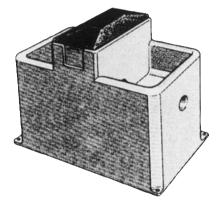


BY MIRACO



INSTALLATION INSTRUCTIONS AND SPECIFICATIONS FOR MODEL #3100

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

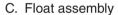
- A. Description
 - Lil' Spring is a multi-purpose waterer designed to be used with a 250 watt heater in cold climates or without in warmer climates.
- B. Weights & Dimensions

Model #	Gallons	Description	Dimensions	Wt.
3100 (w/o heater) #160 Heater Kit	8	multi-purpose electric	36" x 221/2" x 22" 22" drinking height 27" overall height	75

- C. Material necessary for installation
 - 1. concrete for the base
 - 2. teflon tape thread sealer
 - 3. #834 insulated tube

Part II Materials, Products

- A. Materials
 - 1. High impact rockite, Polyethylene
- B. Valve
- 1. Miraco plastic valve #521 HP



- 1. Stainless Steel arm and thumb screw w/Polyethylene 4" x 5" bob float.
- D. Hookup assembly
 - 1. ³/₄" x 24" 150 psi rubber hose.
 - 2. 3/4" plastic ball 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.



Step 1Pull the paper off the back of the rubber gasket and stick to the bottom edge of the tank. This is important to keep out air and water.



Step 2Attach the rubber hose and shutoff valve assembly to your incoming water line. Use teflon tape on all fittings to prevent leaks.



Step 3
After attaching your hose and shutoff valve assembly, lift the tank over the hose and feed the hose up though the small opening into the valve compartment. Attach the blue valve and PVC fitting to the hose. Use teflon tape on all fittings to prevent leaks.

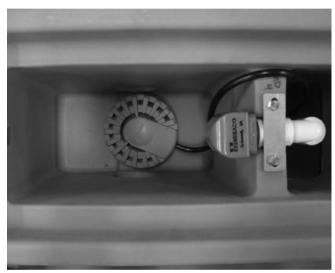


Step 4
Now push the valve assembly down into the molded cradle and secure with the stainless steel retainer and 2-1/4" x 1" bolts. Tighten until valve is tight.

*NOTE: When using the 250 watt Miraco heater, install with a properly grounded electrical line. The heater is to be placed in the valve compartment under the 4x5 bob float. The power cord is connected in the area where the water line is located.



Step 5
Align your tank on the pad and drill 4-%" holes in the concrete to accept stainless steel anchors %" x 4".

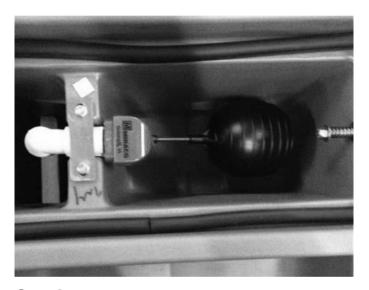


Step 7

Lay your 250 watt heater in the bottom of the valve compartment. Put the plug down the opening into the area below the tank. This is where you plug in both the tank heater and line heater. Attach your float assembly to the valve and turn the water on and adjust your water level. During warm weather remove the heater.



Step 6 Tighten your anchor bolts.



Step 8Connect your float assembly to the valve and adjust your water level to the desired height.

