

DESTINY FOUNTAINS



1–10 HP Floating Fountains



Intertek
FILE# 3179195

Congratulations on choosing the Arbrux Limited Destiny Fountain. We at Arbrux Limited appreciate your decision for choosing our leading display fountain equipment. The following is a manual regarding the installation, usage care and storage of your Destiny Fountain. Please store this manual in an easily accessible location. **DO NOT DESTROY.**

General Information

The following is provided to inform persons of potential injury hazards inherent with this product.

IMPORTANT SAFETY INSTRUCTIONS

- Under no circumstances should anyone enter the body of water when the Destiny Fountain is plugged in and/or in operation. It is NEVER recommended to enter water when any type of electrical equipment is in use. Turn off power and lock out before installing or servicing.
- Before attempting installation, service or maintenance to the Destiny Fountain in any body of water a coast guard approved flotation device must be worn.
- Always use a Ground Fault Protected circuit to power your Destiny Fountain. The unit must be grounded. Failure to connect to a proper ground fault protected circuit could result in injury or death. Ground Fault Circuit interrupters must be tested upon installation and monthly thereafter.
- Attempting to install or service the Destiny Fountain from an unstable work platform could result in injury or death. Installation and/or service work must be done from a stable work platform to avoid the possibility of capsizing.
- Control Panels must be installed by a qualified electrician.
- Do not operate the Destiny Fountain out of water.
- 3 Phase fountains require a startup test to ensure correct rotation. If rotating in the opposite direction damage to the unit may occur.
- Arbrux Limited recommends that precautions be taken around open water and thin ice. Please install appropriate signage, lights, fencing or other safety notices to inform the general public of potential danger. Alternate safety measures may be required by law in your area.

When inherent overheating protection is provided: USE WITH APPROVED MOTOR CONTROL THAT MATCHES MOTOR INPUT IN FULL LOAD AMPERES.

UTILISER UN DÉMARREUR APPROUVÉ CONVENANT AU COURANT À PLEINE CHARGE DU MOTEUR.

Units supplied with SJOOW/SJTOW power cables are intended for household use, other applications require SOOW/STOW.

Les unités fournies avec les cordons d'alimentation de SJOOW/SJTOW sont voulues pour l'usage de ménage, les autres applications exigent SOOW/STOW.

Immediately inspect the shipment upon arrival. Any external evidence of loss or damage must be noted on the freight bill or express receipt, and signed by the carrier's agent. Failure to adequately describe such external evidence of loss or damage may result in the carrier refusing to honour a damage claim. The form required to file such a claim will be supplied by the carrier. *If an order has a short shipment, you must notify Customer Service within 5 days of receipt along with appropriate proof of short shipment. Otherwise shipment will be considered accepted as delivered.*

Assembly and Installation Instructions for 1 to 5 HP Vertical Mount Destiny Fountain

Lower pump assembly into float and rotate until seated in float pockets., Install quick disconnect cable to pump securely. Hand tighten only. When unit is supplied with 4 bolt power connector, connect unit and tighten (4) 10mm bolts until gasket is compressed. Do not over tighten.

Mooring with Installation Cart

The Installation Cart is an optional device on the 2,3 & 5HP Destiny Fountains. The 7.5 & 10 HP Models come complete with the Installation Cart. The cart is used to ensure ease of installation due to the heaviness of the units. (See fig 1) Install Quick Disconnect cable to **pump securely. Hand tighten only. Install the 1/4" U bolt through the cord grip and the bottom centre of card with supplied Nylok Nuts.** (See fig 2) (For units supplied with light kits, Ensure that cable grip on the light kit cable is also looped through the U bolt.) Utilize the same mooring technique as below when installing your Destiny Fountain with the Installation Cart. The cart and wheels will float along with the fountain. You do not need to remove the installation cart before operation.

Mooring (See fig. 3)

Mooring rope included is appropriate for this installation. (In some applications additional mooring rope may be required). A sufficient length of rope should be used to allow the float to rise and fall with changes in water level. If major water level changes are expected, a small weight fixed part way down each rope will accommodate the line slack during low water. In smaller ponds, the ropes may be tied off to opposite sides, or as is commonly done in larger areas, anchored using concrete blocks or similar. The maximum distance between anchors should give the mooring line a scope of approx 3:1. (ie. In 10 feet of water, the anchors would be placed 50-60 feet apart.) Take care when placing the unit in position so that the power cord falls directly to the bottom. (Do not use power cord as a "mooring line").

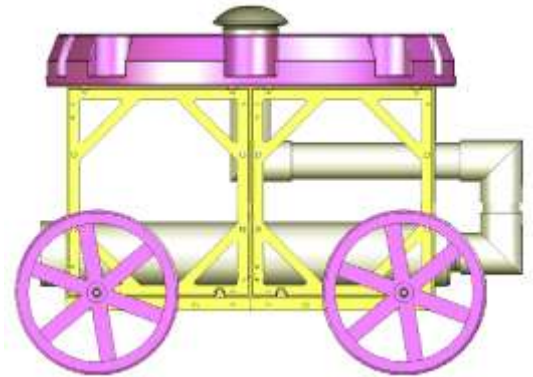


FIGURE ONE (1)



FIGURE TWO (2)

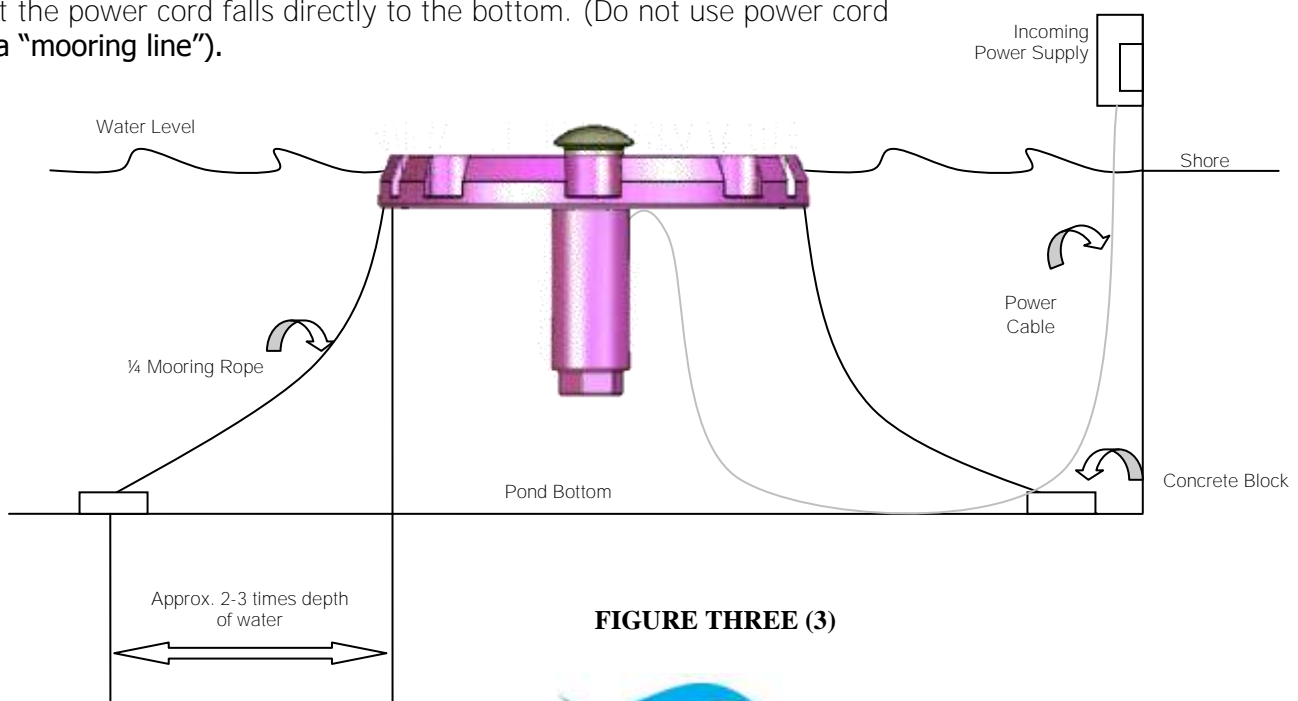


FIGURE THREE (3)

Nozzle Installation and Removal

The Destiny Fountain has a choice of optional removable nozzles. Arbrux Limited provides this as a convenience for ease of cleaning or replacement. The nozzle complete with o-ring is inserted into the nozzle float adapter and fastened with the provided screws. If the spray pattern changes from the original configuration, inspect for and remove any foreign matter that may be present within the pump or nozzle areas. The primary location to look for these obstructions would be within the nozzle or intake screen.

Debris Management

The 1, 2, 3 & 5HP Vertical Mount Destiny Fountain has an optional intake screen that provides extra debris management for areas where debris is an issue. It will help keep foreign objects from becoming in contact with the intake area and/or the pump of the unit. Contact the factory for more information. This option is only for use with vertical mounted pumps. See Fig 1.

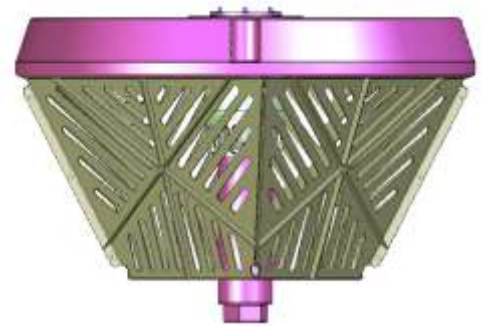


Fig 1.

Debris Management

The 2, 3, 5, 7.5 & 10HP Destiny Fountain with Installation Cart Mount has an intake screen that provides extra protection to the pump and motor combination. It works as a debris management system for areas where debris is an issue to ensure water flow past the pump and motor. It will help keep foreign objects from becoming in contact with the intake area. To install on your fountain, slide it over the end 2 inches and then fasten in place with supplied screws and washers. See Fig 2.



Fig 2.

Minimum Water Depths

1 HP Vertical Mount	32"
2 HP Vertical Mount	40"
3 HP Vertical Mount	46"
5 HP Vertical Mount	60"
2, 3 Horizontal Mount	32"
5, 7.5 & 10 HP Horizontal Mount	36"

Electrical Control Panel Warranty

All electrical panel & onshore components have a one year warranty should they fail due to defects in materials or workmanship.

Control Panel Installation

The electrical control panel must be installed in accordance with the installation instructions, in compliance with all local and National Electrical Code requirements. This should be done by a licensed electrical contractor. Any alterations to or substitution for items in this system, unless allowed by the installation instructions, will void the CSA & UL Listing and will void the product warranty. It may also create a hazardous installation. Read the instructions thoroughly before starting the installation and follow them carefully throughout. The electrical drawings for your appropriate unit may be found in the control panel.

- Power supply to control panel must be sized for 3% or less voltage drop and match voltage and phase supplied on front of control panel. Test before energizing fountain and when fountain is running to ensure correct voltage
- Power supply terminates on top side of main breaker and ground connection to ground lug.
- Mount control panel in a shaded location to prevent excessive heat buildup
- Connect motor leads to appropriate terminals as per wiring diagram
- Connect optional light kit leads (if applicable) including remote photocell to appropriate terminals as per wiring diagram.
- Check motor overload setting matches panel nameplate rating
- Test main breaker ground fault trip and test monthly after
- Manually start fountain for a few seconds with timer manual control when it is in water (do not run dry) to check rotation (3 Phase Models). If rotating backwards spray pattern will be very small. Lockout power and then change motor lead phasing if necessary.
- Adjust time clock settings and set for automatic operation

Record the following

When the unit is running in the water under load

VOLTAGE	AMPERAGE
L1-L2_____	L1_____

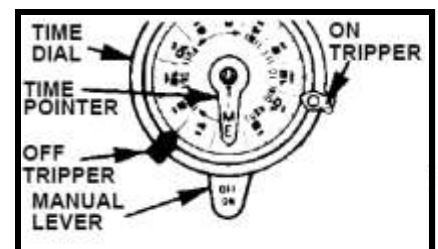
L1-L3_____	L2_____
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Time Clock Programming

1. **TO SET "ON" and "OFF" TIMES:** Hold trippers against edge of CLOCK-DIAL, pointing to time (AM or PM) when ON and OFF operations are desired, tighten tripper screws firmly. For additional tripper pairs on CLOCK-DIAL order 154T1978A.
2. **TO SET TIME-OF-DAY:** Pull CLOCK-DIAL outward. Turn in either direction and align the exact time-of-day on the CLOCK-DIAL (the time now, when switch is being put into operation) to the pointer. **DO NOT MOVE THE POINTER**

OPERATING INSTRUCTIONS

- **TO OPERATE SWITCH MANUALLY:** Move MANUAL LEVER below CLOCK-DIAL left or right as indicated by arrows. This will not effect next operation.
- **IN CASE OF POWER FAILURE** reset CLOCK-DIAL to proper time-of-day. See programming instructions.



Electrical Connections

All electrical connections shall be wired per local electrical codes. Determine the voltage of the unit 120 or 240V Single phase, 208,230,460 or 575V 3 phase. Ground fault protection is strongly suggested on any electrical device. Ground fault devices are not to be confused with or used as a circuit breaker or switch. Units that come complete with a supplementary ELCI are as follows:

1 HP 208V, 3P., 1 HP 230V, 3P., 1 HP 460V, 3P., 2 HP 240V, 1P., 2 HP 208V, 3P., 2 HP 230V, 3P., 2 HP 460V, 3P.,
 3 HP 208V, 3P., 3 HP 240V, 1P., 3 HP 230V, 3P., 3 HP 460V, 3P., 5 HP 240V, 1P., 5 HP 208V, 3P., 5 HP 230V, 3P.,
 5 HP 460V, 3P., 7.5 HP 208V, 3P., 7.5 HP 230V, 3P., 7.5 HP 460V, 3P., 10 HP 208V, 3P.,
 10 HP 230V, 3P., 10 HP 460V, 3P.

Motor Model Prefix	H.P	Volts	Maximum S.F Amps	Watts	Line to Line Resistance	Circuit Breaker Amp Size Standard	Fuse Amp Size Time Delay
F214508	1	240	9.8A	1200	M2.2-2.7 S9.9-12.1	25	11
F234503	1	208	5.4A	1070	3.5-4.5	15	6
F234513	1	230	4.7A	1070	4.9-5.6	15	6
F234523	1	460	2.4A	1070	19.9-23.0	15	3
F234534	1.5	575	2.4A	1460	20.3-25.0	15	3
F224301	2	240	13.2A	2100	M1.8-2.3 S5.8-7.2	25	15
F234305	2	208	9.3A	2150	1.8-2.4	20	11
F234315	2	230	8.1A	2150	2.3-3.0	20	10
F234325	2	460	4.1A	2150	9.2-12.0	15	5
F234335	2	575	3.2A	2150	14.6-18.7	15	5
F224302	3	240	17A	3020	M1.0-1.5 S4.0-4.9	40	20
F234306	3	208	12.5A	2980	1.3-1.7	30	15
F234316	3	230	10.9A	2980	1.8-2.2	25	12
F234326	3	460	5.5A	2980	7.2-8.8	15	6
F234336	3	575	4.4A	2980	11.4-13.9	15	5
F224303	5	240	27.5A	5250	M.68-1.0 S1.8-2.2	60	30
F234307	5	208	20.5A	5050	.74-.91	50	25
F234317	5	230	17.8A	5050	1.0-1.2	45	12
F234327	5	460	8.9A	5050	4.0-4.9	25	10
F234337	5	575	7.1A	5050	6.4-7.8	20	8
F234308	7.5	208	30.5A	7360	.46-.57	70	35
F234318	7.5	230	26.4A	7360	.61-.75	60	30
F234328	7.5	460	13.2A	7360	2.5-3.1	30	15
F234338	7.5	575	10.6A	7360	4.0-5.0	25	12
F236652	10	208	37A	10000	.37-.45	90	45
F236602	10	230	32.2A	10000	.47-.57	80	40
F234595	10	460	17.3A	10000	1.9-2.4	40	20
F234598	10	575	13.6A	10000	3.0-3.7	30	15

Note: Each Destiny Fountain is tested under operating conditions at the factory before packaging and shipment to verify operational characteristics at specific voltages.

Cable Selection Guide

Fountain Cable Runs							
Horsepower	Volts	Phase	14 Gauge	12 Gauge	10 Gauge	8 Gauge	6 Gauge
1	240	1	75	120	180		
	230	3	165	180			
	208	3	120	180			
	460	3	180				
1.5	575	3	180				
2	240	1	45	75	120	180	
	230	3	90	150	180		
	208	3	60	105	180		
	460	3	180				
	575	3	180				
3	240	1		45	90	135	180
	230	3	60	105	180		
	208	3	45	75	135	180	
	460	3	180				
	575	3	180				
5	240	1				75	135
	230	3		60	105	165	180
	208	3		45	75	120	180
	460	3	165	180			
	575	3	180				
7.5	230	3			75	120	180
	208	3			60	90	135
	460	3	120	180			
	575	3	180				
10	230	3				90	135
	208	3				60	105
	460	3	90	150	180		
	575	3	135	180			

Lengths shown are in meters. Cable size must be maintained from electrical panel to the fountain.
Confirm with your local electrical code to insure cable sizes are appropriate for your area.

Insulating & Winding Resistance Values

CONDITION OF MOTOR AND LEADS	OHM VALUE	MEGOHM VALUE
A used motor which can be reinstalled	10,000,000 (or more)	10
MOTOR IN WATER. OHM readings are for drop cable plus motor.		
A motor in the water in reasonably good condition	50,000- 2,000,000	0.5-2.0
A motor which may have been damaged by lightning or with damaged leads. Do not pull unit for this reason.	20,000- 500,000	0.02-0.5
A motor which definitely has been damaged or with a damaged cable. The unit should be pulled and repairs made to the cable/motor replaced. The motor will not fail for this reason alone, but it will probably not operate for long.	10,000- 20,000	0.01-0.02
A motor which has failed or with completely destroyed cable insulation. The unit must be pulled and the cable repaired/motor replaced.	less than 10,000	0.0-0.1
Insulation resistance does not vary with rating. Motors of all HP, voltage and phase rating have the same value of insulation resistance		

Important

Disassembly of the motor by anyone other than an authorized service centre or by the factory will void the warranty. There are no user serviceable parts in the pump and motor.

The Destiny Fountain uses a submersible pump. These pumps should be stored in an upright position during the winter months. Do not expose to temperatures below 2°C and avoid exposure to temperatures over 49°C. It is recommended that the fountain be removed from freezing conditions to prevent damage to the unit.

Maintenance

The Destiny Fountain is virtually maintenance Free. We recommend that you remove the unit from the water periodically to visually inspect and clean any debris and build up on the intake screen, motor and pump assembly. **DO NOT TAMPER WITH OR DISASSEMBLE THE PUMP OR MOTOR. SUCH TAMPERING WILL BE EVIDENT AND WILL VOID THE WARRANTY.**

Troubleshooting Tips

Motor will not run.	<ol style="list-style-type: none"> 1. Disconnect switch is off 2. Fuse is blown/breaker tripped (if applicable) 3. Overload tripped 4. Incorrect or no voltage 5. Motor winding open, shorted or grounded. 6. Low voltage 7. Pump Stuck or Binding 	<ol style="list-style-type: none"> 1. Place on "ON" position 2. Replace with proper size fuse. 3. Reset overload 4. Determine why voltage not available - broken wires, blown fuses, or disconnect switch off. If voltage is incorrect (ref. 120V Service and 230V Pump), customer must purchase proper voltage pump, or change power supply voltage to match pump. 5. Pull pump and replace motor or complete unit. 6. Check with Power Company. Install heavier wiring if wire size is too small. See wiring instructions. 7. Pump may be bound from debris. It may be necessary to pull pump and flush out the inside to free it up.
GFCI on the Circuit trips.	<ol style="list-style-type: none"> 1. Problem with electrical service 2. Water contamination to wire 3. Bad Breaker 4. Control Box/Motor Problems 	<ol style="list-style-type: none"> 1. Have a certified electrician diagnose the problem and contact Arbrux Limited for further instructions.
Motor runs hot and overload kicks off.	<ol style="list-style-type: none"> 1. Motor is wired incorrectly. 2. Voltage is too low. 	<ol style="list-style-type: none"> 1. Refer to motor I.D. label for instructions on wiring. 2. Check with Power Company. Install heavier wiring if wire size is too small. See wiring instructions.
Motor runs but no water is delivered.	<ol style="list-style-type: none"> 1. Intake area may be plugged. 2. Propeller/Impeller make be damaged 	<ol style="list-style-type: none"> 1. Clean intake screen. 2. Repair Pump
Little or no water delivered.	<ol style="list-style-type: none"> 1. Shorted run winding in motor. 2. Low voltage. 3. Intake screen plugged. 4. Pump parts worn. 	<ol style="list-style-type: none"> 1. Replace motor or complete pump. 2. Contact Power Company for corrective action. Install heavier wiring if too small. 3. Pull pump and clean screen. 4. Replace pump end or complete unit.

Note: The Destiny Fountain is built to create a water feature for your pond. Due to the amount of moving water, it is not unlikely to hear the splashing of water when the unit is running.

End of Destiny Fountain Instructions

GFCI Nuisance Tripping

Arbrux Limited control panels are manufactured with class A (GFCI) ground fault circuit interrupters. These are designed to shutoff the supply of power to equipment if there is a leakage current to ground.

Class A GFCI devices are very sensitive and occasionally may experience nuisance tripping. This may occur every minute, hour, day, week or longer. This can occur for many reasons. The most common cause of nuisance tripping is longer cable runs over 60 m (200 feet) in single phase applications. Three phase applications are also affected by nuisance tripping in longer cable lengths. Other causes in all applications may be caused by power spikes or surges from the local utility, VFD drives and high power signals.

In order to determine the cause of the nuisance tripping the complete pump and cable assembly should be Meggered or Hi Pot tested to ensure that they are not the cause of the tripping. The reading for a megger test should be greater than 30 M ohm. Hi Pot testing at 1.2 KV should have a leakage current of less than 20mA.

If the pump and cable assembly are in good condition then one option to correct the problem is to shorten the cable length if possible to reduce the cause of nuisance tripping. If shortening the cable is not possible then installing a GFCI with a higher trip setting may be an option. The class A GFCI interrupter supplied by the factory is set to trip at less than 6 mA, higher trip settings are typically at 10 and 30 mA. If a higher trip setting GFCI is installed by the customer then it may not meet local or national codes and all subsequent liability is assumed by the owner. A higher leakage setting GFCI if necessary is still better than no ground fault leakage protection at all.

2 Year Limited Warranty

This warranty is the only warranty that Arbrux Limited makes for your Destiny Fountain and it is in lieu of any other warranties, express or implied and any other obligation or liability whatever on the part of Arbrux Limited. Arbrux Limited warrants the Destiny Fountain should it fail due to defects in materials or workmanship for 24 months from date of shipment to the original purchaser. This warranty applies when given normal and proper usage as determined by the manufacturer upon examination and when owned by the original purchaser who has registered the warranty. In no event shall Arbrux Limited be held liable for any special or consequential damages.

Warranty Claim Procedure

Warranty determination will be made by our technical service department in accordance with the appropriate warranty policies. All warranties must be accompanied by a valid RMA number. This can be obtained by contacting Arbrux Limited Customer Service. A copy of original proof of purchase including serial number is required for all warranty returns. Please Mark RMA number prominently on outside of the box being shipped. Items returned for warranty will be FOB Arbrux Limited and should be returned in the original packaging to ensure minimal return shipping costs. If the original packaging is not retained and used by the customer, Arbrux Limited will supply replacement packaging (at a nominal charge) upon return of the equipment to the customer. Only complete assemblies including power cable will be considered for warranty repair. It is not necessary to return control box or float unless your electrician has determined the control box needs repair

Repair Returns

To avoid any delays in the repair of equipment in question, it's best to call the factory at 888-211-3548 to determine what portion or portions of the equipment in question should be returned. The Destiny Fountain is to be returned completely assembled. Do not disassemble any portion without prior authorization. A copy of original proof of purchase including serial number is required for all repair returns.

Shipping is FOB Arbrux Limited and all items should be returned in the original UPS approved packaging to ensure minimal shipping charges. If the original packaging is not retained and used by the customer, Arbrux Limited will supply replacement packaging (at a nominal charge) upon return of the equipment to the customer.

Upon the inspection of the returned equipment, whether in warranty or not, contact by Arbrux Limited to proceed with repair will be made to the owner or agent with an explanation of the repairs and charges if any. **NO REPAIRS WILL BE MADE UNLESS AUTHORIZED BY THE OWNER OR AGENT.** If Arbrux Limited is **unable to contact the owner/agent within 30 days after receipt of the equipment for repair, a "signature Required" notice will be forwarded to the owner/agent stating that disposal of the equipment will be made 30 days from the date of this notice.**

You may Contact:
Arbrux Limited
33 Alliance Blvd, Unit 6
Barrie, ON
L4M 5K2
1.888.211.3548

Customer Registration Copy

Owner Name: _____

Date Purchased: _____

Owner Address: _____

City: _____ Prov/State: _____

Model #: _____ Serial #: _____

Dealer Name: _____

Address: _____

City: _____ Prov/State: _____

Mail In form

Warranty Registration

Purchase Date: _____

Model #: _____ Serial #: _____

Owner Name: _____

Address: _____

City: _____ Prov/State: _____ PC/Zip: _____

Dealer Name: _____

Address: _____

City: _____ Prov/State: _____ PC/Zip: _____



DESTINY FOUNTAIN PARTS LIST



DESTINY FOUNTAIN WITH CART FRAME PARTS LIST

