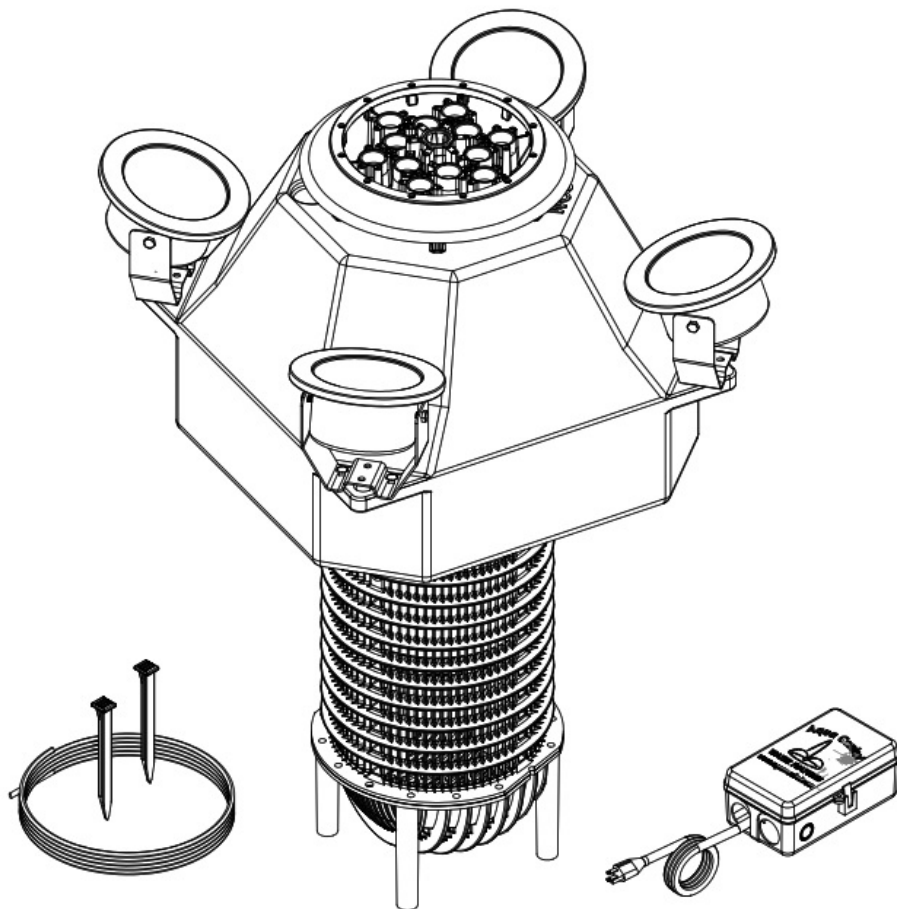




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60 Hz **FUSION** SERIES INSTRUCTION MANUAL



UNIT IDENTIFICATION

Unit Serial Number: _____

Distributor: _____

Light Set Serial Number: _____

Install Date: _____

Parts Included

- Aerating Fountain (1)
- Standard Nozzle Package (1)
- Motor Cord or Quick Disconnect (1)
 - Control Box / Panel (1)
 - Mooring Rope (100')
 - Mooring Stakes (2)

Optional Accessories

- LED Lighting
- Extended Nozzle Package
- Twister Nozzle Package

SAFETY INSTRUCTIONS

IMPORTANT: Reading and understanding the instructions and warranty disclaimer are necessary prior to product installation and operation.

- Under **NO** circumstances should anyone enter the water with the electrical equipment plugged in.
- **NEVER** run the unit out of the water. It may damage the motor seals.
- **NEVER** lift or drag the fountain by the power or light cord.
- Suitable for **FRESHWATER applications only**.
- The fountain suction screen should be inspected for clogging on a monthly basis. If matted weeds, leaves, or plastic bags are present, remove them with a bristle brush. Failure to keep the suction screen clear of blockages will cause low water flow and may cause premature motor failure. **This type of failure is NOT covered under the Aqua Control®, Inc. Manufacturer's Warranty.**
- In freezing conditions, the fountain must be removed from the water body and stored in an area above 32°F.
- Neither Aqua Control®, Inc. nor its distributors are liable for electrician's fees incurred for troubleshooting electrical issues.

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NOZZLE BUILD TIPS AND WARNINGS

- All nozzle builds are in **Appendix A**
- When building the Nozzle, it is best to work from inside out to provide room to work.
- Center Nozzle will always be installed last.

Important Notice on the FUSION Series Multi-Nozzle Components Carry *No* Warranty When Assembled Improperly

This Innovative Multi-Nozzle Casting was designed to offer you the flexibility to switch spray patterns as desired. The screws provided can be inserted multiple times in various locations without damaging the holes. Extra parts have been included as spares in the event they are needed.

Nozzles should be assembled using even and gradual tightening. The screws should be tightened snugly using hand tools only and opposing sides should be tightened evenly. Over-torquing the screws may result in damages not covered under the manufacturer's warranty. Power tools are not allowed.

The assembled nozzle should be handled by the base. Transporting the assembly using the individual tube assemblies or components may result in damages not covered under warranty. Nozzle components are warranted for 30 days and solely replaced due to manufacturing defects. All other damages caused by improper handling and/or assembly will require replacement parts purchased through your Aqua Control® Distributor.

There is a separate instruction sheet to use when installing the Optional Twister Module. If you experience difficulty implementing the build for your preferred spray pattern based upon the instructions provided, please contact Aqua Control® Technical Support or your local distributor for assistance.

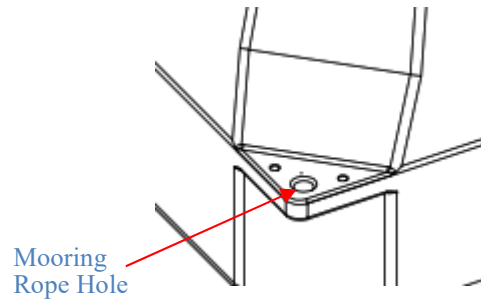
TWISTER MODULE REMINDER

Unlike the pump itself, the Twister Module carries a one (1) year manufacturer's warranty against defects. Due to the intricate bearing design, the Twister Module should not be continuously submerged. This also means that your **Fusion cannot be sunk for the winter months without first removing the Module for off-season storage in a clean, dry, temperature-controlled environment.** Please do not hesitate to contact Aqua Control® Technical Support or your local distributor if you have any additional questions or concerns.

MOORING ROPE & LIGHT SET INSTALLATION

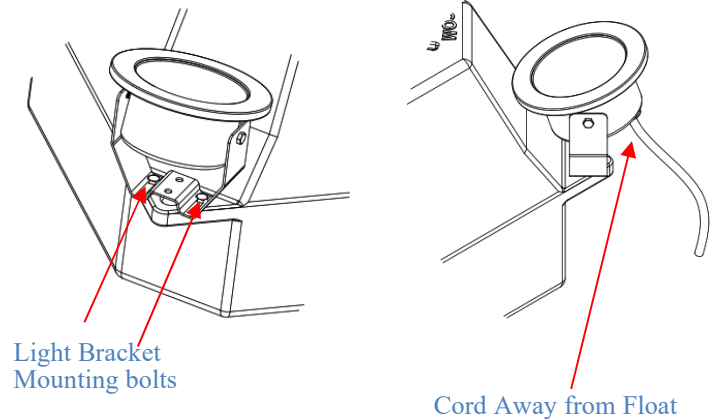
Step #1

Fasten mooring rope to the large holes on two opposing sides of the float. Make sure to place the knot on the bottom side of the float as to not interfere with the light bracket.



Step #2

Mount the light bracket to the float making sure that the power cable is away from the float. Place bracket in the corner using the provided hardware in the two outer holes as shown. Bracket will contour over the mooring rope.



Step #3

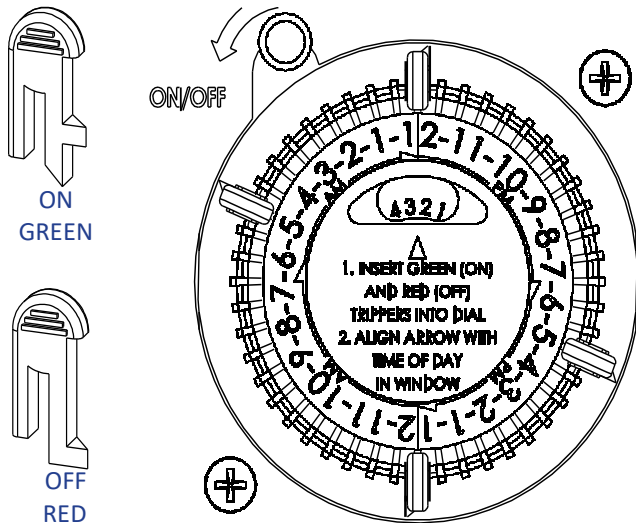
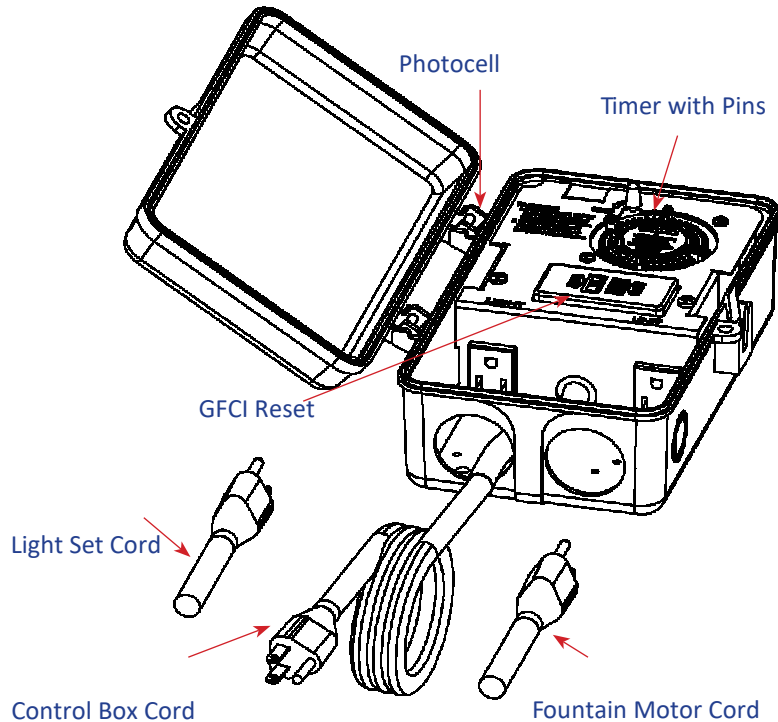
For the 0.5hp and 1hp unit, plug the light set cord into the outlet labeled **Lights** in the control box.

For the 1.5hp and 2hp unit, place the individual wires of the light cable in the corresponding light set terminal block.

0.5HP – 1HP TIMER PROGRAMMING

Step #1

Plug fountain motor cord & light set cord (optional) into the control box. Receptacles in the control box are labeled 'LIGHTS' & 'FOUNTAIN'. *Do not reverse the plugs. The photocell controls the light receptacle.*



Step #2

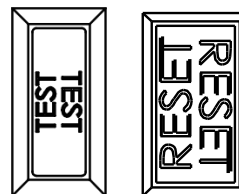
Set ON/OFF times using tripper pins. Insert ON (Green) and OFF (Red) trippers into dial at desired times. Turn dial clockwise and align arrow with Time-of-Day (AM or PM) in window.

Step #3

Plug control box cord into standard 115V household outlet.

Step #4

Turn on control and test GFCI (Push 'TEST' button and then Push 'RESET').



NOTE: Install control box in an area with natural light. Placing the control box in a shaded area or an area that is lit at night will not allow the photocell to properly operate the light circuit.

1.5HP – 2HP TIMER PROGRAMMING

Step #1

Press and hold the *CLOCK* button.
Single press the *DAY* button until the correct day is annotated.
Single press the *HOURL* button until the correct hour (AM/PM) is annotated. Single press *MIN* until the correct minute is annotated.
Once the time and day is set, release the *CLOCK* button.

Step #2

Single press *TIMER* and 1 ON will display. Single press *DAY*, *HOURL*, and *MIN* to set the day or days you want the unit to turn on at a certain time. Single press *TIMER* and 1 OFF will Display. Single press *DAY*, *HOURL*, and *MIN* to set the day or days you want the unit to turn off at a certain time. Repeat until desired on/off times are set. Single press clock to get back to main screen.

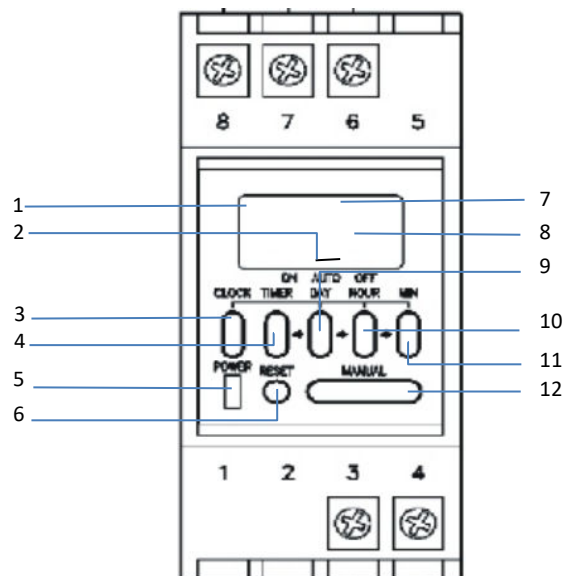
Note: Timer has 8 on/off times that can be set. If unit is to be turned on and off the same time each day, you will only need to set the on time for 1-ON and off time for 1-OFF.

(Mo = Monday, Tu = Tuesday, We = Wednesday, Th = Thursday, Fr = Friday, Sa = Saturday, Su = Sunday); (ON, OFF)
Either individual days "Mo", "Tu", "We", "Th", "Fr", "Sa", "Su", or different groups
1. Group "Mo – Tu – We – Th – Fr",
2. Group "Sa – Su",
3. Group "Mo – Tu – We – Th – Fr – Sa",
4. Group "Mo, Tu, We",
5. Group "Th, Fr, Sa"
6. Group "Mo, We, Fr",
7. Group "Tu, Th, Sa",
8. Group "Mo – Tu – We – Th – Fr – Sa – Su",

Step #3

Single press the *MANUAL* button until the line is over *AUTO*. This sets the timer to turn on/off at specified times.

Note: When line is above on the unit will continue to run until set to auto or off. When turning unit from ON to AUTO, unit will stay on until next OFF time. When turning unit from OFF to AUTO, unit will stay off until next ON time

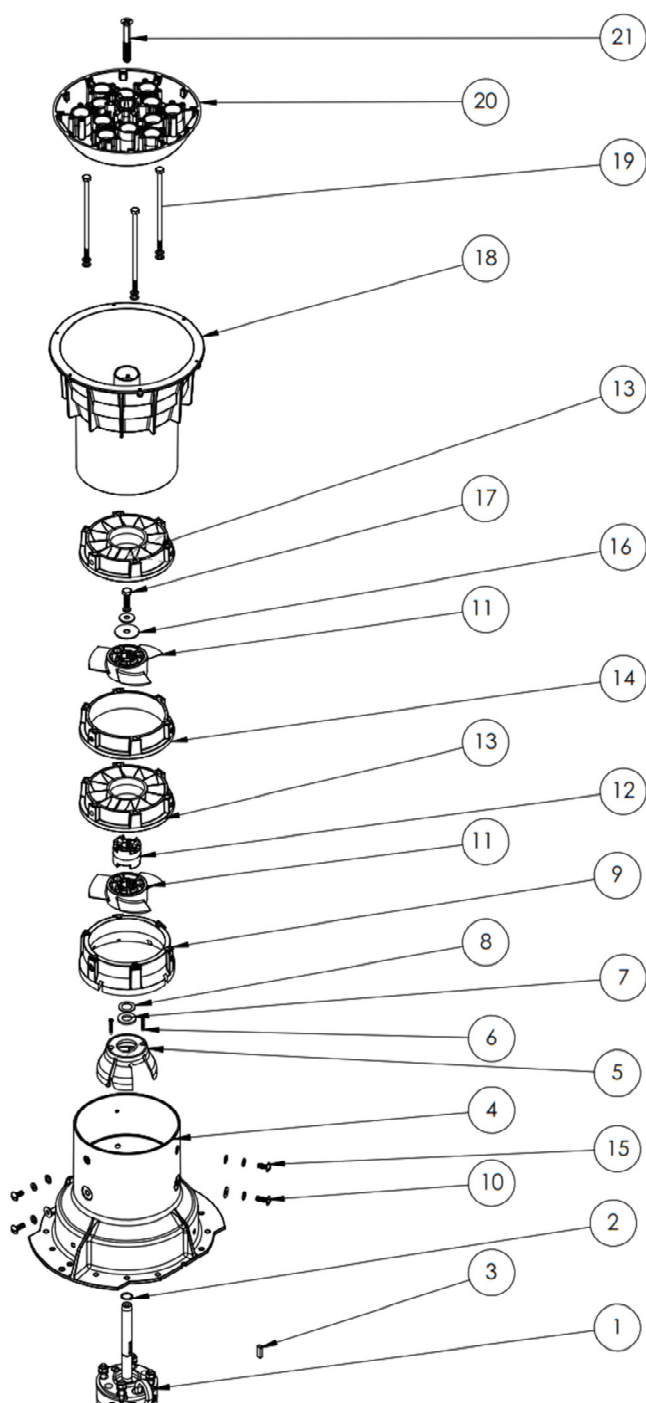


1. AM/PM
2. ON / AUTO / OFF indicator
3. Clock Button
4. Timer Button
5. Power Light – when timer is on
6. Reset Button – press to reset to factory defaults
7. Day of the week display
8. Time Display
9. Day Button
10. Hour Button
11. Minute Button
12. Manual Button

NOTE: Install control box in an area with natural light. Placing the control box in a shaded area or an area that is lit at night will not allow the photocell to properly operate the light circuit.

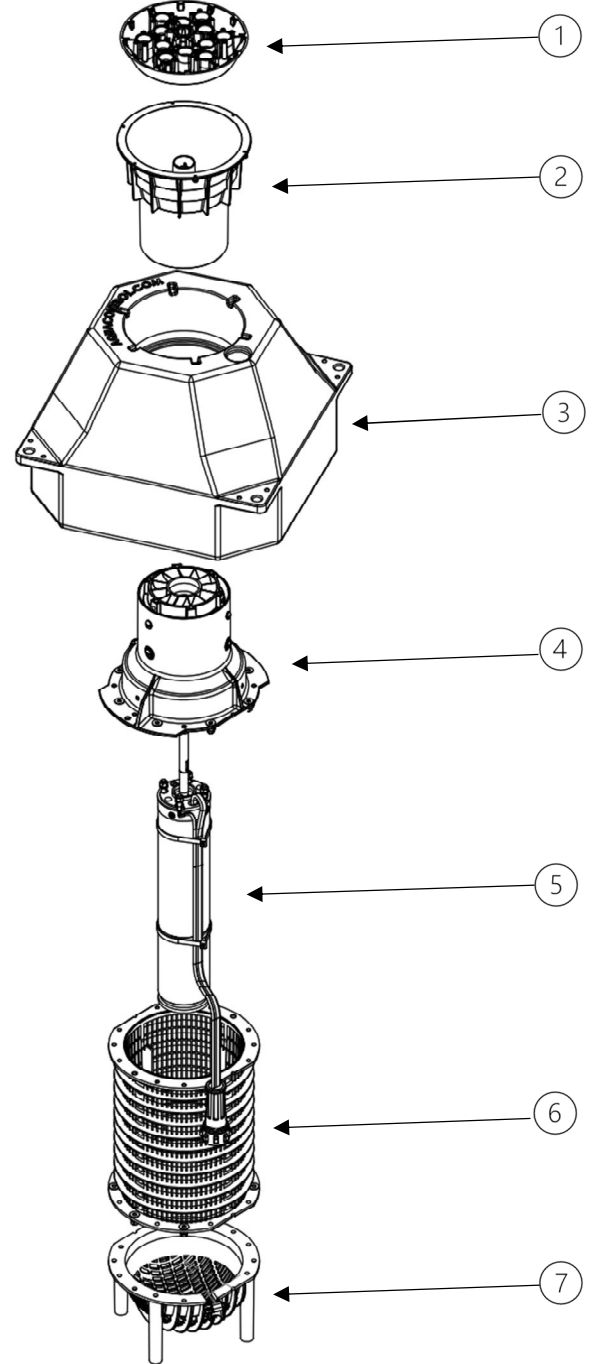
FUSION PUMP PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	62MC2-2.021-L2	2.00HP 60HZ 1PH 230V MOTOR ASSEMBLY FINISHED	1
	EV-H-ZIPTIE	ZIP TIE	2
2	41-SRR	SHAFT RETAINING RING	1
3	41-RSK	.188 X .250 X 0.75 LONG RECTANGULAR KEY	1
4	40-PH	PUMP HOUSING	1
5	40-F-1	S2 INLET FAIRING	1
6	80BS-06X1.0	#6-18 X 1 SELF TAP SCREW	2
7	41-SW	EXTENDED SHAFT WASHER	1
8	80S-0.005	.625 X .005 SHIM 59	
Qty Varies by unit			
9	40-SH-1	PRIMARY SHROUD	1
10	80BSC-0.31X0.63	5/16-18 X 5/8 BUTTONHEAD SC 43	3
	80WF-0.31	5/16" FLAT WASHER 67	3
	80WL-0.31	5/16" LOCK WASHER 76	3
11		PROP	
(.5hp)	40-P-04.5-W	PROP - 4.5 DEGREE - 3 BLADE	1
(1hp)	40-P-08.0	PROP - 8 DEGREE - 3 BLADE	1
(1.5hp)	40-P-07.	PROP - 7 DEGREE - 3 BLADE	2
(2hp)	40-P-08.0	PROP - 8 DEGREE - 3 BLADE	2
12	40-P-00	PROP SPACER(ONLY FOR 2-STAGE)	1
13	40-IFS-2	INTERNAL FLOW STRAIGHTENER 18-35	2
14	40-SH-2	SECONDARY SHROUD	1
15	80BT-0.25X0.63	1/4-20 X 5/8 TRUSS HEAD 30	3
	80WL-0.25	1/4" LOCK WASHER 75	3
	80WF-0.25	1/4" FLAT WASHER 64	3
16	80WB-0.31	5/16" BELLVILLE WASHER	1
17	80BR-0.31X0.75	5/16-18X3/4" PHIL RH SCREW 87	1
	80WF-0.31	5/16" FLAT WASHER 67	1
	80WL-0.31	5/16" LOCK WASHER 76	1
18	41-OF	OUTFLOW	1
19		BOLT	
1-STAGE	80BH-0.25X3.50	1/4-20 X 3 1/2 HEX HEAD 14	3
2-STAGE	80BH-0.25X6.00	1/4-20 X 6 HEX HEAD 16	3
	80WL-0.25	1/4" LOCK WASHER 75	3
	80WF-0.25-N	1/4" NARROW WASHER - 1/2" OD 64	3
20	41-BASE	MULTI NOZZLE BASE	1
21	80BH-0.38X3.00	.375-16X3.000 FHPCS 18-8 S.S.	1



FUSION UNIT BREAKDOWN LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41-BASE	MULTI NOZZLE BASE	1
2	41-OF	OUTFLOW	1
3	FLOAT	FUSION FLOAT	
0.5HP - 1HP	41-FLOAT-S	FUSION FLOAT - SMALL	1
1.5HP - 2HP	41-FLOAT-L	FUSION FLOAT - LARGE	1
4		PUMP ASSEMBLY - SEE PAGE 7	1
5	MOTOR ASSEMBLY		
0.5HP	62MA2-0.511-L2	0.5, 115, 1 2W MTR ASSY	1
1HP	62MA2-1.011-L2	0.5, 115, 1 2W MTR ASSY	1
1.5HP	62MA2-1.511-L2	0.5, 115, 1 2W MTR ASSY	1
5HP	62MA2-2.011-L2	0.5, 115, 1 2W MTR ASSY	1
6	40-SCR	MOLDED SUCTION SCREEN	1
7	40-SCR-EC	MOLDED SUCTION SCREEN END CAP	1



FUSION SERIES TROUBLESHOOTING GUIDE

TROUBLE	CHECK	POSSIBLE SOLUTIONS
Fusion does not operate -OR- Starts then stops	Not plugged in	Cord must be plugged into a 3-wire outlet that is protected by a GFCI or the supplied Fusion Control Box.
	GFCI Tripped	Reset GFCI. If GFCI will not reset or trips immediately, unplug the pump & lights and reset GFCI. If GFCI will still not reset, there may be a problem with the Fusion Control Box or the incoming power. If the GFCI resets, plug the pump in the Fusion Control Box. If the GFCI trips, there may be a problem with the pump cord. If the GFCI holds, plug in the optional light kit. If the GFCI trips, there may be a problem with the lights. Contact Aqua Control® Technical Support to troubleshoot lights or pump
	GFCI not tripped, not running.	Disconnect power. Check propeller for obstruction. These motors have internal overloads. If the propeller is jammed, the internal overload may trip. This overload may require up to 10 minutes to cool down & reset. If the motor does not restart, there may be other motor problems. Contact Aqua Control® Technical Support to troubleshoot the pump.
Fusion spray pattern is not reaching full size	Fusion intake clogged	Disconnect power. Check suction screen for obstruction & remove debris.
	Nozzle clogged	Disconnect power. Remove nozzle & check for obstruction & remove debris.

Aqua Control® Technical Support

Available Monday thru Friday, 7:30AM – 5:00PM CST

Phone: 1-800-377-0019 or 1-815-664-4900

Email: info@aquacontrol.com

-OR-

Contact Your Local Aqua Control® Distributor