



# ACCELA™

Submersible Powerheads



- SP1-400
- SP1-600
- SP1-800
- SP1-1000

TRANSWORLD AQUATIC ENTERPRISES INC.

# ACCELA

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**ACCELA**

# **Important Safety Instructions**

## **WARNING**

To guard against injury, basic safety precautions should be observed, including the following:

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## **READ ALL SAFETY INSTRUCTIONS BEFORE USE.**

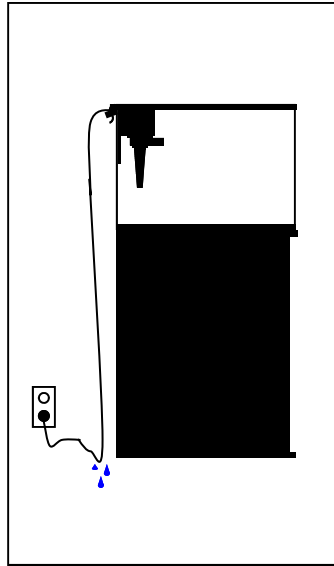
## **DANGER**

To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt to repair yourself: return the appliance to an authorized service facility for service or discard the appliance.

- A. If the appliance shows any sign of abnormal water leakage, immediately unplug from the power source.
- B. Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
- C. Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or if it is dropped or damaged in any manner.

## Important Safety Instructions

D. To avoid the possibility of the appliance plug or receptacle getting wet, position aquarium stand and tank to one side of a wall mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop", shown in the Figure at the right should be arranged by the user for each cord connecting an aquarium appliance to a receptacle. The "drip loop" is that part of the cord below the level of the receptacle or the connector if an extension cord is used, to prevent water travel along the cord and coming in contact with the receptacle. If the plug or the receptacle do get wet, DON'T unplug the cord. Disconnect the fuse to the circuit breaker that supplies power to the appliance. Then unplug and examine for the presence of water in the receptacle.



E. Close supervision is necessary when any appliance is used by or near children.

F. To avoid injury, do not contact moving parts or hot parts such as heaters, reflectors, lamp bulbs, and etc.

G. Always unplug an appliance from the outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank the cord to pull plug from the outlet. Grasp the plug and pull to disconnect

H. Do not use an appliance for other than intended use. The use of attachments not recommended or sold by the appliance manufacturer may cause an unsafe condition.

I. Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.

**ACCELA**

## **Important Safety Instructions**

J. Make sure an appliance mounted on a tank is securely installed before operating it.

K. Read and observe all the important notices on the appliance.

L. This Appliance has a polarized plug (one blade is wider than the other). As a safety feature, this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Never use with an extension cord unless plug can be fully inserted. Do not attempt to defeat this safety feature.

M. If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less amperes or watts than the appliance rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

### **CLEANING**

It is important to keep this appliance clean. Always unplug the appliance before performing maintenance or cleaning of the exterior of this pump. Wipe exposed surfaces carefully with a damp terrycloth to remove any dust or mineral deposits which may collect over time. Make sure hands are completely dry before re-plugging into an electrical outlet.

### **SERVICING**

In order to assure proper electrical connections and polarity, replacement parts and servicing should be performed only by a qualified electrician.

### **OPERATION**

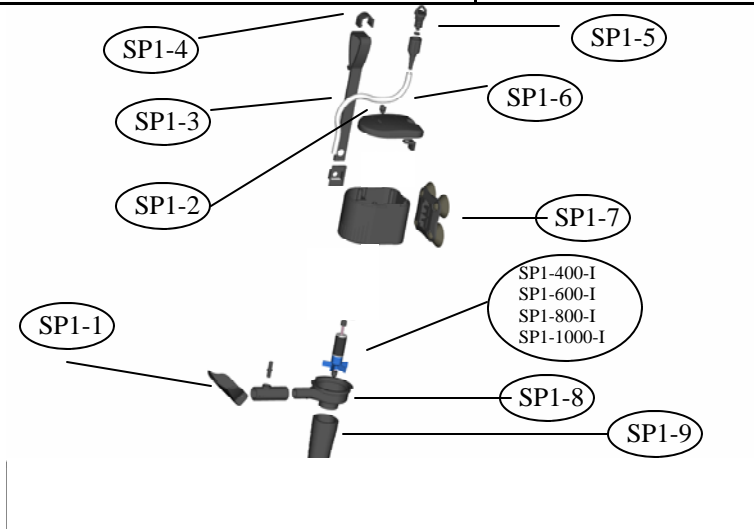
Please carefully read the entire "Owner's Manual" for proper operation procedures before proceeding with turning on this appliance and adding livestock such as fish, corals, and invertebrates.

***SAVE THESE INSTRUCTIONS***

# ACCELA **Parts**

## PARTS EXPLODED VIEW & IDENTIFICATION

Description	Part #
Directional Flow Diffuser	SP1-1
Silicone Hose Clip	SP1-2
Mounting Hook	SP1-3
Mounting Hook/Hose Clamp	SP1-4
Venturi Injector	SP1-5
Silicone Hose	SP1-6
Suction Cup Mounting Bracket	SP1-7
Impeller Housing	SP1-8
Undergravel Lift Tube Adapter	SP1-9
<b>Magnetic Impeller Assembly</b>	
Model SP1-400	SP1-400-I
Model SP1-600	SP1-600-I
Model SP1-800	SP1-800-I
Model SP1-1000	SP1-1000-I



# ACCELA Introduction



## High Performance Submersible Powerheads

Thank you for purchasing the extremely efficient ACCELA powerhead. This submersible appliance is ideal for use with undergravel filters and water circulation within fresh or saltwater aquariums. ACCELA powerhead motors are epoxy-sealed and designed for consistent power with very low energy draw. All kits include a adjustable venturi injector, undergravel attachment tube, flow diffuser flap, (4) suction cup bracket, and mounting hook.

## Replicating Nature

In nature, water circulation is vital for corals, fish, and invertebrates in order to achieve optimal health. Providing the proper water movement is essential for many tank inhabitants who require currents to bring food, oxygen, and remove harmful waste.

Setting multiple powerheads can simulate natural currents while eliminating dead spots in aquariums. Positioning powerheads lower/higher can also allow for more natural wave cycles by producing counter currents. It is important to research what flow rates are required for specific tank mates before replicating its' environment.

It is recommended to position powerheads to direct detritus and waste into the intake of filters. This small step will ensure a healthy and clean aquarium with no areas will high nutrient accumulation.

Pivoting the directional flow diffuser towards the surface will also reap great benefits by allowing for proper gas exchange between the CO2 gas saturated within the water and the Oxygen above its' surface. This will help maintain a proper pH for more stable water parameters.

# ACCELA Introduction

## Super Charging - Undergravel Filters

Undergravel filters are designed to help colonize beneficial bacteria over gravel beds. Creating a water flow generated by airstones and an air pump, oxygen rich water is channeled up the lift tubes and through the gravel bed to maximize surface area for aerobic bacteria.

The negatives usually associated with undergravel filters are:

- Replacing clogged air stones
- Noisy air pumps
- Inadequate flow due to low flow rates



Adding ACCELA powerheads to lift tubes instantly super charges undergravel filters by providing consistent flow without the degradation of air stones. The ability to saturate the water with oxygen with our unique venturi injector is a major advantage for the colonization of nitrifying aerobic bacteria.

\* Connect "undergravel lift tube adapter" to bottom side of ACCELA powerhead . Insert powerhead directly into undergravel filter lift tubes for a secure fit.

## Keeping you Safe & Secure



ACCELA powerheads are listed by Underwriters Laboratories to ensure that it meets stringent U.S. safety requirements. All models are completely waterproof and designed for everyday use within an aquarium.

### Specifications: ACCELA Powerheads

MODEL	V/Hz	Watts	Max Flow	Max Pumping Height	Dimension: (L x W x H)
SP1-400	120V/Hz	7 Watt	132 gph	28"	3.5" x 2" x 3.25"
SP1-600	120V/Hz	9 Watt	172 gph	35"	3.5" x 2" x 3.25"
SP1-800	120V/Hz	13 Watt	211 gph	47"	3.5" x 2" x 3.25"
SP1-1000	120V/Hz	16 Watt	264 gph	59"	3.5" x 2" x 3.25"



# ACCELA Installation

**Caution:**  
**Do Not plug into electrical power source before  
Accela Powerhead is installed.**

## **PARTS INCLUDED**

Please check your box for the parts pictured below.



## **INSTALLING DIRECTIONAL FLOW DIFFUSER**

Slip directional flow diffuser over the output nozzle of powerhead.



# ACCELA Installation

## CHOOSING MOUNTING BRACKET

Your ACCELA powerhead includes a (4) suction cup mounting bracket as well as a hook bracket for mounting options.

### A. (4) Suction Cup Mounting Bracket

There are a total of 3 grooved channels for the suction cup mounting bracket to be inserted into the powerhead. You have an option to use either side or the rear for attaching.

Slide suction cup mounting bracket into grooved channel until secure. Press firmly against tank wall.

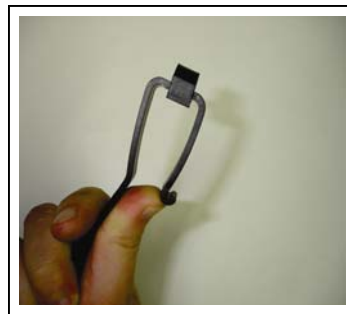


### B. Hanging Bracket

There are a total of 3 grooved channels for the hanging bracket to be inserted into the powerhead.

You have an option to use either side or the rear for the attaching.

Slide hanging bracket into grooved channel until secure. Proceed by attaching the hanging bracket hook over tank frame. You can adjust the height of the powerhead by moving powerhead up/down to your desired position.



# ACCELA Installation

## INSTALLING THE ADJUSTABLE VENTURI INJECTOR

To increase maximum saturation of oxygen, you can choose to install out adjustable venturi injector that draws air from the atmosphere. Oxygen is very important to maintain proper pH levels and provide the ideal environment for aerobic bacteria..

Attach silicone venturi hose over the male air intake port and insert hose into hanging bracket clamp.



## ADJUSTING VENTURI AIR VALVE

Turn venture air valve counter clockwise to allow air into the aquarium. If no air is desired, turn air valve clockwise to shut valve.



# ACCELA **Operation**

## **PLUG IN POWERHEAD**

Plug power cord into a grounded surge protector once AC-CELA powerhead has been firmly mounted . Plug into a standard 115 volt polarized receptacle. Do not force plug into a

## **DIRECTING YOUR FLOW**

Pivoting the diffuser at an angle towards the surface will increase gas exchange and help with creating diffused currents within the aquarium.

\* Do Not Point directly up, water may splash and come in contact with other electrical equipment.



# ACCELA

## Maintenance Procedures

**CAUTION:** Always unplug before performing any maintenance.

**NEVER** use soap, detergents, or any non-recommended cleaning agents around an aquarium.

**ALWAYS** rinse parts with cold water after cleaning.

### **MAINTENANCE PROCEDURES**

Routine aquarium maintenance includes monthly 25% water changes, gravel vacuuming, and media changes. To ensure optimum performance, we recommend the following procedures for the ACCELA powerhead at least every 4 weeks.

1. Rotate Exhaust Outlet and gently uncouple impeller housing



2. Remove magnetic impeller from motor cavity and rinse both under sink to remove slime build-up and any debris.





**MAINTENANCE LOG**

Maintenance Description	Date

**Customer Service Information**  
For additional information or technical support, please call us at (310) 672-4099 , M-F from 9AM-5PM (Pacific Standard Time).

# ACCELA Notes

**TransWorld Aquatic Enterprises, Inc**

3730 W. Century Blvd #3  
Inglewood, CA 90303

Phone: (310) 672-4099



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