

































The entire end of your **Aquatic Fitness System** containing the equipment access panel must remain accessible in order to allow routine maintenance of your **Aquatic Fitness System** equipment. It is imperative that the owner and users of this **Aquatic Fitness System** carefully read all instructions in this manual prior to having your **Aquatic Fitness System** installed at your chosen location, whether indoors or outdoors.

 Caution	Improper installation may result in equipment damage and will void the Warranty.
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## DELIVERY AND SETUP

### DELIVERY

The site will require access by a flat-bed truck and a crane or heavy-duty fork lift.

 Caution	An empty AFS should never be exposed to temperatures below 0°F (-18°C) as extreme cold can cause shell damage. This includes storage, delivery, <u>and</u> draining (winterizing). If your AFS can be exposed to these temperatures, keep the AFS filled and running. If you do not plan to use your AFS, you can lower the temperature setting to 61°F (16°C).
Failure to adhere to these guidelines will void the warranty.	

### SETUP


Your Dimension One Aquatic Fitness System has a very high quality finish. Stains and dirt will generally not adhere to this surface. You may clean your AFS's surface with an approved cleaner such as Leisure Time Multi-Purpose Cleaner. Check with your dealer before using any household cleaning products on your AFS. Do not use any "409" type cleaners or any cleaners containing abrasives, as these will damage the AFS shell surface.

Fill the **Aquatic Fitness System** with water. The **Aquatic Fitness System** should be filled until the water level is approximately 2 inches (5 centimeters) above the bottom of the tile line.

### CONNECT POWER

Turn on the circuit breaker for your **Aquatic Fitness System** on your house panel. The main pump will start in one of the modes as described under the **Aquatic Fitness System** side control functions.

Select jets (main pump) on high speed. Let the system run for a few minutes to bleed air out of the plumbing system. Select second pump on high speed. If the system does not prime after 2 minutes of running, turn off electrical power to the **Aquatic Fitness System**.

 Caution	RUNNING ANY PUMP DRY FOR AN EXTENDED PERIOD WILL PERMANENTLY DAMAGE THE PUMP.
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The air control valves on the **Aquatic Fitness System** labeled "max" and "min" regulate the amount of air drawn through the **Aquatic Fitness System's** jets. More air produces a more vigorous massage. Your **Aquatic Fitness System** will heat quicker with the air valves set to "min".

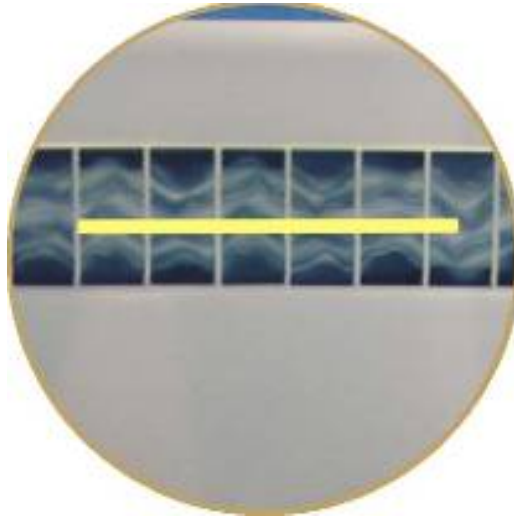
With the **Aquatic Fitness System** operating, gradual heating of the water takes place over 12 to 24 hours. After initial startup, the low speed pump will start running if the water temperature is below 85°F (29.4°C) Monitor the temperature and adjust the setting as desired. The water temperature must never exceed 104 F.



Please read and follow the remaining instructions in this owner's manual, including instructions on water treatment. Proper water treatment is critical to the maintenance of your **Aquatic Fitness System's** equipment as well as your own health and satisfaction.



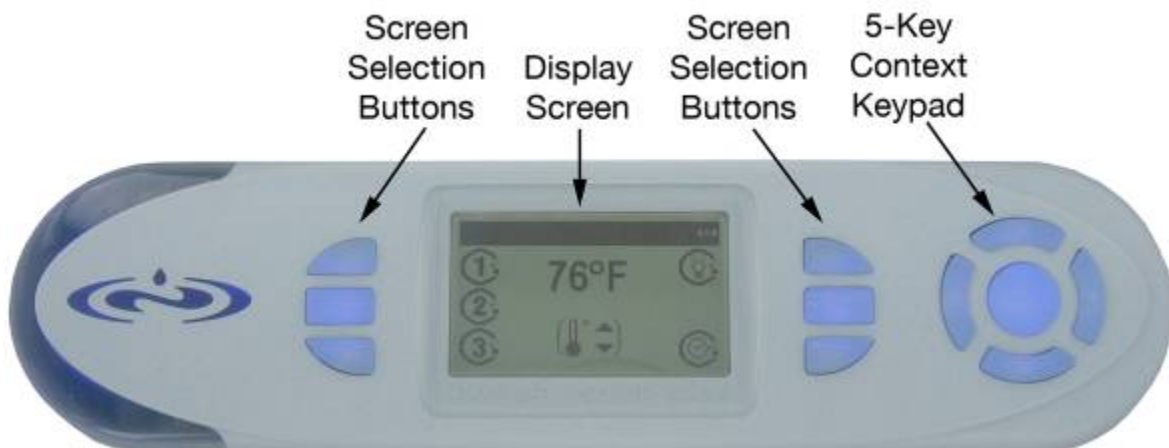
Be sure to refer to the Water Care Guide (P/N 01513-192) in order to test and treat your water properly.



## TESTING

### TEST THE TOP SIDE CONTROL

Refer to the Owner's Manual that was shipped with the Aquatic Fitness System for instructions on how to use and program the Top Side Control. Be sure to test each controllable setting.



# TROUBLESHOOTING GUIDE

## HEATING SYSTEM

Symptom	Problem	Corrective Action
<b>Does not heat</b>	1. Temperature setting is too low	1. Turn up the "set temperature" on the control panel
	2. Dirty filter	2. Clean filter
	3. Flow switch malfunction	3. Call your dealer for service
<b>Too hot</b>	1. Temperature setting too high	1. Turn down the "set temperature" on the control panel
	2. High limit tripped	2. Call your dealer for service
<b>Flashing temperature of 34°F (≈1° C) or 134°F (≈56° C) appears on the display</b>	Possible temperature sensor failure	Call your dealer for service
<b>Hot Tub Temperature erratic</b>	Water level	Fill hot tub to about six inches below the top of the spa or 1" (2.54 cm) to 2" (5.08 cm) above the bottom of the tile line.
<b>Display reads OVERHEAT</b>	1. Too much filtration	1. Reduce the number of filter cycles and/or the filter cycle duration
	2. Temperature setting too high	2. Turn down the "set temperature" on the control panel
	3. High limit or sensor problem	3. Call your dealer for service

## ELECTRICAL SYSTEM

Symptom	Problem	Corrective Action
Will not turn on – in any mode	No power	Check circuit breaker and/or GFCI
Turns on by itself	Normal automatic daily filtration, or anti-freeze cycle	No action required
Light is out	Burned out bulb	Replace bulb
Pump shuts down unexpectedly while in use	1. Automatic timer has shut pump off	1. Push JETS Button again to start another cycle. If desired, reprogram automatic pump timer for longer duration.
	2. Motor over-heated and automatic protective device has shut down pump(s)	2. If pump(s) will not restart when JETS Button is pushed, call for service  Make sure that the equipment panel vent area is not blocked. Vent blockage can cause serious damage to your equipment.

## WATER SYSTEM

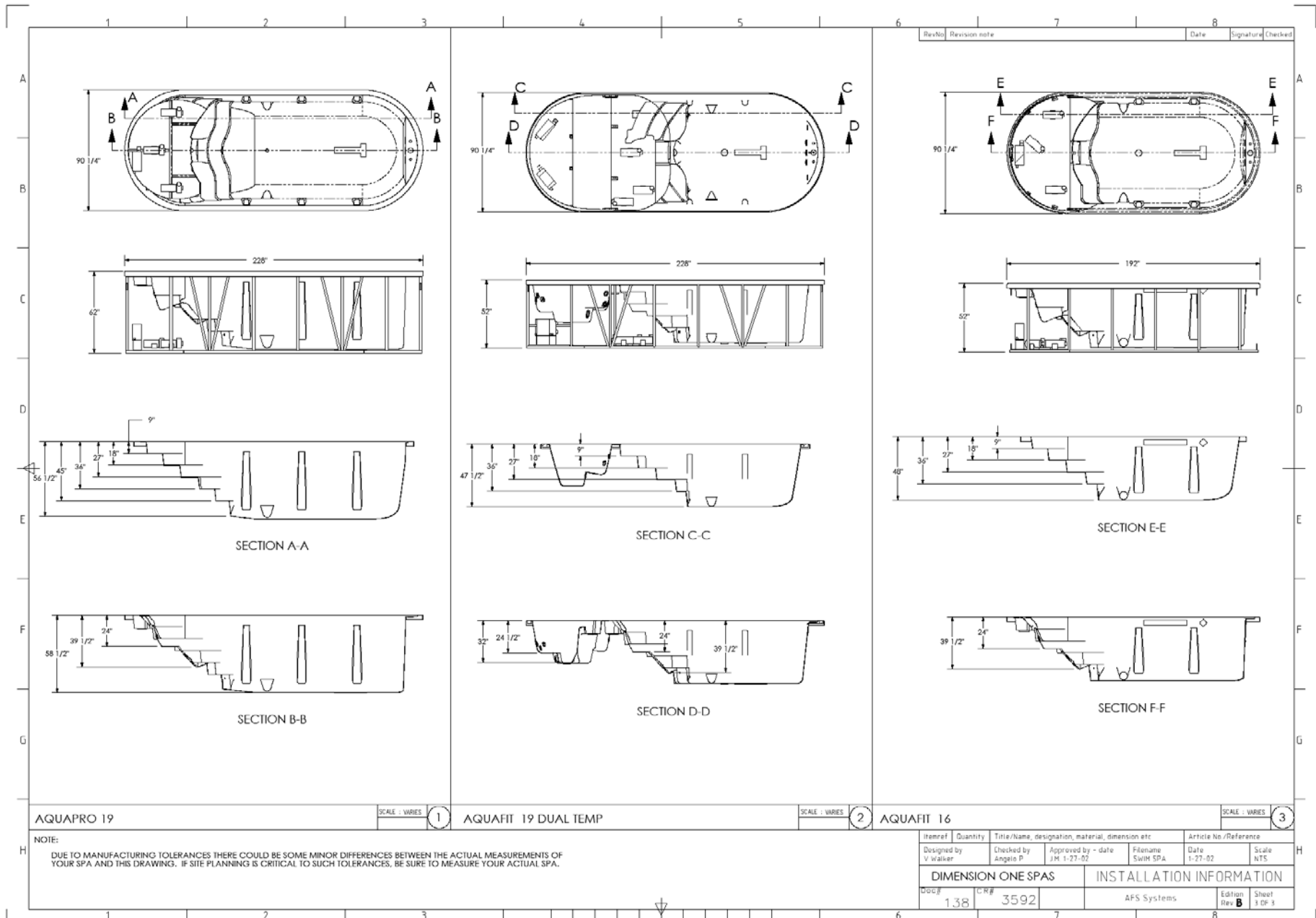
Symptom	Problem	Corrective Action
Pulsing jets	Water level too low	Fill spa to proper water level
No Jet Action, or action is poor	1. Jets turned off	1. Turn jets on by turning jet face clockwise
	1. Selector Valve turned	1. Turn the Selector Valve to the appropriate position
	3. Dirty Filter	3. Clean Filter
	4. Air lock	4. Loosen pump union to allow air to bleed
	5. Gate valve closed	5. Open gate valve







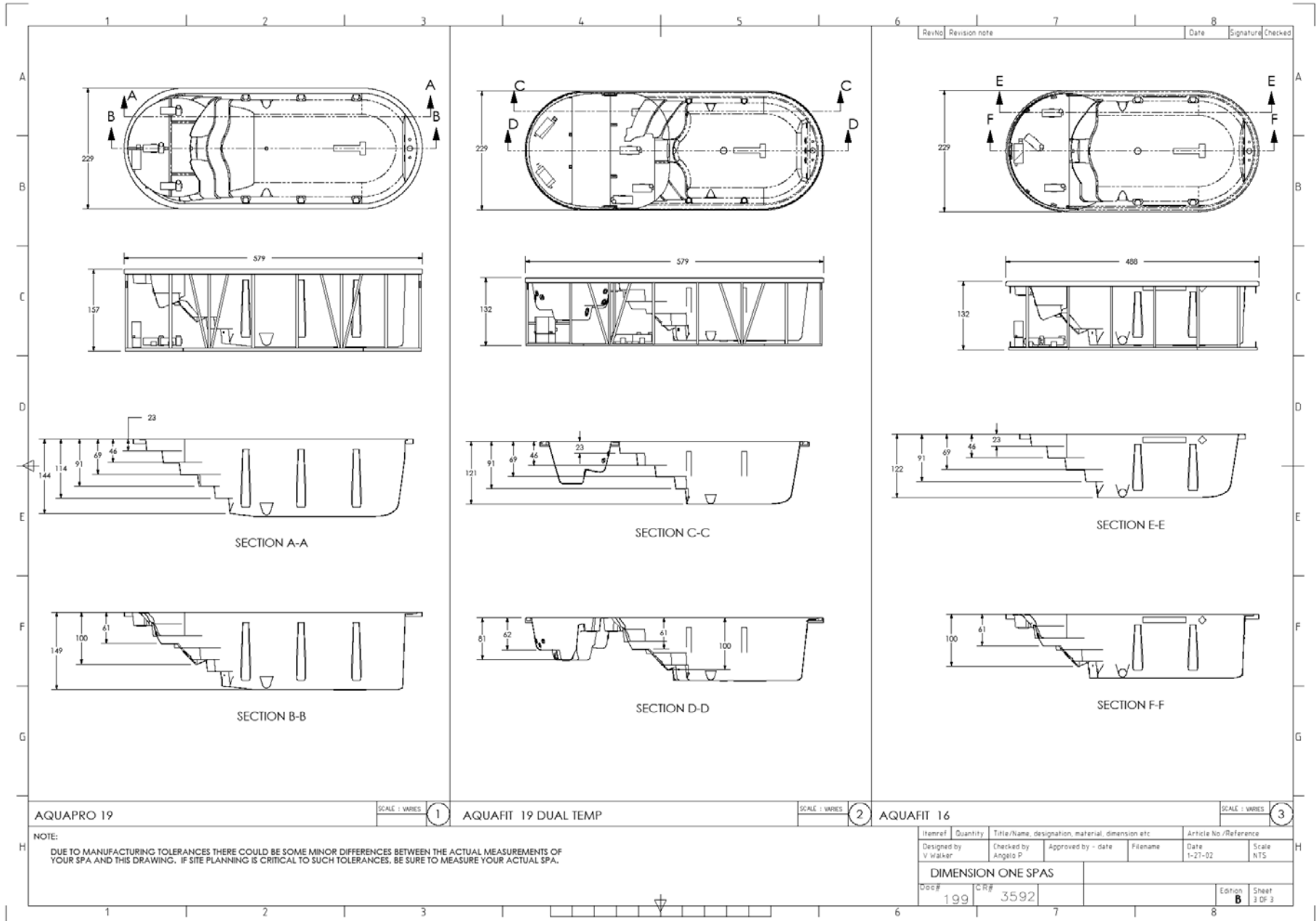
# NORTH AMERICA AFS VIEW





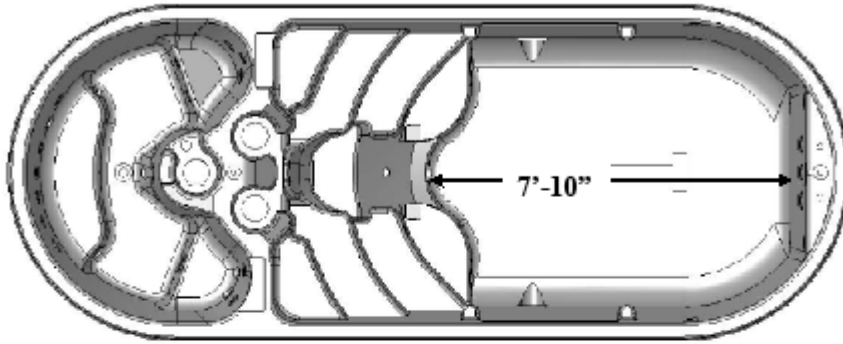


# INTERNATIONAL AFS VIEW

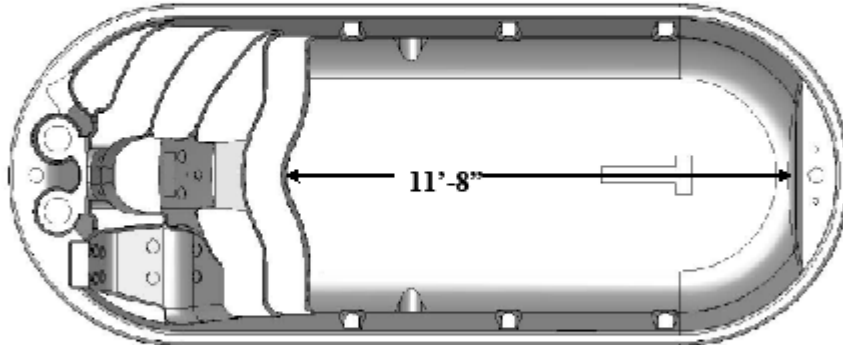


# SPECIFICATIONS

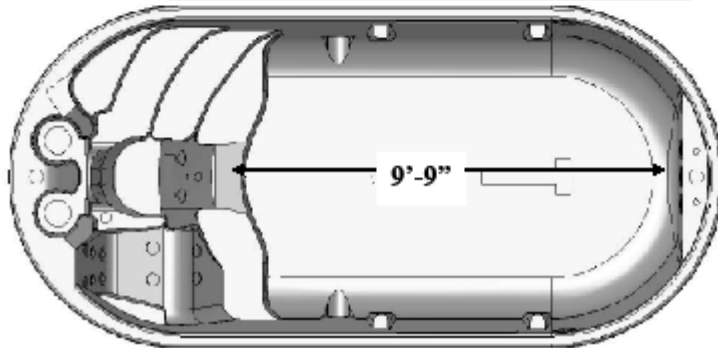
## SWIM SPACE AND WATER LEVEL



**AFS 19DT**  
Water Level: 42 inches (~106 cm)  
Swim Space: 7'10" (~238 cm)



**Aquapro 19**  
Water Level: 52 inches (~132 cm)  
Swim Space: 11'8" (~355 cm)



**AFS 16**  
Water Level: 42 inches (~106 cm)  
Swim Space: 9'9" (~297 cm)

## SPECIFICATIONS: AQUATIC FITNESS SYSTEMS 16

General		
Shape	Oval	
Seating Capacity	n/a	
Shell Material	DuraTex™	
Dimensions	90½" x 192" x 52" H / (229cm X 488cm x 132cm H)	
Corner Radii	N/A	
Water Capacity	1700 Gallons (6440 Liters)	
Dry Weight	2400 lbs (1090 kg)	
Shipping Weight	2400 lbs (1090 kg)	
Full Weight	17100 lbs (7760 kg)	
Skirt Material	Wood or Synthetic optional	
Water System		
Water Treatment System	CD - Ozone*	
Plumbing Systems	2	
Filters/Coverage	2 / 75 sq. ft.	
Gate Valves	8	
VCR Jet® - Air Adjustable/Directional	0	
VCR Jet® - Rotator	0	
VCR Jet® - Dual Rotator	0	
VCR Jet® - Multi Port Spinner	0	
VCR Jet® - Mini Rotator	4	
VCR Jet® - Mini Directional	10	
VCR Jet® - Euro Directional	0	
VCR Jet® - Euro Rotator	0	
VCR Jet® - Mini Directional in NFJ	0	
Typhoon Jet	0	
Swim Jets	6	
Ozone Jet	2 *	
Heater Return Jet	1 *	
Pump Returns	5	
Diverter Valves	1	
Floor Drains	1	
Skimmer	2 - 8" Weir	
Special Features		
NeckFlex® Jet Pillows	0	
Headrest Pillows	1	
Optimounts™	12	
Tether Mount	2	
Bar	1	
Swim Jet Air Valves	2	
Swim Tether	1	
Pump Information		
	Domestic (60Hz)	Export (50Hz)
Motor Size – Peak (Continuous) HP	5.0 (3.0) HP	3.6 (2.0) HP
Jet Pumps # of Pumps/Speed	One / Dual & Two / Single	One / Dual & Two / Single
Circulation pump	0	0
Electrical System		
	Domestic (60Hz)	Export (50Hz)
Voltage	240	230
Amperage	50/40	1x32 / 3x16 / 2x16
Heater	5.5 kW *	5.2 kW *
Thermostat	Electronic *	Electronic *
Light	2 Multi color LED**	2 Multi color LED**
Control System	Gecko Alliance*	Gecko Alliance*
Upper Control	Gecko Alliance*	Gecko Alliance*



- Note: 1. Subject to change without notice.
2. \* For builder's pack models the following equipment is not supplied.  
Ozone Jets, Heater return jet, water treatment system, heater, thermostat, upper control, control system and pumps.
3. \*\* Builder's pack light is an incandescent bulb

## SPECIFICATIONS: AQUATIC FITNESS SYSTEMS 19

General	
Shape	Oval
Seating Capacity	n/a
Shell Material	DuraTex™
Dimensions	90¼" x 228" x 62" H / (229cm X 579cm x 157cm H)
Corner Radii	N/A
Water Capacity	2400 Gallons (9085 Liters)
Dry Weight	3600 lbs (1633 kg)
Shipping Weight	3600 lbs (1633 kg)
Full Weight	23600 lbs (10705 kg)
Skirt Material	Wood or Synthetic optional

Water System	
Water Treatment System	CD - Ozone*
Plumbing Systems	2
Filters/Coverage	2 / 75 sq. ft.
Gate Valves	8
VCR Jet® - Air Adjustable/Directional	0
VCR Jet® - Rotator	0
VCR Jet® - Dual Rotator	0
VCR Jet® - Multi Port Spinner	0
VCR Jet® - Mini Rotator	4
VCR Jet® - Mini Directional	8
VCR Jet® - Euro Directional	0
VCR Jet® - Euro Rotator	0
VCR Jet® - Mini Directional in NFJ	4
Typhoon Jet	0
Swim Jets	6
Ozone Jet	2 *
Heater Return Jet	1 *
Pump Returns	5
Diverter Valves	1
Floor Drains	1
Skimmer	2 - 8" Weir

Special Features	
NeckFlex® Jet Pillows	1
Headrest Pillows	0
Optimounts™	14
Tether Mount	2
Swim Bar	1
Swim Jet Air Valves	2
Swim Tether	1

	Domestic (60Hz)	Export (50Hz)
<b>Pump Information</b>		
Motor Size – Peak (Continuous) HP	5.0 (3.0) HP	3.6 (2.0) HP
Jet Pumps # of Pumps/Speed	One / Dual & Two / Single	One / Dual & Two / Single
Circulation pump	0	0
<b>Electrical System</b>		
Voltage	240	230
Amperage	50 / 40	1x32 / 3x16 / 2x16
Heater	5.5 kW *	5.2 kW *
Thermostat	Electronic *	Electronic *
Light	2 Multi color LED**	2 Multi color LED**
Control System	Gecko Alliance *	Gecko Alliance *
Upper Control	Gecko Alliance *	Gecko Alliance *



Note: 1. Subject to change without notice.

2. \* For builder's pack models the following equipment is not supplied.  
Ozone Jets, Heater return jet, water treatment system, heater,  
thermostat, upper control, control system and pumps.

3. \*\* Builder's pack light is an incandescent bulb.

## SPECIFICATIONS: AQUATIC FITNESS SYSTEMS 19DT

General		
Shape	Oval	
Seating Capacity	n/a	
Shell Material	DuraTex™	
Dimensions	90 1/4" x 228" x 52" H // (229cm X 579cm x 132cm H)	
Corner Radii	N/A	
Water Capacity	1730 Gallons (6550 Liters) swim 1450 Gallons (5490 Liters) spa 280 Gallons (1060 Liters)	
Dry Weight	3500 lbs (1590 kg)	
Shipping Weight	3500 lbs (1590 kg)	
Full Weight	18000 lbs (8200 kg)	
Skirt Material	Wood or Synthetic optional	
Water System		
Water Treatment System	CD - Ozone (swim) / UV bulb (spa)	
Plumbing Systems	4	
Filters/Coverage	3 / 75 sq. ft.	
Gate Valves	10	
VCR Jet® - Air Adjustable/Directional	0	
VCR Jet® - Rotator	0	
VCR Jet® - Dual Rotator	0	
VCR Jet® - Multi Port Spinner	0	
VCR Jet® - Mini Rotator	8	
VCR Jet® - Mini Directional	8	
VCR Jet® - Euro Directional	0	
VCR Jet® - Euro Rotator	0	
VCR Jet® - Mini Directional in NFJ	0	
Typhoon Jet	1	
Swim Jets	6	
Ozone Jet	2 swim, 1 spa	
Heater Return Jet	1 swim, 1 spa	
Pump Returns	5 swim, 2 spa	
Diverter Valves	1	
Floor Drains	1 swim, 1 spa	
Skimmer	3 - 8' Weir	
Special Features		
NeckFlex® Jet Pillows	0	
Headrest Pillows	0	
Optimounts™	10	
Tether Mount	2	
Swim Bar	1	
Swim Jet Air Valves	2	
Swim Tether	1	
Pump Information		
	<b>Domestic (60Hz)</b>	<b>Export (50Hz)</b>
Swim Motor Size – Peak (Continuous) HP	5.0 (3.0) HP	3.6 (2.0) HP
Swim Jet Pumps # of Pumps/Speed	One / Dual & Two / Single	One / Dual & Two / Single
Spa Motor Size – Peak (Continuous) HP	4.0 (2.0) HP	3.6 (2.0) HP
Spa Jet Pumps # of Pumps/Speed	One/ Single	One/ Single
Circulation pump	1 spa side	1 spa side
Electrical System		
	<b>Domestic (60Hz)</b>	<b>Export (50Hz)</b>
Voltage	240	230
Amperage - swim	50 / 40	3x16 / 2x16 / 1x32
Amperage - spa	50 / 40	3x16 / 2x16 / 1x32
Heater	5.5 kW	5.2 kW
Thermostat	Electronic	Electronic
Light	3 Multi color LED	3 Multi color LED
Control System - swim	Gecko	Gecko
Upper Control - swim	Gecko	Gecko
Control System - spa	Gecko	Gecko
Upper Control - spa	Gecko	Gecko

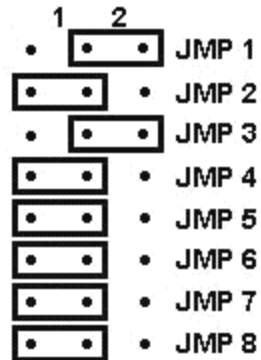


Note: 1. Subject to change without notice.  
2. Builder Pack model not available.

# JUMPER SETTINGS FOR AFS PACK

## NORTH AMERICA JUMPER SETTINGS

All jumpers are read at power-up only.



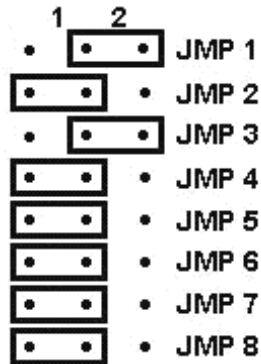
Jumper Number	Function	Position 1 (Left)	Position 2 (Right)
JMP-1	Maximum amperage draw	<b>50Amp</b>	40Amp
JMP-2	Heat associated pump/ default set point	<b>Circulation Pump/100°F</b>	Pump 1/85°F
JMP-3	Pump 2 not installed	x	
JMP-4	Pump 3 not installed	X	
JMP-3	Pump 2 is single speed	X	
JMP-4	Pump 3 not installed		X
JMP-3	Pump 2 is dual speed		X
JMP-4	Pump 3 not installed		X
<b>JMP-3</b>	<b>Pump 2 is single speed Pump 3 is single speed</b>		<b>X</b>
<b>JMP-4</b>		<b>X</b>	
JMP-5	Waterfall	<b>Installed</b>	Not Installed
JMP-6	Dynamic Lighting	<b>Installed</b>	Not Installed
JMP-7	Heater management	<b>Enabled (restricted)</b>	Disabled**
JMP-8	Not used	---	---

Default settings shown in **Bold**.

\*\* If jumper 7 is set to position 2, Heater management is disabled and heat is driven between P63 and P66.

## INTERNATIONAL JUMPER SETTINGS

All jumpers are read at power-up only.



Jumper Number	Function	Position 1 (Left)	Position 2 (Right)
JMP-1	Input is 2x16Amp	X	
JMP-2			X
<b>JMP-1</b>	<b>Input is 1x32Amp</b>		<b>X</b>
<b>JMP-2</b>		<b>X</b>	
JMP-1	Input is 3x16Amp		X
JMP-2			X
JMP-3	Heat associated pump/ default set point	<b>Circulation Pump/100°F</b>	Pump 1/85°F
JMP-4	Pump 2 not installed	X	
JMP-5	Pump 3 not installed	X	
JMP-4	Pump 2 is single speed Pump 3 not installed	X	
JMP-5			X
JMP-4	Pump 2 is dual speed Pump 3 not installed		X
JMP-5			X
<b>JMP-4</b>	<b>Pump 2 is single speed Pump 3 is single speed</b>		<b>X</b>
<b>JMP-5</b>		<b>X</b>	
JMP-6	Waterfall	<b>Installed</b>	Not Installed
JMP-7	Dynamic Lighting	<b>Installed</b>	Not Installed
JMP-8	Heater management	<b>Enabled (restricted)</b>	Disabled**

Default settings shown in **Bold**.

\*\* If jumper 8 is set to position 2, Heater management is disabled and heat is driven between P63 and P66.

# AFS GAS HEATER CONVERSION INSTRUCTIONS

Please read the following document if you want to learn how to heat up an Aquatic Fitness System with a gas heater:

In order to make the conversion, you need to purchase an AFS gas heater conversion kit from an authorized D1 dealer (part # 01512-0071)

- 1) Make sure that the GFCI is turned off
- 2) Locate the lower control (blue box) and open it



- 3) Attach the relay to the black shield in the Lower Control with two dots of silicone: one on the bottom and one on the side.



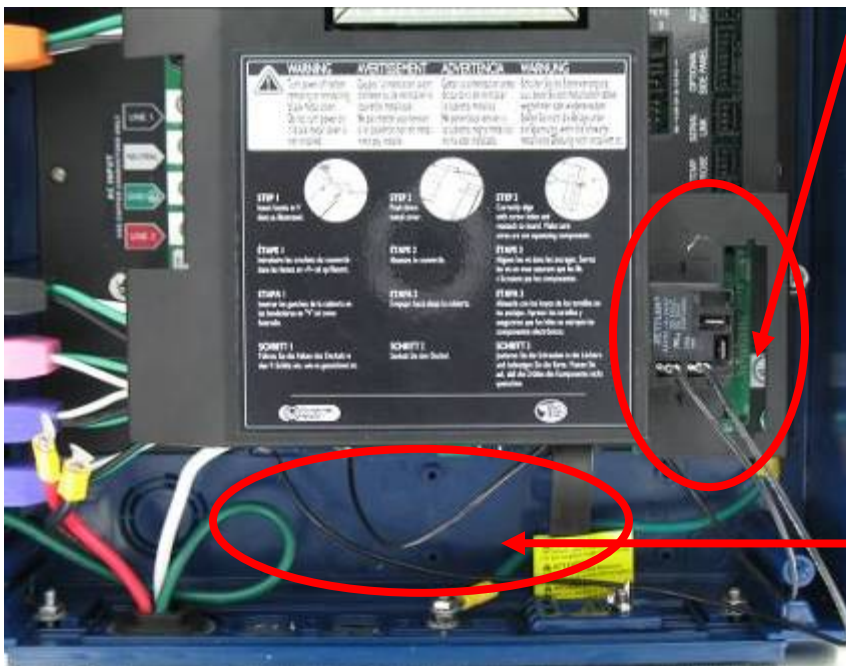
- 4) Move the heater management jumper to the right position (disabled). Jumper 7 for North American boards and jumper 8 for Export boards.



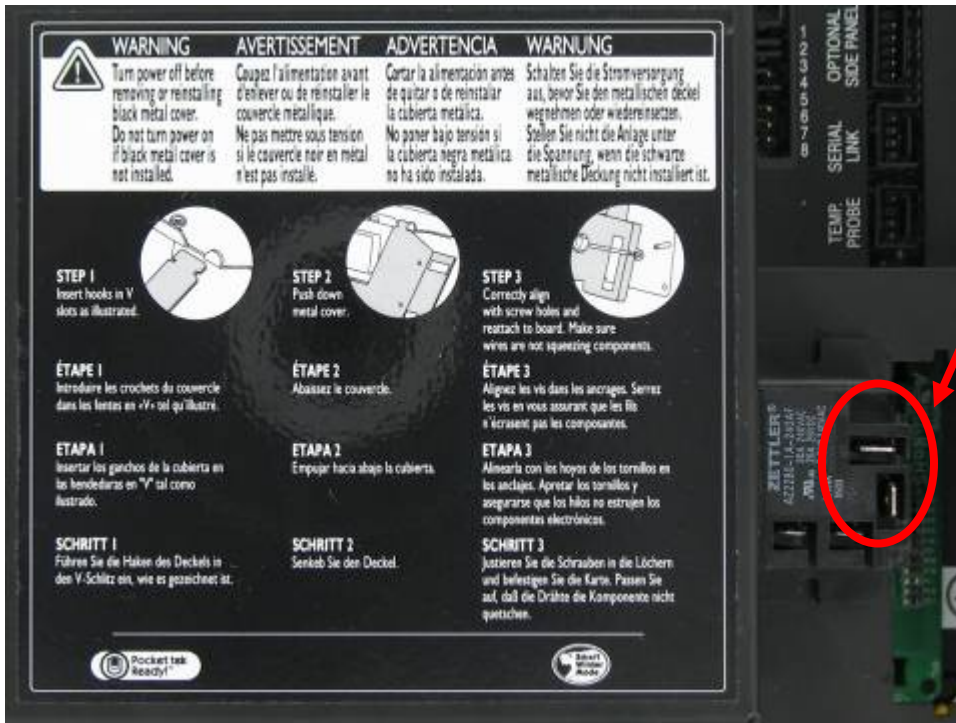
- 5) Disconnect the power wires from the electrical heater (Black, red, green and white cables) and secure the loose ends to a nearby ground stud.



- 6) Connect one wire jumper to P63 and the other wire jumper to P66. Connect the wire jumpers to the two unmarked terminals of the relay.



7) Connect the wires from the gas heater safety circuit to the relay terminals marked NO and COM



8) Cut off the 2" ends caps at pump 1 output and return. Connect to the heater plumbing.

