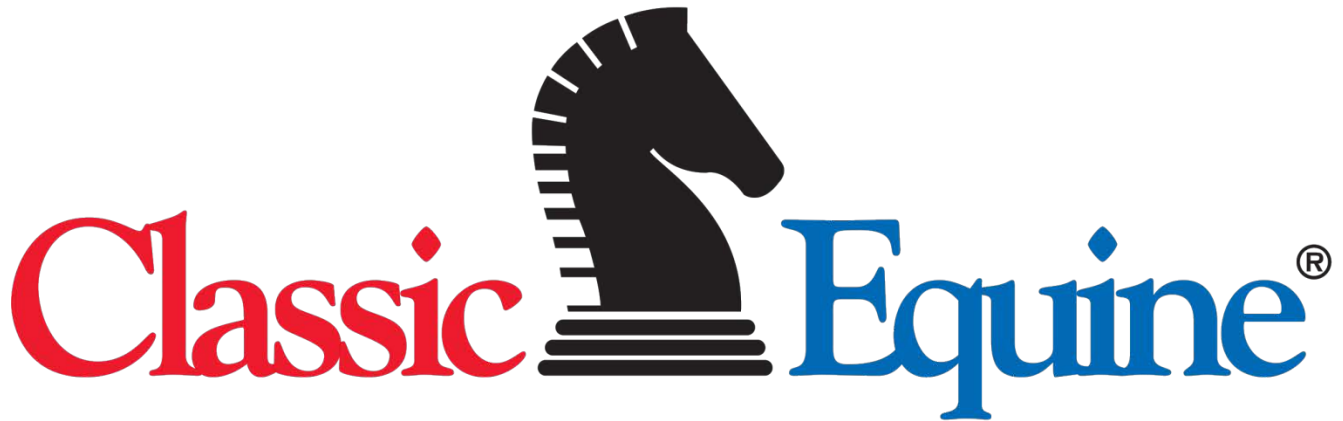


Installation Instructions For



P L A Y T O W I N TM

ULTRAFOUNT

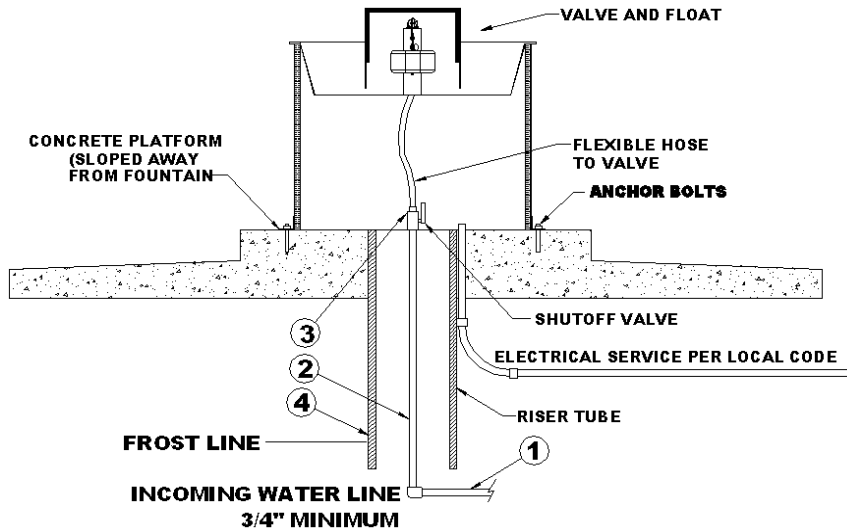
MODEL:ES1&ES2

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



Part # 24076
7 July, 2021

Fountain Installation Instructions



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

B. Mounting Platform - A concrete platform (see above) must be provided for all fountains. Use a minimum of 4" thick, (6" recommended thickness), large enough to accommodate fountain, and additional 4" step (on top of the platform) extending 18" out from each side of the unit. This 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. The concrete step and platform should slope away from the fountain for drainage. A rough broom finish to concrete surface provides better footing for livestock.

C. Water Supply Line - Horizontal underground water line (#1) should be sized to account for pressure drop, relating to distance, and placed one foot below frost line. A one-inch vertical supply pipe (#2) is recommended. A shut-off valve (#3) 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.

D. Riser Tube - Install a riser tube (#4) to provide room for plumbing and to accommodate optional shut-off valve. Ensure that the water supply line is centered in the riser tube. For optimum water line protection, use the recommended insulated Ritchie Thermal Tube. Use a combination of Thermal Tubes to reach the required depth of 1' below your frost depth.

Ritchie Thermal Tubes	
18158	1' top section
16417	2' top section
16612	4' top section
16416	2' extension

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.

E. Preparing the Bottom - Apply the provided foam weather stripping to the bottom of the fountain, following along the outside edge of the fountain. **Note: Sealing the bottom of the unit from cold air is an important aspect of the unit's thermal performance.**

F. Hold-Downs - Your fountain has four built-in hold-down locations to anchor your unit securely to the concrete pad. The use of 3/8" x 5" stainless steel expansion anchor bolts (not included) is recommended for concrete installations. Anchor bolts are available from Ritchie in a two pack, part # 16555. Fender washers are supplied for use with anchors.

G. Electric Supply – It is generally most cost effective to run your electrical supply line at the same time you are trenching for your water supply. **Any electrical service must be installed and maintained by a qualified electrician.**

H. Electrical Connection – The electrical installation should be made and maintained by qualified electrician conforming to national and local codes. Electrical Supply wiring can be provided either underground, overhead, or from an inside wall behind fountain. In all cases, a grounded receptacle should be provided for the attached power cord and the wiring should be protected from tampering by the livestock. For cord connected units, connection must be made only to a properly grounded circuit protected by a ground-fault circuit-interrupter (GFCI).

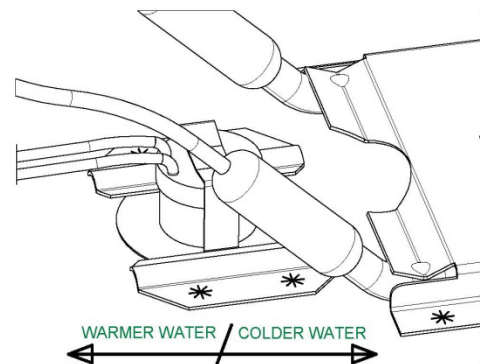
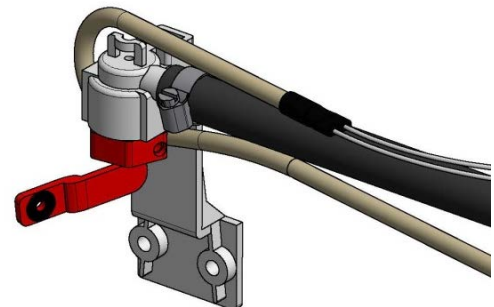
NOTE: National/Local electrical codes may require livestock fountains installed in feedlots in open feeding area to be grounded by a separate stranded copper grounding conductor or at least No.6 AWG terminating at a point where the branch circuit receives its supply. Check with local inspection authorities.

WARNING: This installation must be made and maintained in strict conformity with National/Local plumbing codes and National/Local electrical codes (CSA in Canada). The application of these codes takes precedent. Failure to make and maintain all installations properly may result in loss of livestock, personal injury, or death.

I. Cable Heater – Uncoil cable heater and loop around the valve. Attach the remaining part of the cable heater to the water supply, as far down the riser tube as possible with the cable twist ties provided. This heater is water tight, but should not be immersed in water.

CAUTION: Installation must not cause any strain on heater wiring connections. Do not cross the cable over itself along the water line. Avoid heater damage caused by hot spots due to its leads lying close to each other. Also, do not wrap additional insulation around heater.

J. Disc Thermostat – The disc thermostat is mounted in a bracket under the trough, which allows it to be moved relative to the heater. To ease movement of thermostat turn ¼ turn. To lock in position after adjustment turn ¼ turn back. **As the thermostat is moved toward the heater, the water temperature in the trough is lowered.** The best location is determined by checking the trough temperature several times during the heating season.



K. Valve Cover –Before installing the valve cover the weather seal must be installed. The seal is installed by removing the paper backing from the adhesive side and then, starting at the midpoint of one of the legs, attach the seal to the frame. Work your way around the frame with the seal as close to the inside edge as possible and then up the other leg to the halfway point. At this time cut any extra foam seal as needed then repeat for other side.

L. Attaching Valve – Installing the valve assembly before attaching the cover is preferred. To attach the valve you will need a 3/8" socket with driver. Align holes of white valve bracket with the holes on the trough tab, as shown at right. Securely tighten the screw being careful to not over tighten and strip out plastic valve bracket.

M. Float Adjustment – Open water-supply shut-off valve, check for and fix any leaks. Adjust float for a water depth of 2 inches below top of trough or overflow pipe by adjusting the thumbscrew or wing-nut. With the valve functioning properly and the water level set at the proper level, you may install the valve cover.

N. Attaching the Cover – Install the cover assembly as shown in picture on right. Align holes of the cover with holes in casing behind the valve. Using the supplied 3/16" hex wrench tighten the screws until there is a 1/8" gap between the cover and the base on both sides of the cover. Some adjust may be required if the thumb screw does not align with the locking groove on the front of the fountain.

O. Hose Connection – Connect hose to customer supplied shutoff valve at the top of the concrete. Cut hose to proper length and slip onto the barb fitting of the valve assembly. Clamps and fittings are furnished to secure the connection.

P. Drain Plug – Insert the drain plug firmly into the drain hole in the center of the trough.

Q. Install Side Access Panel – Once all water line connections have been checked for leaks and electrical hook-up is complete, the side access door may be installed.

R. Children should be supervised to ensure that they do not play with the appliance – This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instructions concerning use of the appliance by a person responsible for their safety.

S. Cleaning Your Fountain – To clean your watering fountain you will need a good stiff bristled brush. Open the cover then brush the tank to remove any build-up. Remove the plug that is located in the valve chamber area under the float 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. Close cover and you are done.



Figure 1. Ultrafount ES1

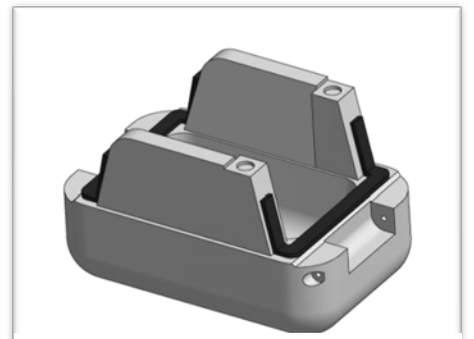
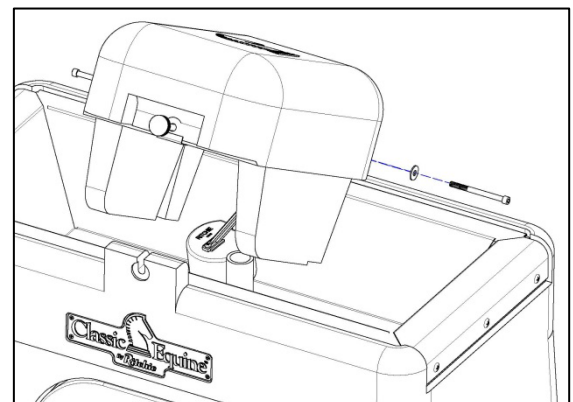
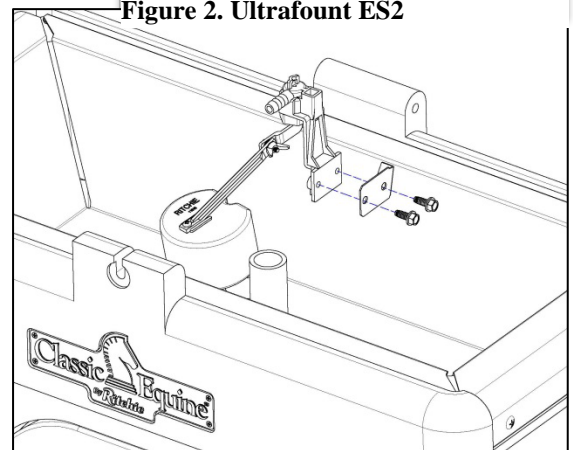


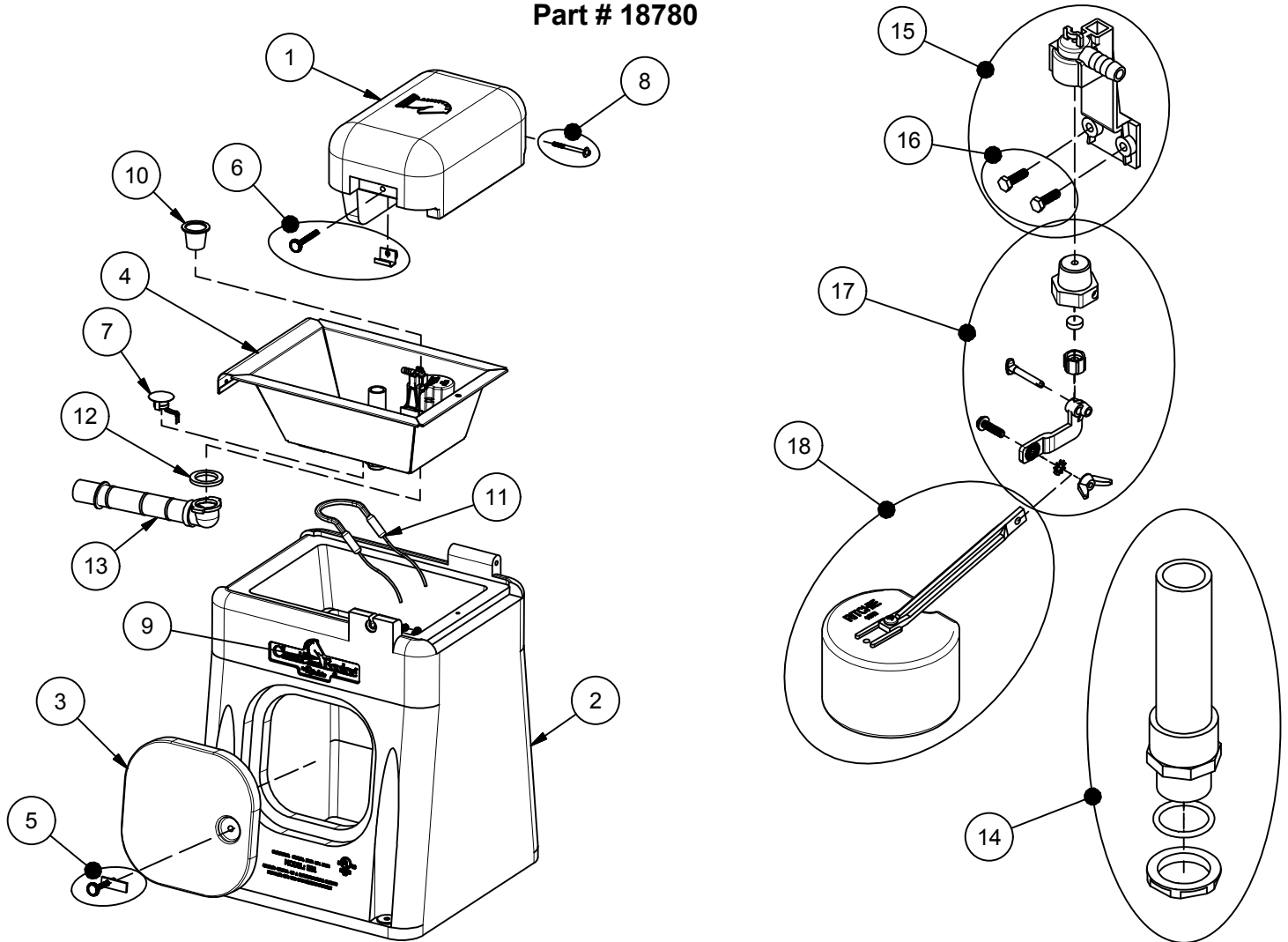
Figure 2. Ultrafount ES2



Trouble Shooting

Classic Equine ULTRAFOUNT

MODEL: ES1
Part # 18780

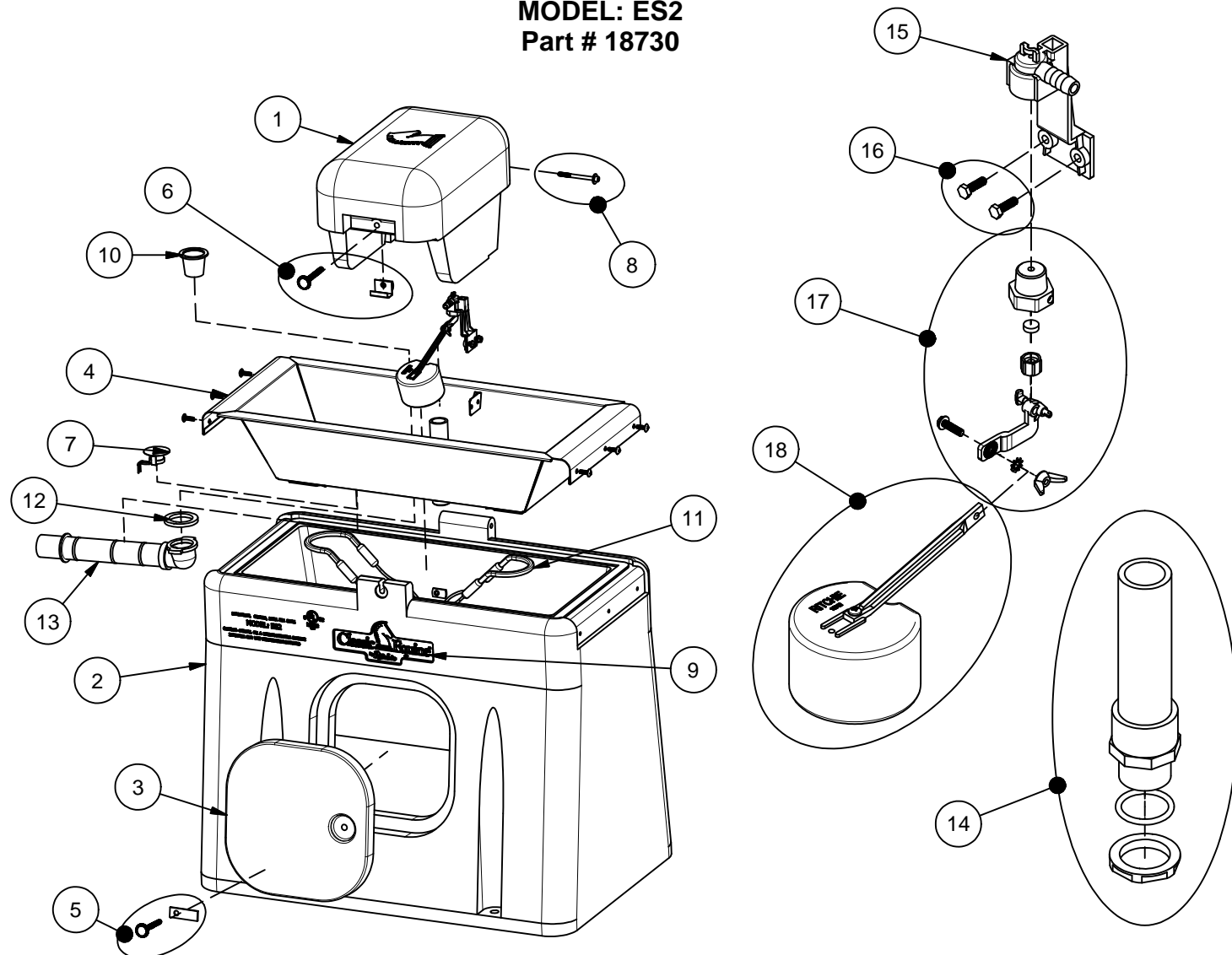


Item	Part #	Description	Qty	Item	Part #	Description	Qty
1	18778	ULTRAFOUNT ES1 Cover	1	14	18788	Standpipe pkg	1 pkg
2	18776	ULTRAFOUNT ES1 Casing	1	15	11515	Valve Bracket 1/2" w/ Scrws pkg	1 pkg
3	18726	Classic Equine Access Panel	1	16	15154	Screws Valve Bracket (10/ pkg)	1 pkg
4	18775	ULTRAFOUNT ES1 Trough	1	17	12575	Red Valve 1/2" pkg	1 pkg
5	18753	Access Panel Hardware Pkg	1 pkg	18	12836	Float with Long Arm pkg	1 pkg
6	18718	Cover Latch Hardware Pkg	1 pkg	NS	13830	Cable Htr 120V 48W (1/pkg)	1 pkg
7	11885	Disc Thermostat pkg	1 pkg	NS	18791	ULTRAFOUNT Accessory pkg	1 pkg
8	18716	Classic Equine Hinge Bolt Pkg	1 pkg	NS	16523	Seal Foam 1/4"x3/4"x25' Roll	1
9	18719	Classic Equine Logo Pkg (2/pkg)	1 pkg	NS	14866	Seal Foam 1/2"x3/4"x10' Roll	1
10	18628	Drain Plug (2/pkg)	1 pkg				
11	14150	Heater 120V 125W (1/pkg)	1 pkg		18781	ULTRAFOUNT ES1 - 240V	
12	18075	Drain Washer (6/pkg)		NS	16664	Heater 240V 200W (1/pkg)	1 pkg
13	11473	Drain Pipe with Elbow	1 pkg	NS	16424	Cable Htr 240V 48W (1/pkg)	1 pkg

Classic Equine ULTRAFOUNT

MODEL: ES2

Part # 18730



Item	Part #	Description	Qty	Item	Part #	Description	Qty
1	18734	ULTRAFOUNT Cover	1	14	18788	Standpipe pkg	1 pkg
2	18732	ULTRAFOUNT Casing	1	15	11515	Valve Bracket 1/2" w/ Scrws pkg	1 pkg
3	18726	Classic Equine Access Panel	1	16	15154	Screws Valve Bracket (10/ pkg)	1 pkg
4	18737	ULTRAFOUNT Trough	1	17	12575	Red Valve 1/2" pkg	1 pkg
5	18753	Access Panel Hardware Pkg	1 pkg	18	12836	Float with Long Arm pkg	1 pkg
6	18718	Cover Latch Hardware Pkg	1 pkg	NS	13830	Cable Htr 120V 48W (1/pkg)	1 pkg
7	11885	Disc Thermostat pkg	1 pkg	NS	18751	ULTRAFOUNT Accessory pkg	1 pkg
8	18716	Classic Equine Hinge Bolt Pkg	1 pkg	NS	16523	Seal Foam 1/4"x3/4"x25' Roll	1
9	18719	Classic Equine Logo Pkg (2/pkg)	1 pkg	NS	14866	Seal Foam 1/2"x3/4"x10' Roll	1
10	18628	Drain Plug (2/pkg)	1 pkg				
11	14150	Heater 120V 125W (1/pkg)	2 pkg		18731	ULTRAFOUNT ES2 - 240V	
12	18075	Drain Washer (6/pkg)		NS	16664	Heater 240V 200W (1/pkg)	2 pkg
13	11473	Drain Pipe with Elbow	1 pkg	NS	16424	Cable Htr 240V 48W (1/pkg)	1 pkg

Problem	Solution
Ice in Trough	Check fuses or circuit breakers
	Check all heating elements to make sure they are heating
	Adjust thermostat to higher temperature
	Check for voltage to fountain
Valve Freezing	Check that cable heater is installed properly and fastened around valve
	Check for air gaps where a cold wind can reach the valve
Supply line Freezing	Check that the cable heater is uncoiled and fastened around valve and supply line
	Check that supply piping is centered in riser tube and not touching the sides
	Check that riser tube is free of water and mud that may cause freezing
	Check that flexible hose does not touch side of casing or frame
	Check for air gaps between casing and concrete floor
Valve won't stop dripping	Check the float adjustment. Check that float is not water logged or rubbing sides
	Check for excessive water supply pressure
	Disassemble valve and check for sand or mineral build-up on valve rubber. Check valve orifice outlet for wear and damage. A screen or filter may be required with sandy or scaly water
	Turn valve rubber over and re-assemble
Low water flow	Check that valve inlet is not plugged or supply hose is not kinked
	Check system pressure and water flow from supply line
	Check that shutoff valves are fully open

Ritchie Limited Warranty

Effective June 2021

Ritchie Industries, Inc. warrants its products to be free of defective materials and workmanship. Defective part(s) will be repaired or replaced at the option of Ritchie Industries. **This warranty specifically excludes all labor and shipping charges.**

This warranty does not apply to any appearance items, to any product whose exterior has been damaged or defaced, to any product that has been improperly installed, to any product subjected to misuse, abnormal service or handling, and to any products altered or repaired with other than original equipment or manufacturer's parts.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

All warranty claims must be processed through an Authorized Ritchie Dealer/ Distributor. **Proof of purchase is required. This warranty is transferable.** The period of warranty begins at original date of purchase as follows:

Poly Units

Base, top and ball closures

10 year limited against manufacturing defect. 100% first five years, then declining 20% per year for the remaining five years.

Stainless Steel Units

Stainless trough and stainless valve chamber frame:

Ten years against manufacturing defect or corrosion. 100% all ten years.

Casing and cover:

10 year limited against manufacturing defect. 100% first year, then declining 10% per year for the remaining nine years.

Component Parts

All component parts, such as floats, valves, heating elements:

One year from the date of purchase against manufacturing defect, 100%.