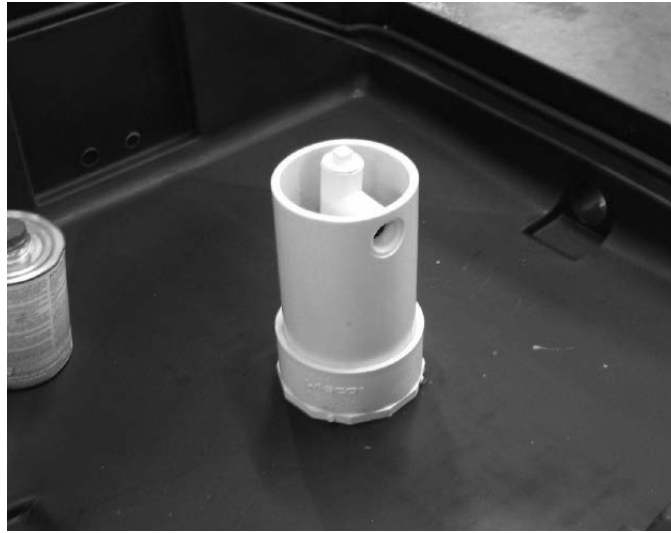
Step 10

Make any adjustments before the cement sets up.



Step 11

Using the same PVC cement, apply it to the bottom of your 4" riser pipe. Make sure all connections are clean before applying glue.



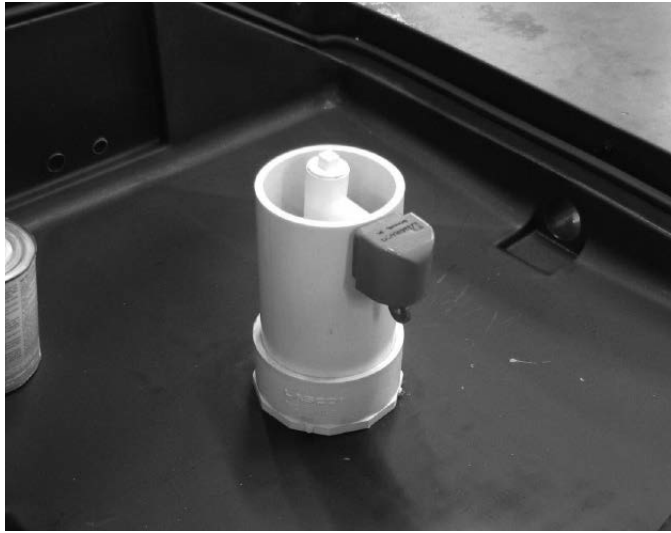
Step 12

After PVC cement has been applied, push the riser pipe into the bottom fitting and align with the "T" fitting so the "T" fitting fits into the 1¹/₄" hole at the top of the riser pipe.



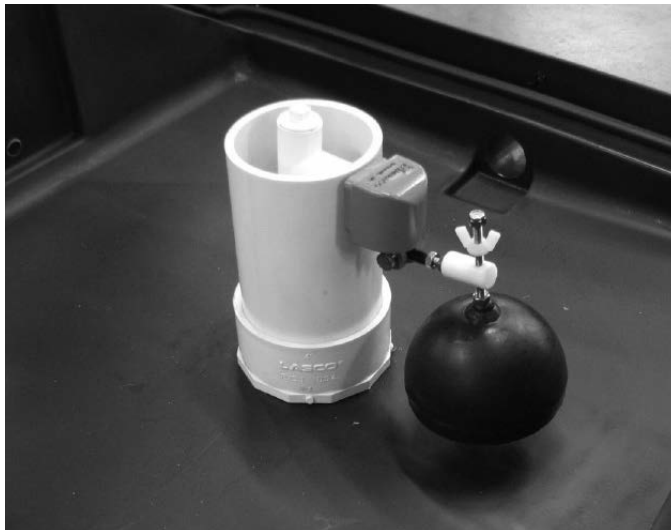
Step 13

Apply teflon tape sealer to the valve threads.



Step 14

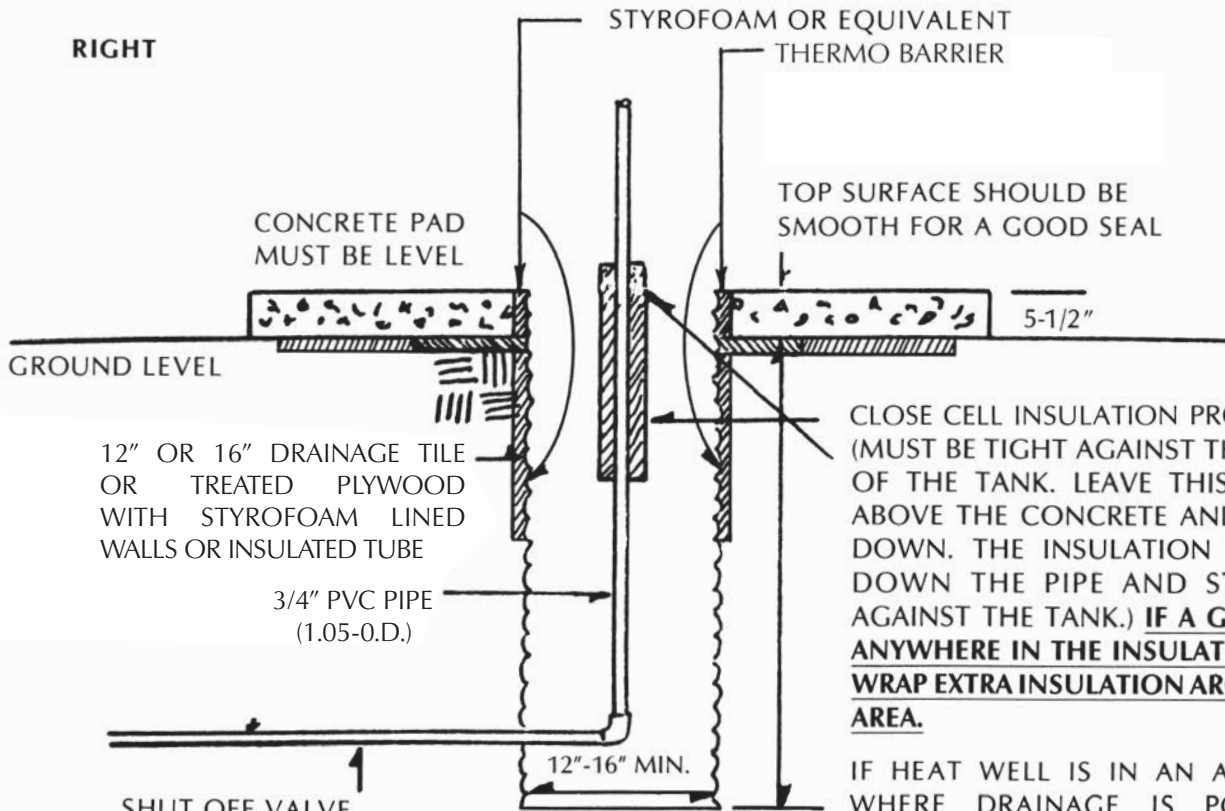
Screw the valve into the elbow so the valve is tight. In most cases, hand tight is sufficient. If wrenches are required, be careful not to over tighten.



Step 15

Install the bob float and arm with the brass thumb screw.

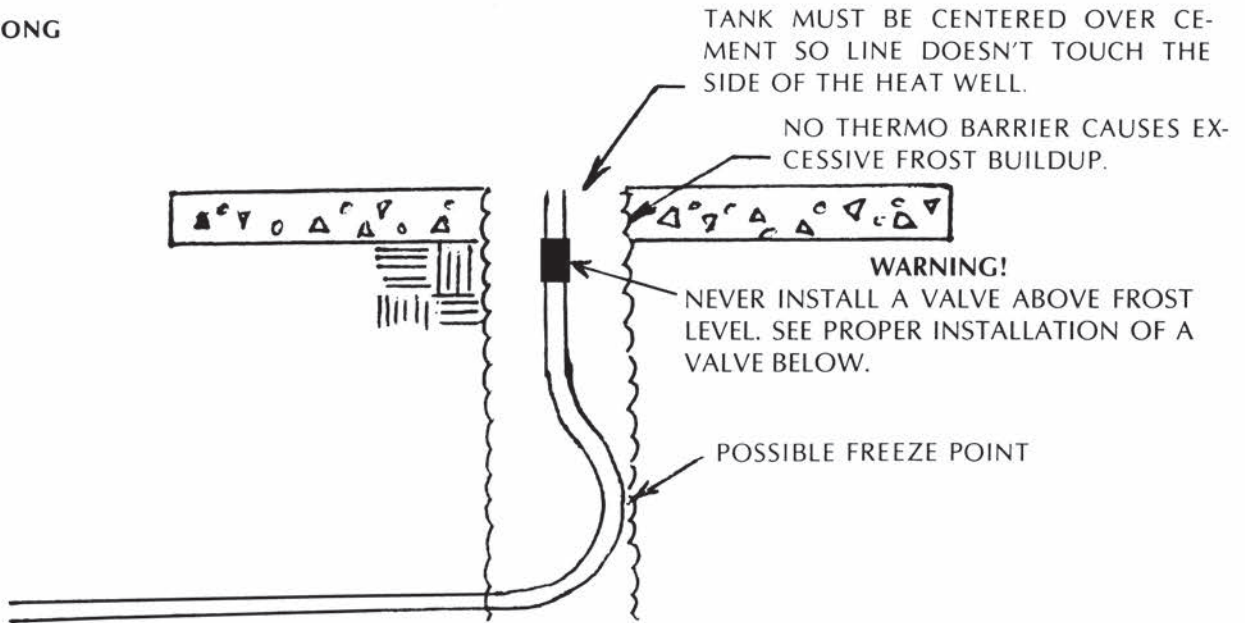
RIGHT



CLOSE CELL INSULATION PROVIDED (MUST BE TIGHT AGAINST THE BOTTOM OF THE TANK. LEAVE THIS ABOUT 3" ABOVE THE CONCRETE AND SET TANK DOWN. THE INSULATION WILL SLIDE DOWN THE PIPE AND STAY TIGHT AGAINST THE TANK.) **IF A GAP OCCURS ANYWHERE IN THE INSULATION SLEEVE, WRAP EXTRA INSULATION AROUND THAT AREA.**

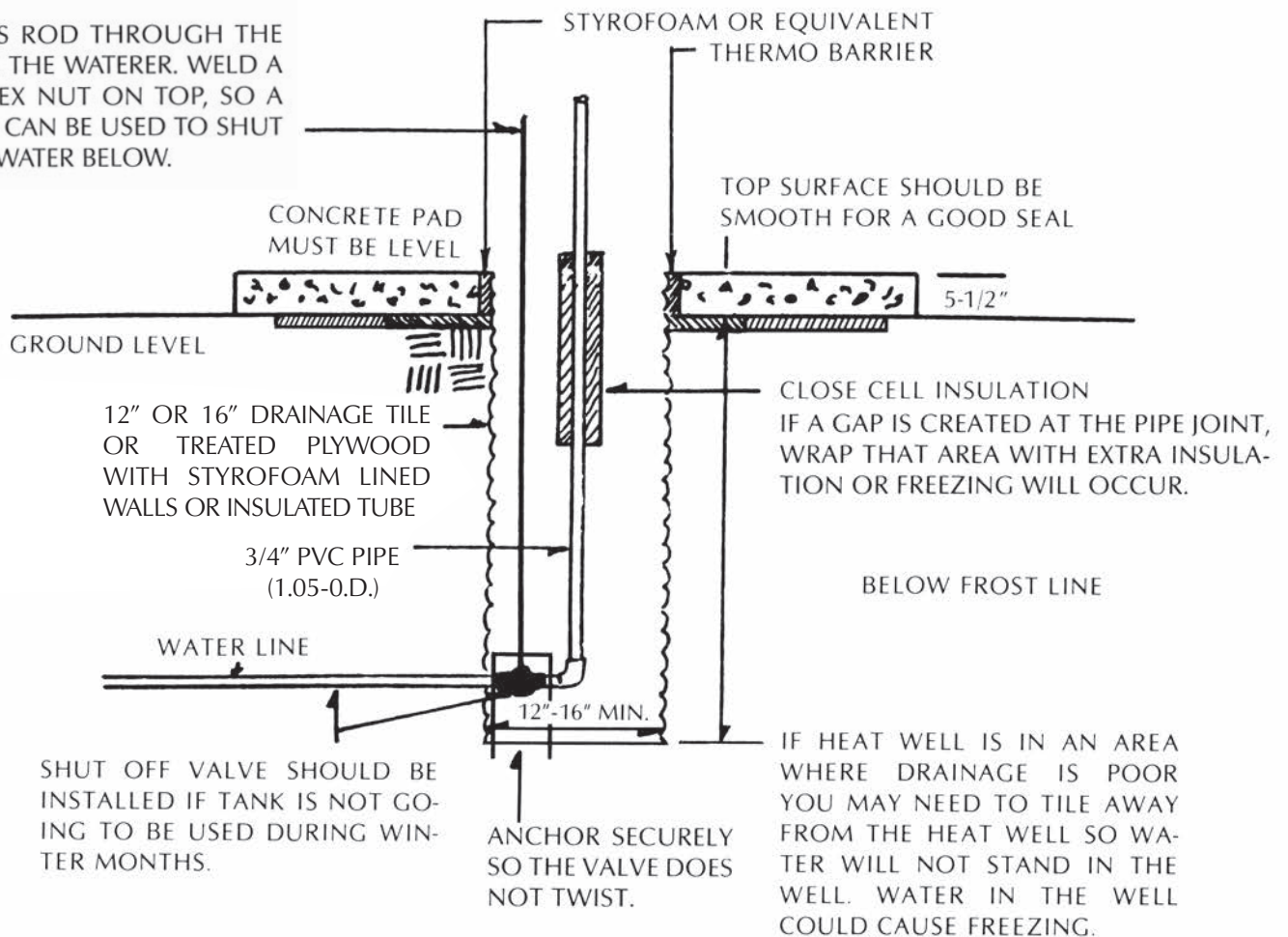
IF HEAT WELL IS IN AN AREA WHERE DRAINAGE IS POOR YOU MAY NEED TO TILE AWAY FROM THE HEAT WELL SO WATER WILL NOT STAND IN THE WELL. WATER IN THE WELL COULD CAUSE FREEZING.

WRONG



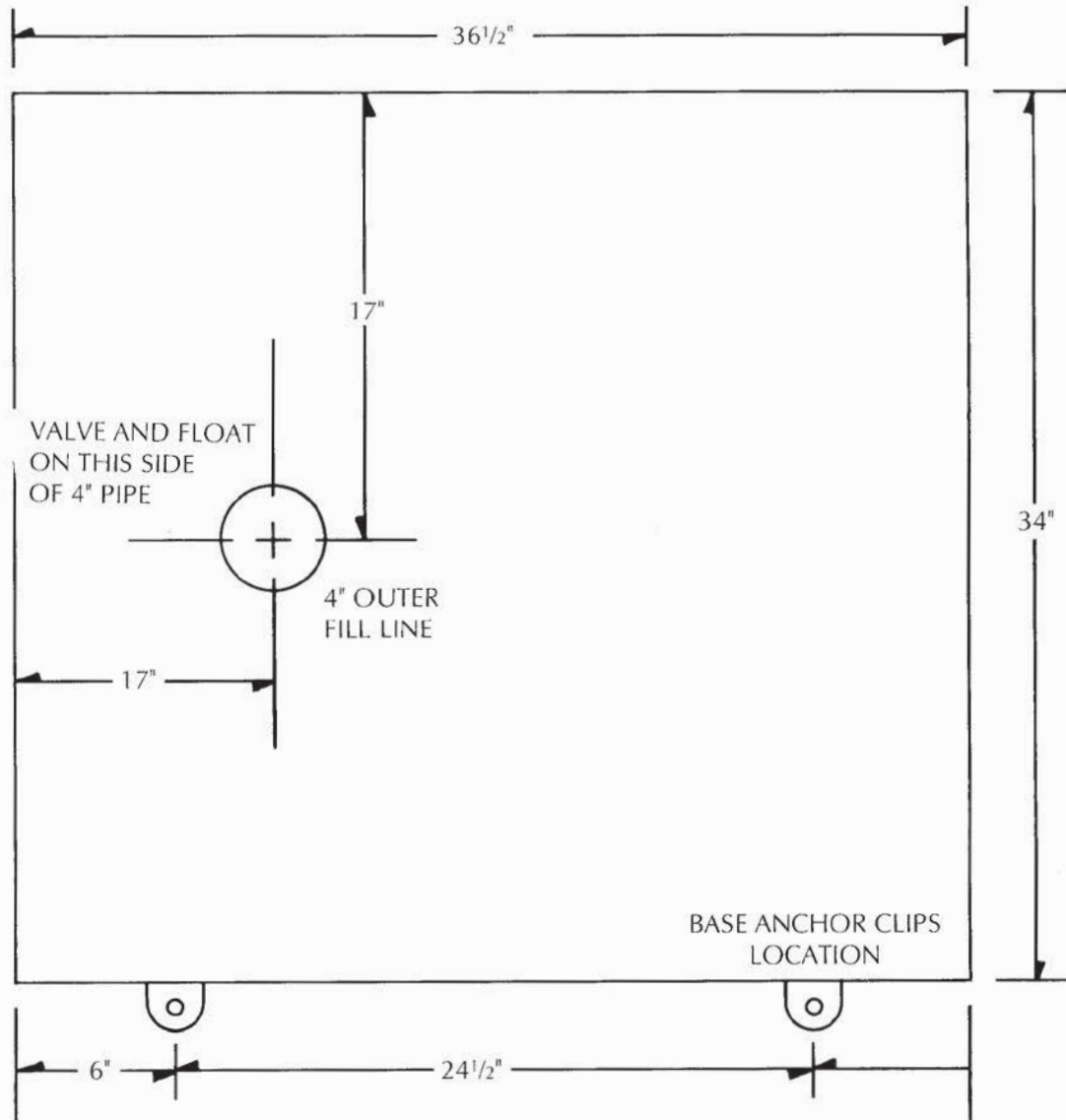
PROPER INSTALLATION OF DRAIN BACK SHUTOFF VALVE

RUN THIS ROD THROUGH THE 4" PIPE IN THE WATERER. WELD A LARGE HEX NUT ON TOP, SO A WRENCH CAN BE USED TO SHUT OFF THE WATER BELOW.



BASE AND ANCHOR PLATE DIMENSIONS MODEL 3410-4

DRILL ANCHOR BOLTS IN AFTER SETTING TANK. USE $\frac{3}{8}$ " CEMENT DRILL



BECAUSE OF EXPANSION AND CONTRACTION OF THIS TYPE OF MATERIAL WE RECOMMEND DRILLING ANCHOR BOLTS IN AFTER THE TANK IS SITTING ON THE CONCRETE PAD.

MODEL 3410-4 MANAGEMENT TIPS

1. 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.
2. 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!**
3. 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.
4. The MiraFount should be cleaned periodically, especially the ones being used for hogs. Mud can hamper the proper operation of the MiraFount.
5. 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.
6. If you have any questions give us a call at 641-236-5822.
7. If valve persists on leaking, use an allen wrench to tighten the orifice under the plunger. Turn clockwise to tighten.
8. Important: On the MODELS 3410 and 3410-4 it is very important that the water level be maintained at the highest possible level.
9. Drain plugs are to be placed inside the tank to plug the drain hole.

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.