

Table of Contents	
Servo Overload	2
Servo Underload	2
Servo Motor Driver failure	2
Impeller Controller	3
Impeller No Current	3
Drive Controller	3
Drive No Current	3
Tilt Sensor	4
Gyro Sensor	4
Card Fail	4
Drive Motor Fail	4
Impeller Motor Fail	4
VCC INPUT	5
Out of water	6
Impeller Underload	7
Impeller Overload	7
Drive Overload	8
Drive Underload	8
Wall/Floor sensor 1	9
Wall/Floor sensor 2	10
Liberty Only	11

Servo Overload

Reason	Parts to Test	Corrective Action
The Servo motor is working in overload	Servo motor	<ol style="list-style-type: none">1. Check if any foreign objects are stuck in the water tube.2. Move the water tube from side to side to verify that the Servo motor is working smoothly.
	Motor unit	Operate the robot in the water for a full working cycle. Replace the Servo motor if the robot stops before the cycle ends and the same error reappears.

Servo Underload

Reason	Parts to Test	Corrective Action
The Servo motor is working in underload	Servo motor	Operate the robot in the water for a full working cycle. Replace the Servo motor if the robot stops before the cycle ends and the same error reappears.

Servo Motor Driver failure

Reason	Parts to Test	Corrective Action
No voltage in Servo motor	Servo motor	Replace the Servo motor.

Important note:

Test the robot in the water for one full cycle after the repair to make sure it is working properly.

Impeller Controller

Reason	Parts to Test	Corrective Action
No voltage	PCB card	Replace the PCB card.

Impeller No Current

Reason	Parts to Test	Corrective Action
Impeller motor is working in underload	Impeller motor	Replace the impeller motor.

Drive Controller

Reason	Parts to Test	Corrective Action
No voltage	PCB card	Replace the PCB card.

Drive No Current

Reason	Parts to Test	Corrective Action
Drive motor is working in underload	Drive motor	Replace the drive motor.

Important note:

Test the robot in the water for one full cycle after the repair to make sure it is working properly.

Tilt Sensor

Reason	Parts to Test	Corrective Action
Wall detection failure	PCB card	Replace the PCB card.

Gyro Sensor

Reason	Parts to Test	Corrective Action
Gyro sensor failure	PCB card	Replace the PCB card.

Card Fail

Reason	Parts to Test	Corrective Action
PCB card is not working	PCB card	Replace the PCB card.

Drive Motor Fail

Reason	Parts to Test	Corrective Action
Drive motor is not working	Drive motor	Replace the drive motor.

Impeller Motor Fail

Reason	Parts to Test	Corrective Action
Impeller motor is not working	Impeller motor	Replace the impeller motor.

VCC INPUT

Reason	Parts to Test	Corrective Action
Voltage input is too high or low	Amphenol	Open the Amphenol plug and check that: 1. None of the wires are disconnected. 2. The wires are not touching each other.
	Power supply	1. Check output with a tester/multimeter. 2. Check the power supply cable.
	Floating cable	1. Check the swivel. 2. Check the retrofit. 3. Check the Amphenol plug. 4. Check cable conductivity and voltage.
	There has been a temporary drop in voltage in the customer's wall socket	Ask your customer to check the wall socket.
	Motor unit	Operate the robot in the water for a full working cycle. Repair (DIY) or replace the motor unit if the robot stops before the cycle ends and the same error reappears.

Important note:

Test the robot in the water for one full cycle after the repair to make sure it is working properly.

Out of Water

Reason	Parts to Test	Corrective Action
The robot was operated outside the water	Impeller	Check if the impeller is worn out or broken.
	Motor unit terminal socket	Check for corrosion/water inside the motor unit terminal socket.
	The robot was operated outside of the water (by the customer).	Ask your customer whether the robot was operated outside of the water.
	Motor unit	Operate the robot in the water for a full working cycle. Repair (DIY) or replace the motor unit if the same error reappears when the robot is in the water.

Important note:

Test the robot in the water for one full cycle after the repair to make sure it is working properly.

Impeller Underload

Reason	Parts to Test	Corrective Action
The impeller motor is working in underload	Swivel	Open the swivel and check for water inside.
	Motor unit terminal socket	Check for water inside the terminal socket.
	Motor unit	Operate the robot in the water for a full working cycle. Repair (DIY) or replace the motor unit if the robot stops before the cycle ends and the same error reappears.

Impeller Overload

Reason	Parts to Test	Corrective Action
The impeller motor is working in overload	Impeller	<ol style="list-style-type: none">1. Check if the impeller is touching the impeller cover.2. Check if dirt is stuck in the impeller (hair, grass or leaves).
	Filter	Check if the filter is blocked and clean the filter.
	Motor unit	Operate the robot in the water for a full working cycle. Repair (DIY) and replace the motor unit if the robot stops before the cycle ends and the same error reappears.

Important note:

Test the robot in the water for one full cycle after the repair to make sure it is working properly.

Drive Overload

Reason	Parts to Test	Corrective Action
The drive motor is working in overload	Driving system	<ol style="list-style-type: none"> 1. Check if foreign objects are stuck in the driving system. 2. Check if the pulley or guide wheels are broken. 3. Ask your customer if the robot is stuck on an obstacle in the pool. 4. Check if the track is coming off while working in the pool or if the track is worn out. <p>Models with active brush:</p> <ol style="list-style-type: none"> 1. Check if foreign objects are stuck in the active brush. 2. Check if the active brush bearings are worn out.
	Motor unit	Operate the robot in the water for a full working cycle. Repair (DIY) and replace the motor unit if the robot stops before the cycle ends and same error reappears.

Drive Underload

Reason	Parts to Test	Corrective Action
The drive motor is working in underload	Swivel	Open the swivel and check if there is water inside.
	Motor unit terminal socket	Check for water inside the terminal socket.
	Motor unit	Operate the robot in the water for a full working cycle. Repair (DIY) or replace the motor unit if the robot stops before the cycle ends and same error reappears.

Important note:
 Test the robot in the water for one full cycle after the repair to make sure it is working properly.

Wall/Floor sensor 1

Reason	Parts to Test	Corrective Action
The robot is stuck in a vertical position	Customer pool	Ask your customer how often the robot gets stuck in a vertical position and if it gets stuck behind the pool ladder or on the pool stairs.
	Filter	Check if The filter is blocked and clean the filter.
	Cable float	<ol style="list-style-type: none">1. Check if the float is on the cable.2. Check that the float is placed in the correct position.3. If everything is ok with the float and the problem occurs every cycle, add another float next to the existing float.
	Motor unit	Place the robot upside down and run a self-test. The tracks should move forwards for 10 seconds and backwards for 10 seconds. If the robot doesn't stop, operate it in the water for a full working cycle. Repair (DIY) or replace the motor unit if it stops before the cycle ends and the same error reappears.

Important note:

Test the robot in the water for one full cycle after the repair to make sure it is working properly.

Wall/Floor Sensor 2

Reason	Parts to Test	Corrective Action
The robot is stuck on its side (floor models)	Customer pool	Ask your customer how often the robot gets stuck on its side and if it gets stuck behind the pool ladder or on the pool stairs.
	Filter	Check if the filter is blocked and clean the filter.
	Cable float	<ol style="list-style-type: none">1. Check if the float is on the cable.2. Check that the float is placed in the correct position.3. If everything is ok with the float and problem occurs every cycle, add another float next to the existing float.
	Motor unit	Place the robot upside down and run a self-test. The tracks should move forwards for 10 seconds and backwards for 10 seconds. If the robot doesn't stop, operate it in the water for a full working cycle. Repair (DIY) or replace the motor unit if it stops before the cycle ends and the same error reappears.

Important note:

Test the robot in the water for one full cycle after the repair to make sure it is working properly.

Liberty Only

Reason	Parts to Test	Corrective Action
VCC input error + short cycle time Or BATT LOW error Or WALL NOT FOUND error	Battery	<ol style="list-style-type: none">1. Charge the battery and test if the voltage is $\leq 19.8\text{DCV}$. If the battery voltage is $\leq 19.8\text{DCV}$, operate the robot in the water for a full working cycle before sending it back to the customer.2. If the battery is not charging (no communication LED is blinking on the power supply), open the motor unit and charge the battery directly using the cable P/N 9995983. For more information and instructions, contact the Maytronics technical team.3. If the battery is not charging even when trying to charge directly, replace the battery.

Important note:

Test the robot in the water for one full cycle after the repair to make sure it is working properly.