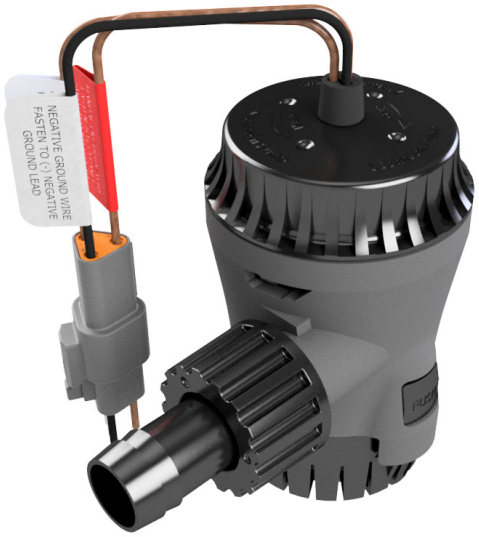
Johnson Pump®

INSTRUCTION MANUAL



Aqua Void Auto

Bilge Pumps

500 and 800 GPH models

MODELS:	**10-13626-03, 10-13626-04,**
10-13626-07, 10-13626-08.	
FORM NO.:	IB-532
REVISION:	16/04/2024

SPXFLOW®

READ AND UNDERSTAND THIS MANUAL PRIOR TO OPERATING OR SERVICING THIS PRODUCT.

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Applicable standards
ISO 8846, ISO 8849, ISO 55014, ABYC H-22

Warranty Information US: SPX FLOW Inc. 5885 11th Street Rockford,IL 61109-3699 warrants to the original consumer purchaser that this product will be free from defects in material and workmanship, providing that the case is not opened or the pump otherwise abused for a period of three (3) year from the date originally purchased. The exclusive remedy of the consumer purchaser in the event the product does not meet this express Limited Warranty is to return the pump to ORIGINAL LOCATION OF PURCHASE or THE AUTHORIZED SPX FLOW JOHNSON PUMP RETAILER with your sales receipt. IMPORTANT: FOR THIS WARRANTY TO BE EFFECTIVE, THE SPX FLOW JOHNSON PUMP AUTHORIZED RETAILER MUST BE SUPPLIED WITH THE ORIGINAL PURCHASE DATE OF THE PRODUCT. THE ACCEPTANCE BY SPX FLOW JOHNSON PUMP AUTHORIZED RETAILER OF ANY PRODUCT RETURNED SHALL NOT BE DEEMED AN ADMISSION THAT SUCH PRODUCT IS DEFECTIVE OR IN VIOLATION OF ANY WARRANTY. THE COMPANY RESERVES THE RIGHT TO REPAIR OR REPLACE THE PRODUCT. NO REPRESENTATIVE OR OTHER PERSON IS AUTHORIZED TO ASSUME FOR SPX FLOW JOHNSON PUMP ANY ADDITIONAL LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS OR TO ALTER THIS WARRANTY IN ANY WAY. IN NO EVENT WILL SPX FLOW JOHNSON PUMP BE LIABLE FOR MORE THAN THE SALES PRICE OF THE PRODUCT. UNDER NO CIRCUMSTANCES WILL SPX FLOW JOHNSON PUMP BE LIABLE FOR ANY LOST PROFITS, INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES. THE LIMITATION ON LIABILITY FOR LOST PROFITS, INCIDENTAL OR CONSEQUENTIAL COST EXPENSES OR DAMAGES SHALL SURVIVE ANY FAILURE OF ESSENTIAL PURPOSE OF THIS LIMITED WARRANTY. Some states do not allow the exclusive or limitation of incidental or consequential damages, so the above limitation may not apply to you. NO EXPRESS OR LIMITED WARRANTY, INCLUDING WARRANTY OF MERCHANTABILITY AND FITNESS SHALL EXTEND FOR ANY PERIOD OF TIME GREATER THAN THREE (3) YEARS FROM THE DATE OF ORIGINAL PURCHASE OF THIS PRODUCT. Some states do not allow limitation on how long an implied warranty lasts so the above limitation may not apply to you. CAUTION - Warranty void if seal on product is broken, if any electric cord is cut, if electric splices become submerged, or if product is installed contrary to instructions or warnings.

1. Pump function description

The Aqua Void Auto Bilge Pump is equipped with advanced sensing technology to detect the presence of water within the bilge. Featuring a uniform pump housing design across all Aqua Void Pump models, the point of distinction lies in the inclusion of the auto-sensing motor cartridge.

Operational efficiency is ensured through an automated cycle where the pump initiates a brief impeller rotation every 2.5 minutes, lasting for 1 second. This spinning action serves the purpose of automatically detecting the presence of water. Upon detection, the pump transitions into operation mode, continuing until all the water is removed.

In the absence of any liquid detection, the pump ceases its operation, initiating a subsequent cycle after a 2.5-minute interval. This meticulous process ensures optimal functionality and reliable performance, making the Aqua Void Auto Bilge Pump an indispensable component for bilge water management.

Described above pump operation is presented also on a chart on next page.

2. Available product types

Aqua Void Auto bilge pumps are available for delivery under following numbers:

PUMP TYPE	VOLTAGE (VDC)	CAPACITY (GPH)	PRODUCT NUMBER
AQUA VOID AUTO - RETAIL	12	500	10-13626-03
AQUA VOID AUTO - BULK PACKED	12	500	10-13626-04
AQUA VOID AUTO - RETAIL	12	800	10-13626-07
AQUA VOID AUTO - BULK PACKED	12	800	10-13626-08

Pumps are either packed in retail boxes and then in a bulk box or inside bulk box directly. First type of packaging is marked as ”retail” in table above and the second type marking is ”bulk packed”

3. Accessories

It is possible to order accessories for auto bilge pump . Mentioned accessories extend functions and add new possibilities for the pump. Good example of accessorie is check valve which adds beckflow prevention. All available accesorie sets are presented in table below:

ACCESORIE	PRODUCT NUMBER
STRAIGHT DURA PORT ASSEMBLY	09-36422
90 DEGREE DURA PORT ASSEMBLY	09-36423
CHECK VALVE	09-36426

Straight Dura Port

90 Degree Dura Port

Check Valve

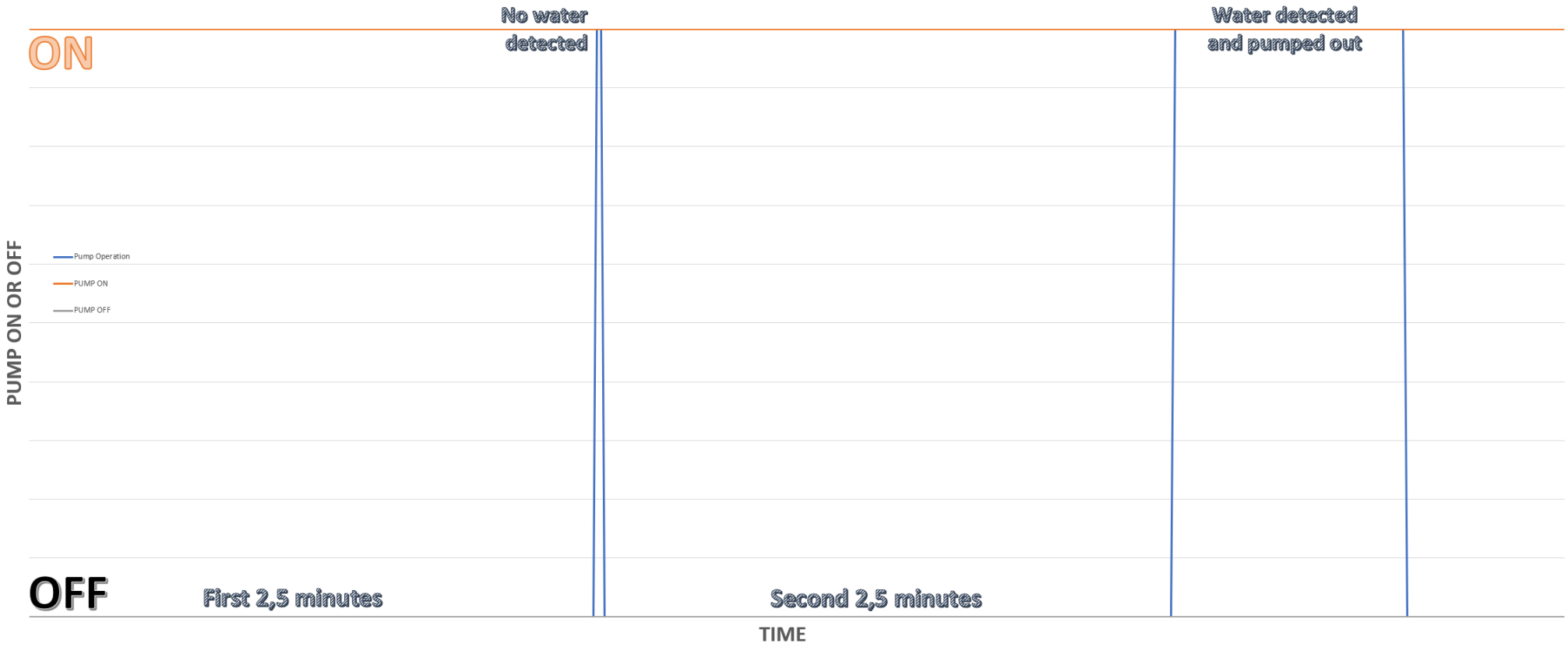
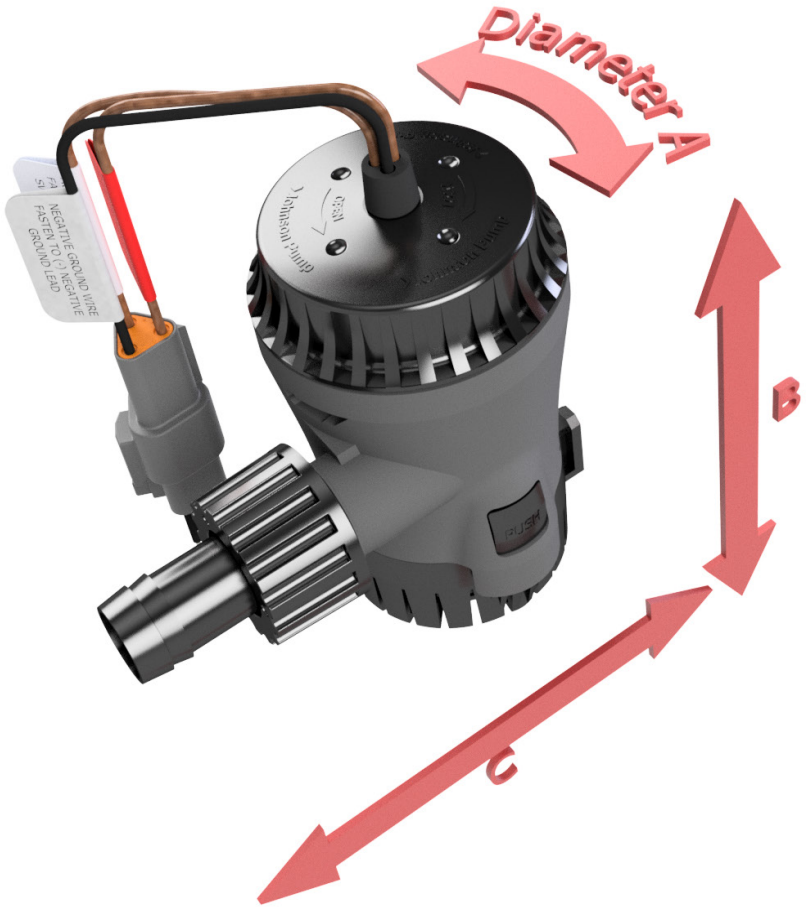


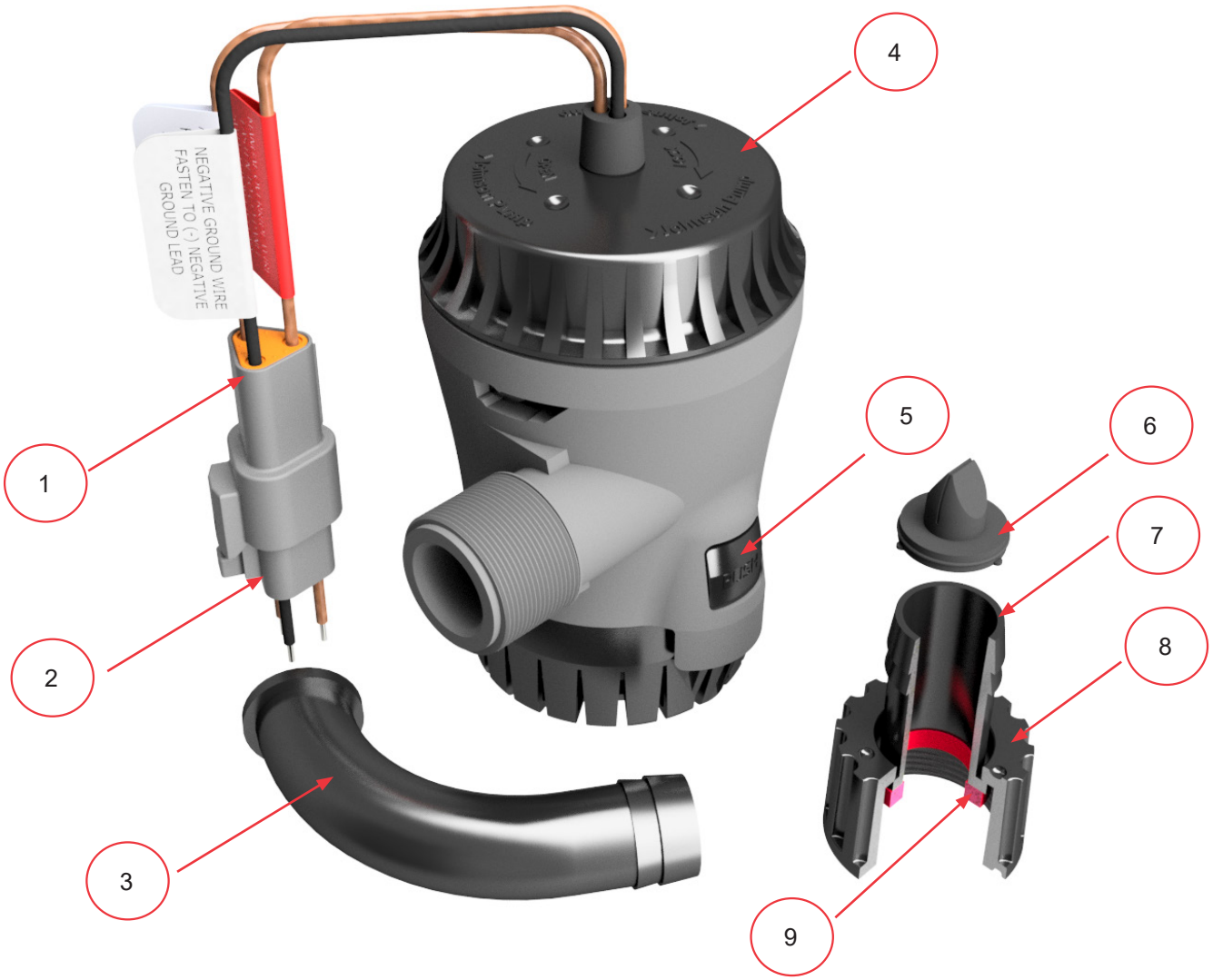
Fig. 1. AUTO PUMP

4. Pump basic technical data

	500 GPH	800 GPH	DESCRIPTION
1	**19mm / 3/4”**	**19mm / 3/4”**	**Hose size**
2	**ISO: 38 l/min. 600GPH**	**ISO: 50 l/min. 795GPH**	**Capacity, straight (12V, ISO 8849)**
	ABYC: 38 l/min. 600GPH	**ABYC: 50 l/min. 795GPH**	**Capacity, straight (ABYC H-22)**
3	**ISO: 26 l/min. 410GPH**	**ISO: 35 l/min. 560GPH**	**Capacity, 1m head (12V, ISO 8849)**
	ABYC: 23 l/min. 365GPH	**ABYC: 32 l/min. 510GPH**	**Capacity, 1m head (ABYC H-22)**
4	**ISO: 16 l/min. 250GPH**	**ISO: 26 l/min. 405GPH**	**Capacity, 2m head (12V, ISO 8849)**
	ABYC: 14 l/min. 225GPH	**ABYC: 24 l/min. 375GPH**	**Capacity, 2m head (ABYC H-22)**
5	**3,0 m / 9.9 ft**	**4,4 m / 14.5 ft**	**Capacity, MAX head (12V, ISO 8849, ABYC H-22)**
6	**12V**	**12V**	**Voltage**
7	**2,7A**	**3,7A**	**Amperage**
8	3,5A	5A	**Fuse size**
9	**(B) 119 mm / 4.69”**	**(B) 119 mm / 4.69”**	**Height**
10	**(A) 69.8 mm / 2.75”**	**(A) 69.8 mm / 2.75”**	**Max. diameter**
	(C) 133 mm / 5.24”	**(C) 133 mm / 5.24”**	
11	**0,38 kg / 13.4 oz**	**0.4kg / 14.11 oz**	**Weight**
12	**16GA / 1.3 mm2**	**16GA / 1.3 mm2**	**Wire cross section area**



5. Product main parts



PART NUMBER	PART NAME
1	CONNECTOR MALE PART
2	CONNECTOR FEMALE PART
3	90 DEGREES DURAPORT SLEEVE
4	CARTRIDGE MOTOR
5	PUMP BASKET (INLET STRAINER)
6	CHECK VALVE
7	STRAIGHT DURAPORT SLEEVE
8	DURAPORT NUT
9	DURAPORT WASHER

6. Check valve

The check valve is used to reduce repetitive pump on/off cycling by preventing backflow of water from returning to the bilge. When the check valve is installed, the gasket is not required. The check valve is installed between the pump housing and duraport nut/sleeve. The protruding shape of the valve can be inserted into the duraport sleeve in the direction of water flow, which is then fastened to the pump using the duraport nut. The flat face of the valve will seal against the face of the pump threaded region when fastened together.

NOTE
Installation of the check valve can reduce performance of the pump up to 30% as it creates additional flow restriction.

7. Replacement motor

Cartridge motor in pump auto version is a part in which auto function is built in . Therefore it is important to know correct part numberwhen ordering replacement motor for your part.

Pump type	VOLTAGE (VDC)	500 GPH 12V AUTO	800 GPH 12V AUTO
Part. No.	12V	09-36336-04	09-36336-10

NOTE
Auto cardridge motors are delivered only with male electrical plug. Female elctrical plug shall be installed in boat electrical system upfront.

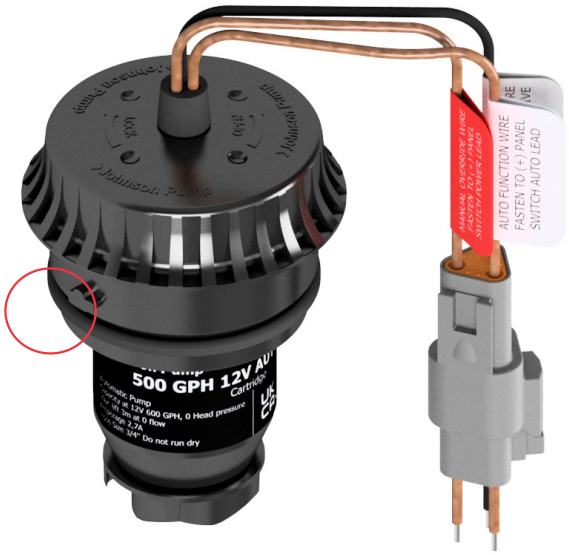
8 Cartridge motor replacement

1. Push down firmly until parts reach to mechanical stop.

2. Rotate cartridge motor clockwise until it clicks in posi-

3. Rotate cartridge motor counter clockwise until mechani-cal stop and pull it up to remove

When replacing motor make sure that the oring is always in position and it is covered with food grade ecological grease relevant for NBR rubber.



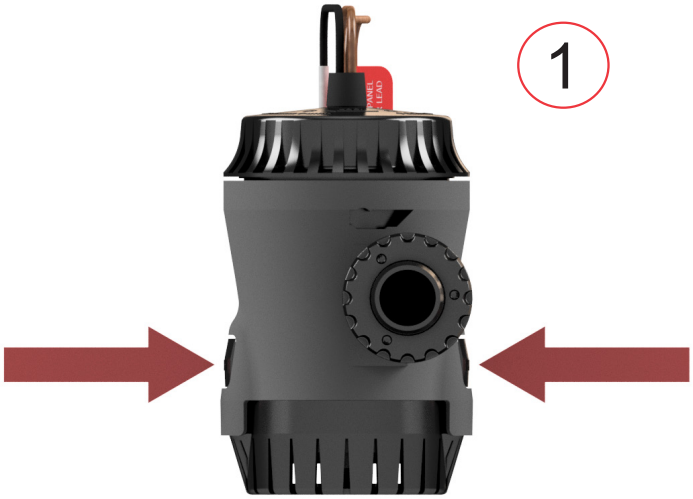
9. Pump installation

First of all bilge pump basket needs to be installed in appropriate place on a boat.

Mounting holes.

Always be carefull when installing basket. Use appropriate screws type and size. Together with screws always use washers.

1



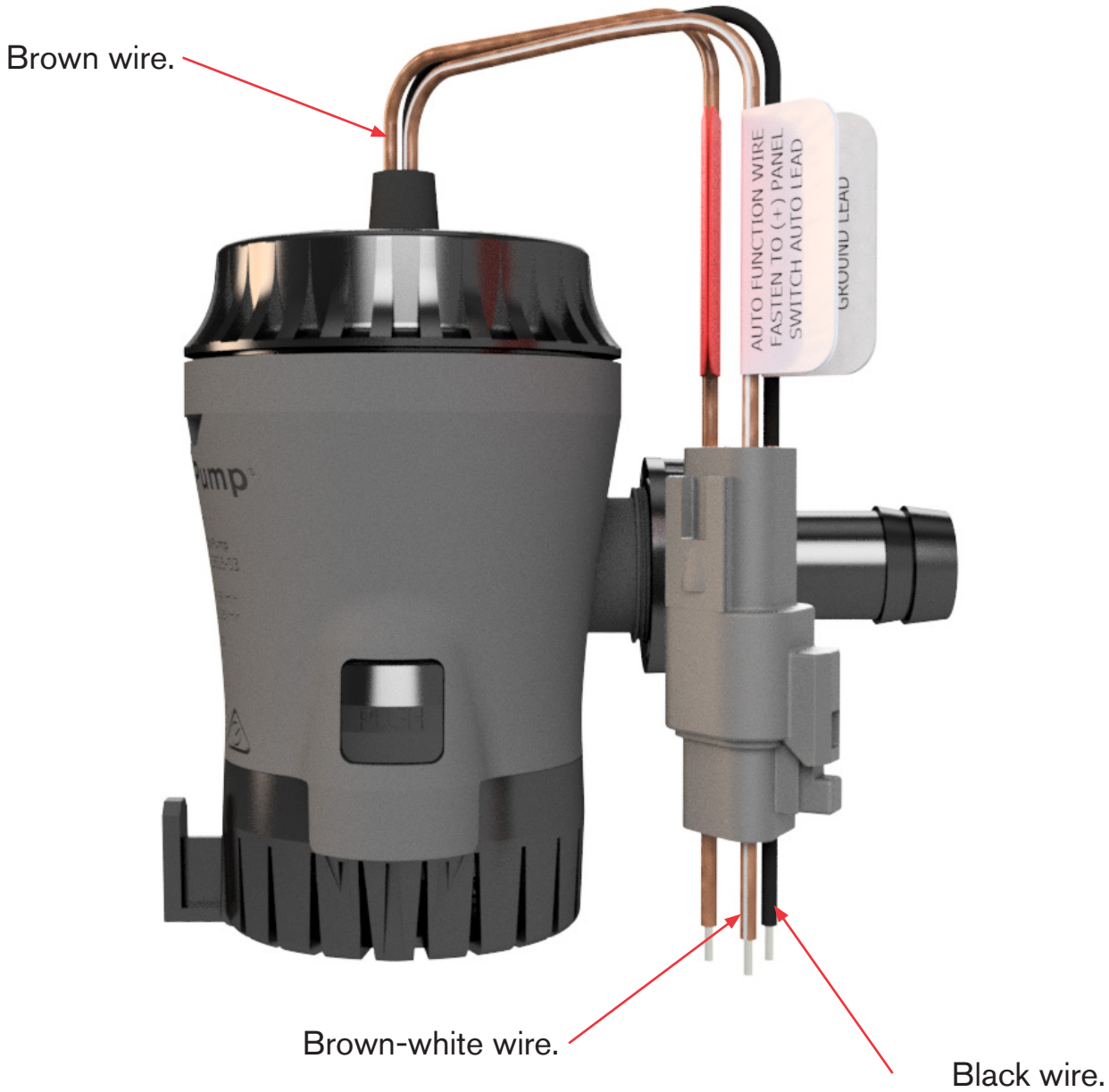
Push Tabs In-

Pull pump and pasket apart.

2

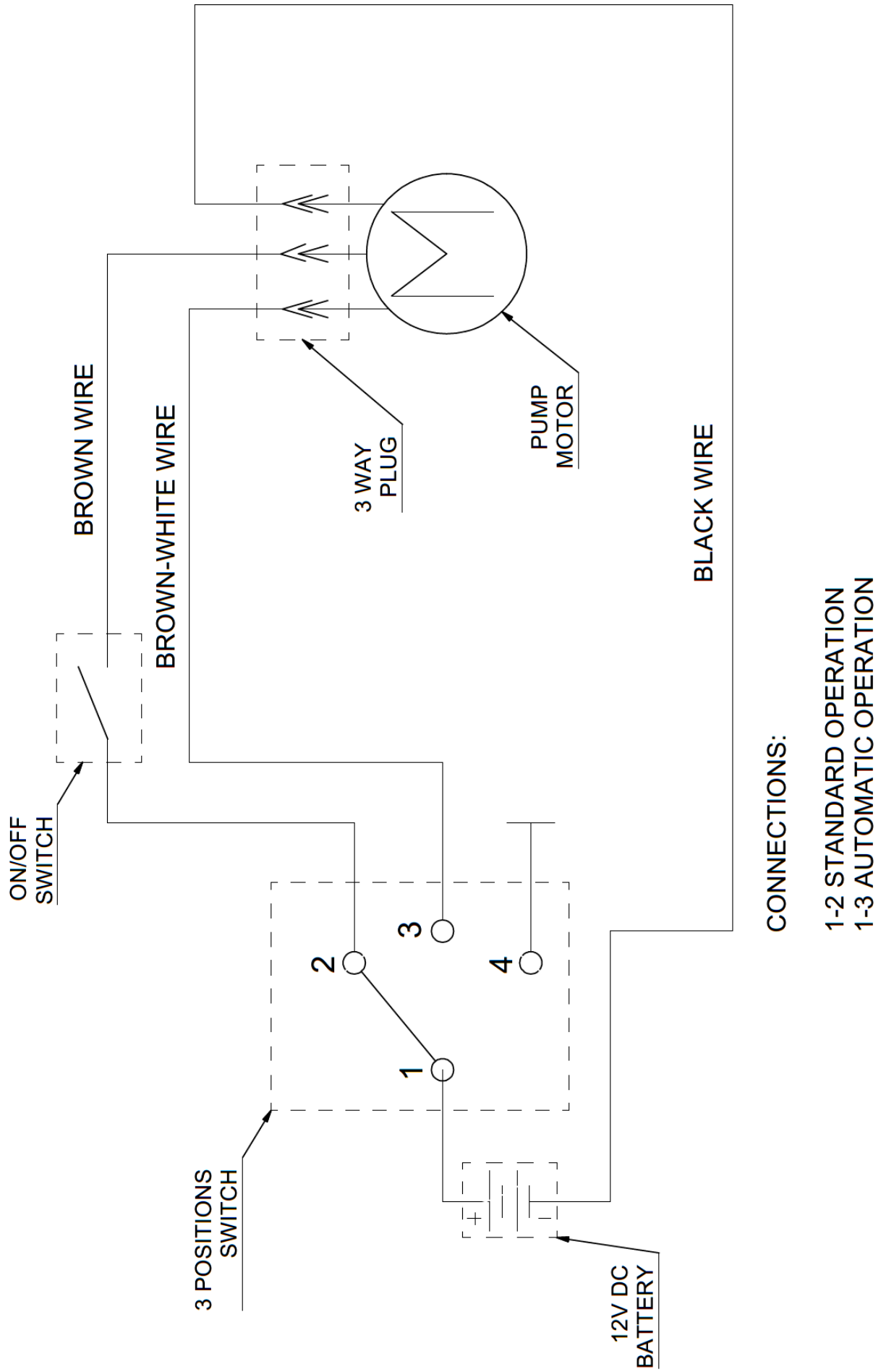
10. Auto cardridge motor wires explanation

Auto pump cartridge motor will always have three wires. Brown wire (+), black wire (-) and brown wire with white stripe on it (auto function wire). In general when pump electrical circuit will be closed with use of brown and black wire, then it will work as a normal bilge pump without any auto functions in use. On the other hand when brown wire with white stripe + black wire will be utilized to close pump electrical circuit then a pump will work with usage of pre-programmed 2,5 minutes spin check function. Further explanation of electrical connections is available on this and



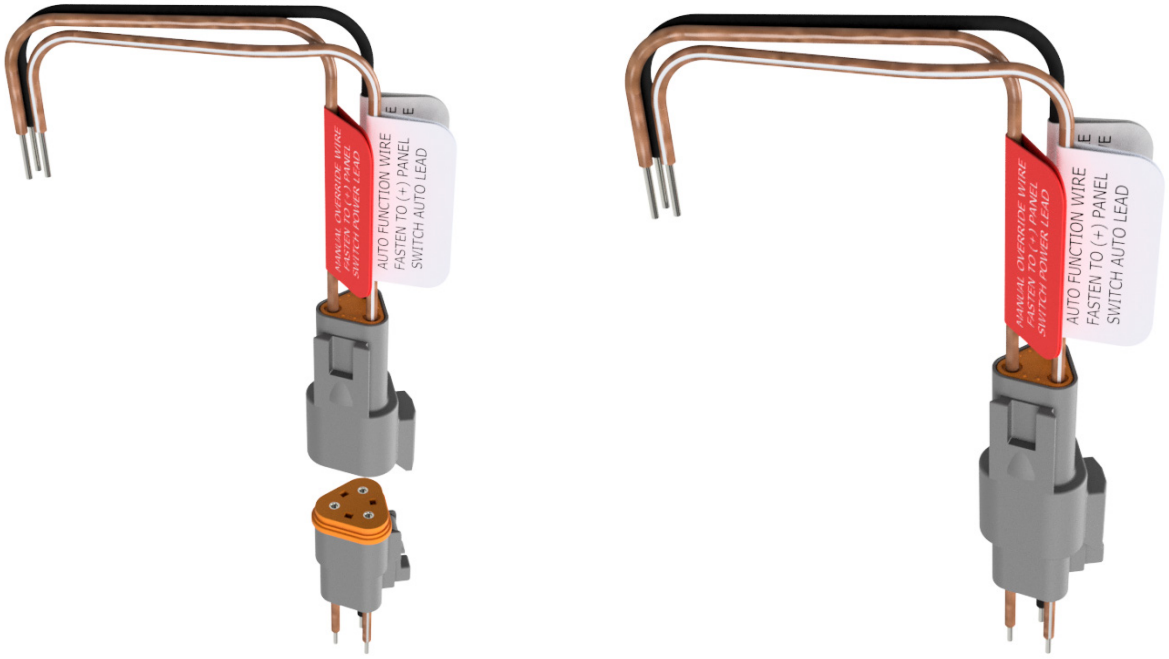
11. Electrical connection explanation

Just as it was explained in previous point of this instruction manual, it is up to end user how auto pump will function in boat electrical system. It is also possible to connect all available wires with use of appropriate device and switch between manual operation (same as in case of standard bilge pump) and auto operation. This way of connection is recommended because it allows end user to combine advantages of two products (standard and auto bilge pump) in one device. Of course presented electrical connection (see next page) is not the only one possible.


BROWN WIRE
BROWN-WHITE WIRE
BLACK WIRE
3 WAY PLUG
PUMP MOTOR
ON/OFF SWITCH
3 POSITIONS SWITCH
12V DC BATTERY
1
2
3
4
CONNECTIONS:
1-2 STANDARD OPERATION
1-3 AUTOMATIC OPERATION
1-4 PUMP OFF

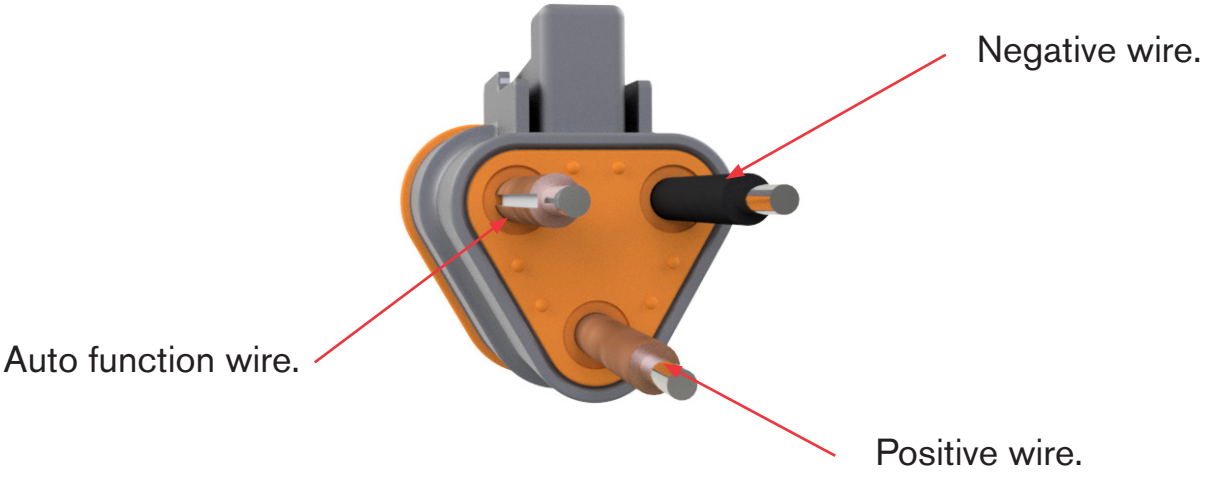
12. Electrical connection plug

Auto pump is equipped with IP68 electrical connector, which makes easy pump installation a reality. It is enough if electrical system on a boat is prepared correctly to easily plug in a pump, make an upgrade or replace a motor. A bit more information obout 3-way electrical plug is available below:



Plug is made of two main parts (male and female). To be sure, that the plug was connected correctly assemble mentioned parts together and push it until it snaps one into another. Moment in which parts are in position is very easy to notice. It is important to assemble male and female plug parts correctly, because otherwise contact between water and electricity can occur.

13. Female plug wires arrangement



14. Energy consumption

Auto pumps use different type of sensing technology. That technology utilizes electronics which, even if pump is not in operation uses small amount of energy to keep pump in stand by mode. Pump stand by mode consumes 3,7mA. It is important to remember that:

1. Pump consumes energy constantly only if device is used in auto mode,

2. When pump is in standard mode, then no energy is used if pump is not in operation.

Taking above into consideration it is strongly recommended to:

1. Implement pump in boat electrical system in a way which allow to switch pump operation mode or to shut off the pump when it's operation is not required or expected,

Johnson Pump®

INSTRUCTION MANUALS *DOWNLOADS*

Aqua Void Auto Pumps

Models: 10-13626-03, 10-13626-04, 10-13626-07, 10-13626-08

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