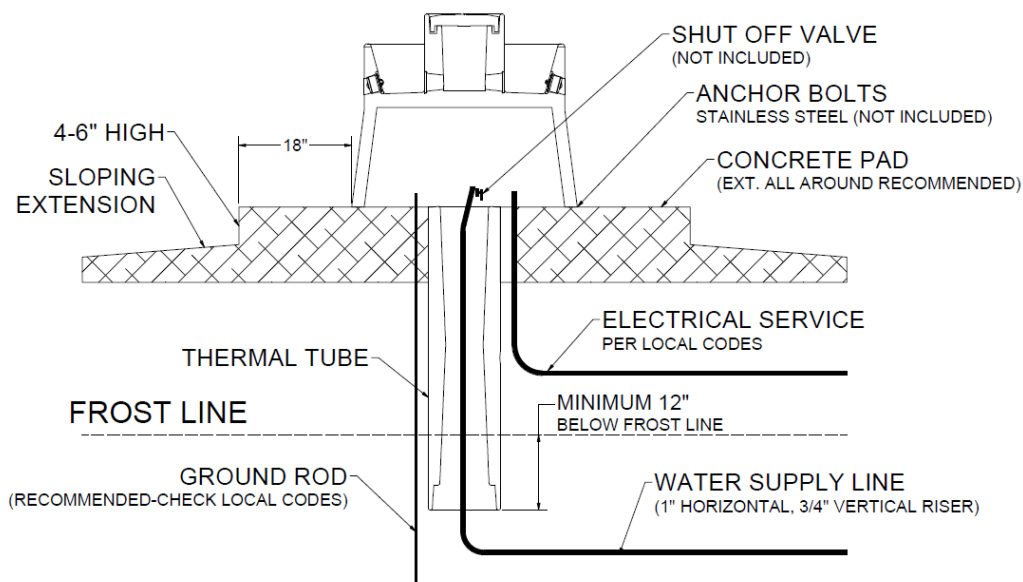


# AUTOFont Installation Instructions



**A. Location** - Putting the fountain in a location that offers protection from the wind will enhance the performance of the fountain. Livestock will tend to gather in this protected area, enticing them to drink more. If possible, the side that supply line enters the fountain should be opposite of prevailing winter wind to give additional protection to the supply line.

**B. Water Supply Line** – Horizontal underground water line should be sized to account for pressure drop, relating to distance, and placed one foot below frost line. A one-inch vertical supply pipe is recommended. A shut-off valve should be installed under fountain to allow for easier servicing. For optimum serviceability, a stop and waste valve can be installed below frost level to drain water when unit is not in use. Vertical supply line must be centered in riser tube to provide an air space between the line and frozen ground outside of tube. Flush water supply line thoroughly before connection to fountain. Water supplies with foreign material such as sand, rust, etc. may require a filter to keep fountain valve working properly.

**C. Riser Tube** – Install a riser tube and extend it at least one foot below frost line or down to horizontal underground water line. For optimum water line protection, use the 12” diameter insulated Ritchie Thermal Tube, part numbers and sizes are shown to the right. Tube opening must be kept clear.

**NOTE:** *The supply line touching the riser tube is the most common cause of the supply line freezing. Do not surround the supply line with insulation, wood, or other foreign material. Any foreign material in the tube may cause frost to migrate to the supply line causing it to freeze.*

Ritchie Thermal Tube	
Part #	Description
18158	1' Top Section
16417	2' Top Section
16612	4' Top Section
16416	2' Extension

**D. Electrical Connection (Optional)** – In many areas, supplemental heat is required, it is easiest to run the electrical line at the same time you lay the waterline for your fountain. Electrical connections should be installed under the unit.

**WARNING: ANY ELECTRICAL SERVICE MUST BE INSTALLED AND MAINTAINED BY A QUALIFIED ELECTRICIAN IN COMPLIANCE WITH LOCAL CODES.**

**E. Mounting Platform** – A concrete platform should be provided for all fountains. It should be at least 4” thick and large enough to accommodate fountain. An additional 4” high step 18” out from each side of the unit will protect the unit from manure handling equipment, as well as discouraging animals from defecating in the fountain. Extending the platform provides animals a place to stand while drinking, consider the size of your animals when determining the dimensions of your platform. Slope the platform away from the fountain for drainage. A rough broom finish on the concrete surface provides better footing for animals.

**F. Preparing the Bottom** - Apply the foam weather stripping to the bottom of the unit, along the outside edge of the fountain.

**G. Hold-Downs** – Ritchie Fountains have mounting pockets molded into the base. Use of Ritchie stainless steel anchor bolts (not included) is recommended for concrete installations. Anchor bolts are available from any Ritchie authorized dealer, in packages of two, part # 16555. Once you have verified the positioning of the fountain, drill, install, and tighten down anchor bolts. Use the large washers provided to hold unit down. Tighten hold down anchors tight, but do not over tighten as this could damage the plastic feet.

**H. Final Water Connection** – Connect the top of the supplied hose to the valve, cut hose to proper length and slip onto the barb fitting of the valve assembly. Clamps and fittings are furnished to secure the connection.

**I. Seal the Base** - After the unit is completely installed, apply a bead of caulking around the base of the fountain to ensure no wind enters through the base of the unit.

**NOTE:** *Sealing the bottom of the unit from cold air is an important aspect of the unit's thermal performance.*

**J. Drain Plug** – Install pre-assembled drain plugs from inside of trough. Plugs should be pushed in flush to prevent accidental removal by animals. Wetting the plug can aid proper installation. Tighten the wing nut to secure plug.

**K. Float Adjustment** – Turn on water supply, check for and correct any leaks. Adjust float for a water depth of one-two inches below top of trough by adjusting the wingnut.

**L. Access Covers** –Reinstall all access panels in the base. Do not over tighten bolt.

**M. Install Cover** – Securely fasten the valve chamber cover by tighten the knurled screw. Do not over tighten. Note: Serial number or date code is found on underneath side of the valve cover.

**N. Cleaning Your Fountain** – To clean your watering fountain you will need a good stiff bristled brush. Open the cover then brush the valve chamber to remove any build-up then brush the tank. Remove the drain plug that is located at the end of the trough to drain out the water and debris. You can shut off the water with the shut-off valve located under the unit or by holding the float in the up position. After the water and debris has drained reinstall the plug and let the tank refill. Now is a good time to readjust the float if needed. Fasten cover and you are done.

## Installation Variations

Incoming water temperature and pressure will vary and will affect the performance of your fountain. Well water will be between 45° and 50°, but rural water from a water tower may be substantially cooler. Supplemental heaters and alternate valves are available for these variations.

### Supplemental Heat

Immersion Heaters			Self-Regulating Heat Cable		
Part #	Volts	Watts	Part #	Volts	Watts
16311	120	250	16276	120	30
17960	240	250	16713	240	30

Both the valve chamber and the water supply line should be protected from freezing. To protect the valve chamber, immersion heaters should be placed flat on the bottom of the chamber. Ensure the heater and power cable does not interfere with the motion of the float. Self-regulating heat cables protect the supply line from freezing. Heat cables should wrap around the valve and follow the supply line down into the riser tube. You may use nylon ties to anchor the cable to the supply line. Both immersion heaters and supply line heaters are thermostatically controlled, using power only when needed. Neither heater will get hot enough to melt the plastic of the fountain.

### Ritchie Valves

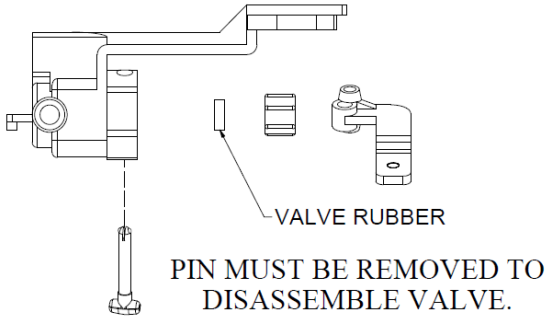
Ritchie valves come in various sizes and pressure ratings as shown below - green for high supply line pressure, red for moderate supply pressure, and white for low-pressure applications. Differences in the size of trough also impacts valve choice. Your individual situations may require a change from the standard valve supplied with your fountain, see your Ritchie Dealer if this is needed.

**NOTE:** *The red ½" valve is standard on the AUTOFont.*

1/2"	Part #	GPM	Pressure Range
White	12574	4.8	Low, 5-40 psi. (34-275 kPa)
Red	12575	3.4	Moderate, 40-60 psi. (275-414 kPa)
Green	13597	1.45	High, 60-80 psi. (414-552 kPa)

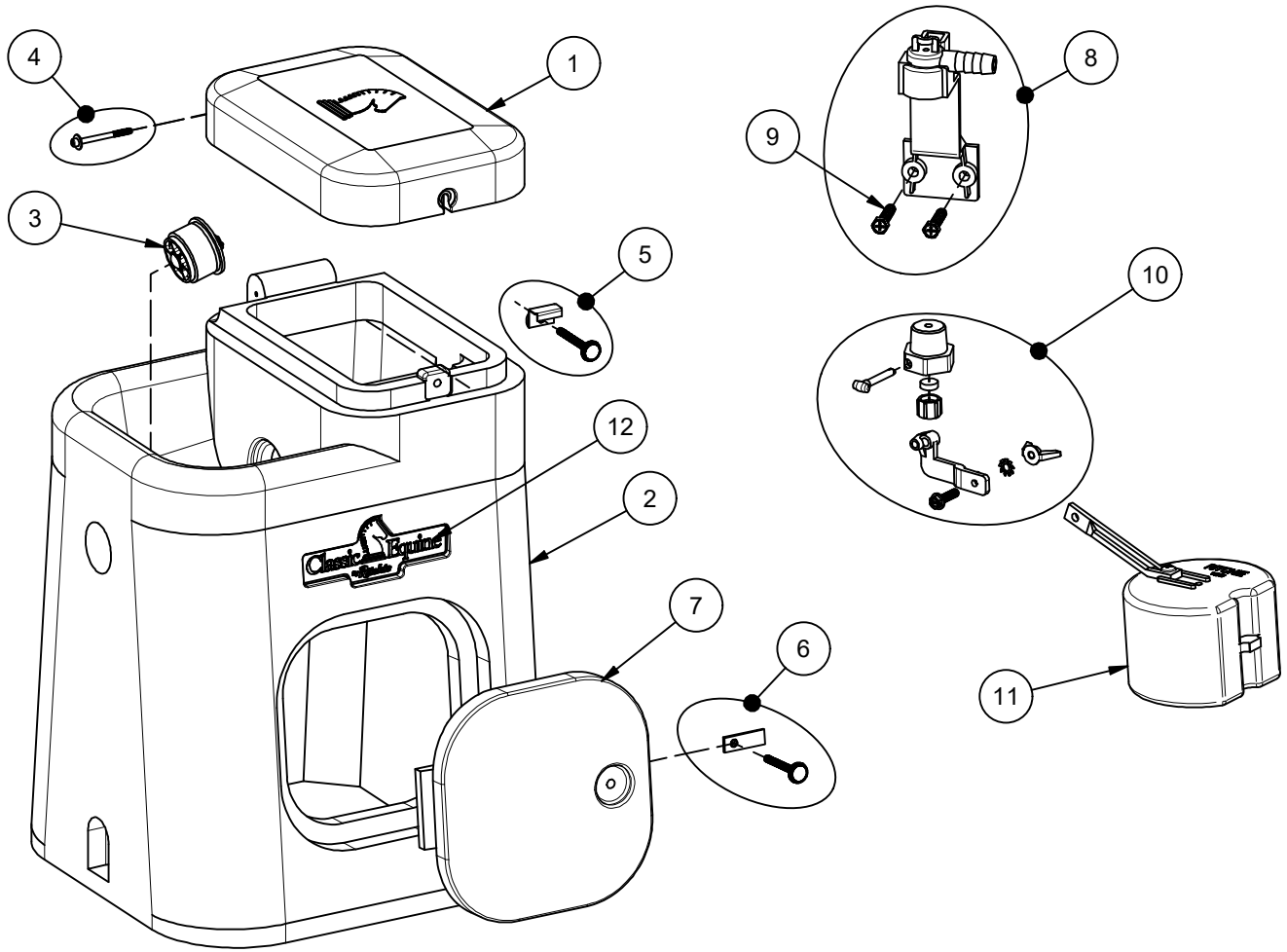
**NOTE:** *Maximum inlet water pressure for each valve is shown above. If water pressure is extremely high, and if the valve does not shut off, a pressure-reducing valve may be needed.*

## Trouble Shooting

Problem	Solution
Water Freezing in the Valve or Supply Line	Make sure the fountain is sealed from wind between the concrete platform and bottom of unit.
	Make sure supply line is properly installed: <ul style="list-style-type: none"> <li>◆ Riser tube with supply line centered, and air space between riser tube and supply line. Ritchie Thermal Tubes are recommended as they have optimum inside and outside diameter to maximize insulation.</li> <li>◆ Horizontal supply line is at least 1 foot below frost line.</li> </ul>
	If freezing continues, use supplemental heat below freezing temperatures.
Low Water Flow	Check that valve inlet is not plugged or supply hose is not kinked.
	Check system pressure from supply hose by installing a tee and pressure gauge in front of the valve to check pressure drop when valve is open. A severe pressure drop indicates a restriction or undersized supply system.
	Check that shut off valves are fully open.
Valve won't stop dripping	Check float adjustment. Ensure float moves freely.
	Take valve apart and check for sand or scale in valve rubber.
	Turn valve rubber over and re-assemble.
	Check for excessive water system pressure and install pressure reducing valve.
<b>1/2" Valve:</b> <div style="text-align: center;">  <p>The diagram shows a cross-section of a valve assembly. A callout line points to a component labeled 'VALVE RUBBER'. Below the main assembly, a separate vertical component is shown with a small pin protruding from its top. A note below this pin states: 'PIN MUST BE REMOVED TO DISASSEMBLE VALVE.'</p> </div>	

# Classic Equine AUTOFOUNT 1

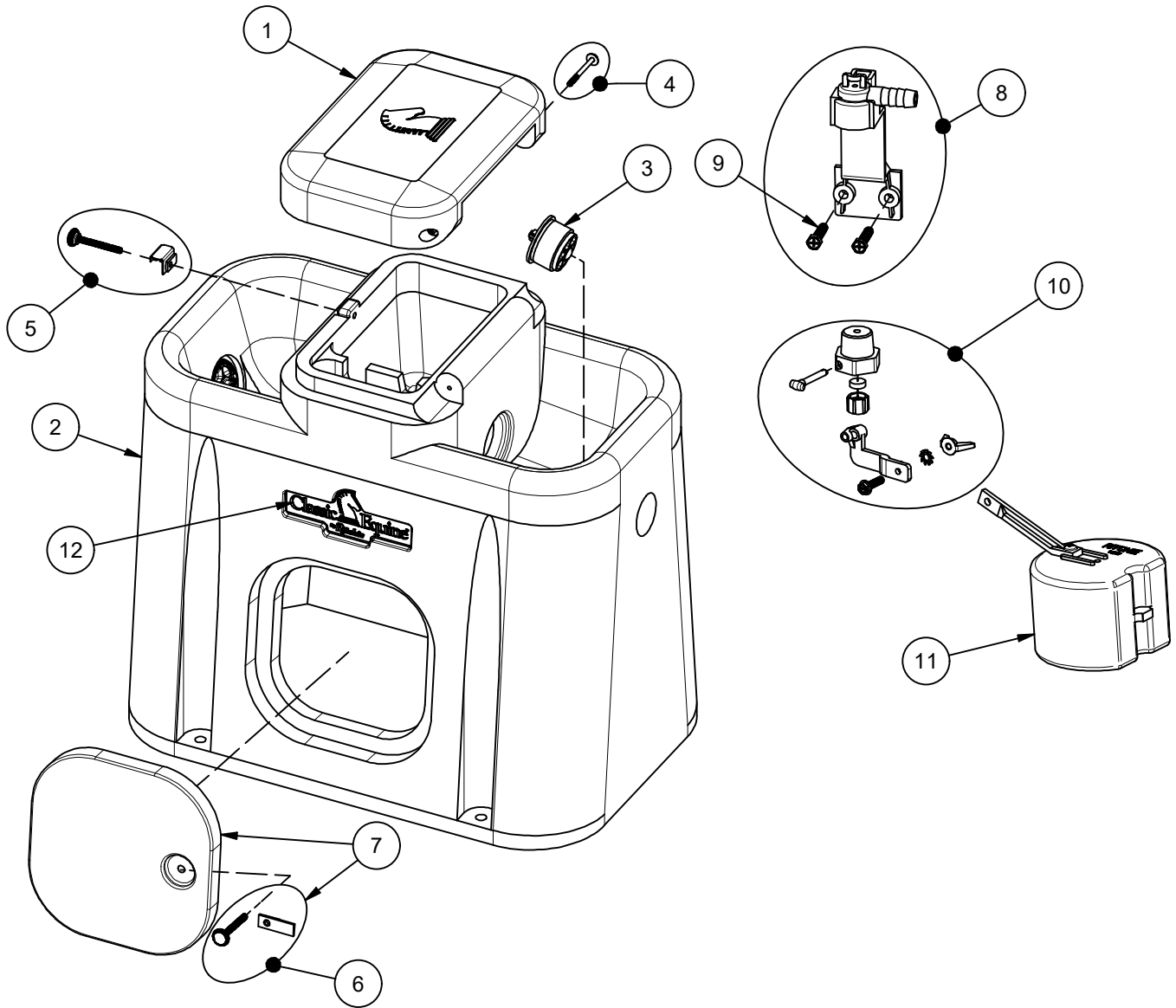
Part # 18770



Item	Part #	Description	Qty	Item	Part #	Description	Qty
1	18766	AUTOFOUNT 1 Cover	1	9	18709	Screw Valve Mount (4/pkg)	1 pkg
2	18768	AUTOFOUNT 1 Base	1	10	12575	Red Valve 1/2" pkg	1 pkg
3	18470	Drain Plug Ritchie 3"	1 pkg	11	13613	Float with Short Arm pkg	1 pkg
4	18716	Classic Equine Hinge Bolt (2/pkg)	1 pkg	12	18719	Classic Equine Logo pkg (2/pkg)	1 pkg
5	18718	Cover Latch Hardware pkg	1 pkg	NS	15931	Hose Clamp SS (5/pkg)	1 pkg
6	18753	Access Panel Hardware Pkg	1 pkg	NS	18613	Adapter 1/2" x 3/8" HB	1 pkg
7	18726	Access Panel w/hardware	1	NS	18739	AUTOFOUNT Accessory pkg	1 pkg
8	11515	Valve Bracket w/screws pkg	1 pkg	NS	14866	Seal Foam 1/2"x3/4"x10' Roll	1

# Classic Equine AUTOFOUNT 2

Part # 18720



Item	Part #	Description	Qty	Item	Part #	Description	Qty
1	18722	AUTOFOUNT Cover	1	9	18709	Screw Valve Mount (4/pkg)	1 pkg
2	18724	AUTOFOUNT Base	1	10	12575	Red Valve 1/2" pkg	1 pkg
3	18470	Drain Plug Ritchie 3"	2 pkgs	11	13613	Float with Short Arm pkg	1 pkg
4	18716	Classic Equine Hinge Bolt (2/pkg)	1 pkg	12	18719	Classic Equine Logo pkg (2/pkg)	1 pkg
5	18718	Cover Latch Hardware pkg	1 pkg	NS	15931	Hose Clamp SS (5/pkg)	1 pkg
6	18753	Access Panel Hardware Pkg	1 pkg	NS	18613	Adapter 1/2" x 3/8" HB	1 pkg
7	18726	Access Panel w/Hardware	1	NS	18739	AUTOFOUNT Accessory pkg	1 pkg
8	11515	Valve Bracket w/screw pkg	1 pkg	NS	14866	Seal Foam 1/2"x3/4"x10' Roll	1



## RITCHIE INDUSTRIES, INC.

### LIMITED WARRANTY

Ritchie Industries, Inc., hereinafter referred to as Ritchie Industries, gives a LIMITED WARRANTY for the period of time(s) stated herein, subject to certain limitations, on your new watering system against defects in material or workmanship when properly installed, set up, operated, and maintained in accordance with the instructions and recommendations set forth by Ritchie Industries, including in the Installation Instructions. **The warranty excludes labor and shipping charges.**

The warranty is transferable to the next purchaser of the watering system prior to expiration of the warranty period, but any such transfer will not extend the original warranty term. Proof of purchase must be submitted with any warranty claim, and all warranty claims shall be processed through an Authorized Ritchie Dealer or Distributor.

Ritchie Industries' liability for any defects in material or workmanship with respect to accepted goods shall be limited to repairing the goods or replacing them as Ritchie Industries shall elect. Parts used in warranty repairs will be warranted for the balance of the water system's warranty period, with all parts replaced under warranty becoming the property of Ritchie Industries.

The limited warranty periods begin upon delivery of the watering system to the original purchaser. Upon delivery of the goods, purchaser assumes all liability, including but not limited to all personal injury and property damage, resulting from the handling, possession, or use of the goods.

### WARRANTY COVERAGE AND LIMITATIONS

#### Limitations of Warranties and Remedies

Ritchie Industries' watering systems are designed and manufactured to provide years of reliable use when installed and operated consistent with Ritchie Industries' instructions and recommendations. However, the potential for improper installation, modifications and misuse of the goods exists. Therefore, the limited warranty provided shall be as follows:

This limited warranty shall not apply to any appearance items and shall not apply to any product which has been subject to misuse, abuse, abnormal service or handling, negligence, or accident, nor to any product that is installed and/or used contrary to Ritchie Industries' installation instructions and instructions for use. The limited warranty shall also not apply to any product whose exterior has been damaged or otherwise defaced, that has been repaired, altered, or modified by anyone, other than Ritchie Industries, in a way so as in Ritchie Industries' judgment it adversely affects the product's operation, performance, durability, or intended use, nor to any product where removal of parts, modification(s) or use of parts or accessories not manufactured or approved by Ritchie Industries has caused damage.

#### Coverage and Warranty Periods

Unit Type	Coverage and Warranty Period
Poly Units	Base, top, and ball closures. Ten-year limited warranty: 100% for first five years, then declining 20% per year for remainder of the 10-year period.
Stainless Steel Units	Stainless trough and stainless valve chamber frame. Ten-year limited warranty, plus ten years of corrosion coverage, at 100% for entire 10-year period.
Component Parts	One-year limited warranty on all component parts, such as floats, valves, and heating elements.

#### Exclusions of Liability

EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, RITCHIE INDUSTRIES MAKES NO OTHER WARRANTY OR REPRESENTATION OF ANY KIND, EXPRESSED OR IMPLIED. **THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED FROM THIS LIMITED WARRANTY.** TO THE EXTENT THEY CANNOT BE DISCLAIMED, THE IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE LIFE OF THE EXPRESS WARRANTY. **THIS LIMITED WARRANTY EXCLUDES INCIDENTAL, CONSEQUENTIAL, AND SPECIAL DAMAGES. THIS EXCLUSION OF CONSEQUENTIAL, INCIDENTAL, AND SPECIAL DAMAGES IS INDEPENDENT FROM AND SHALL SURVIVE ANY FINDING THAT THE EXCLUSIVE REMEDY FAILED OF ITS ESSENTIAL PURPOSE.** THE REMEDIES SET FORTH IN THIS LIMITED WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON UNDER THIS WARRANTY. SOME STATES/PROVINCES DO NOT ALLOW FOR THE DISCLAIMERS, LIMITATIONS, AND EXCLUSIONS IDENTIFIED ABOVE AND, AS A RESULT, THEY MAY NOT APPLY TO YOU.

No agent, employee or representative of Ritchie Industries, and no Ritchie Industries Dealer/Distributor, is authorized to bind Ritchie Industries to any representation or warranty regarding the goods except as specifically included in this limited warranty.

# Installation Instructions for



P L A Y T O W I N <sup>TM</sup>

## AUTOFOUNT

*Congratulations, you have just purchased the finest watering fountain on the market. This unit is built to give you excellent service when properly installed and maintained. Please follow instructions carefully. Read and understand all instructions before installing.*

**18739** *Ritchie*  
CONRAD, IOWA USA 50621



**847987087396**

AUTOFOUNT BAG ASSY

