



# **Dolphin Wave 200XL and 300XL**

## **Pool Troubleshooting Guide**



**October 2017**

## Release History

Rev	Date	Revision History	Prepared by	Approved by
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# 1 Overview

This Dolphin Wave 200 and 300 Pool Troubleshooting Guide is intended to guide technician in addressing problems associated with possible faults in the robot.

The information in this guide is organized according to type of problem/symptom/component and the troubleshooting checks to be performed to pinpoint the source of the problem.

With regard to ...	See ...
Alert ID is on	Chapter 11, Robot Stops before End of Cycle, page 9
Communication with remote	Chapter 13, Robot Not Communicating with the Remote Control, page 11
Driving system failure	Chapter 12, Robot Drives Back before Capitalize the Line, page 10
Filter blockage	Chapter 8, Robot Doesn't Pick Up Dirt, page 7 Chapter 9, Robot Stays in the Deep Area, page 8
Floating cable stuck between floats	Chapter 10, Floating Cable Gets Stuck between Swimming Lanes Floats, page 9
Leaves in pool	Chapter 8, Robot Doesn't Pick Up Dirt, page 7
Lines are too close together	Chapter 4, Not Enough Space between Lines, page 4
Lines are too far apart	Chapter 5, Too Much Space between Lines, page 4
Maze areas in pool	Chapter 7, Robot Leaves Unclean Spots in the Pool, page 6
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Not climbing slope	Chapter 6, Robot Doesn't Climb Slope, page 5
Not driving in straight lines	Chapter 3, Robot Doesn't Drive in Straight Lines, page 3
Pool length	Chapter 12, Robot Drives Back before Capitalize the Line, page 10
Remote ID	Chapter 13, Robot Not Communicating with the Remote Control, page 11

With regard to ...	See ...
Robot doesn't complete lines	Chapter 12, Robot Drives Back before Capitalize the Line, page 10
Robot drives width (instead of length)	Chapter 6, Robot Doesn't Climb Slope, page 5
Robot stays at wall	Chapter 2, Robot Works Along Walls for a Long period of Time, page 2
Robot stops before end of cycle	Chapter 11, Robot Stops before End of Cycle, page 9
Sand in pool	Chapter 8, Robot Doesn't Pick Up Dirt, page 7
Slippery pool floor	Chapter 9, Robot Stays in the Deep Area, page 8
Starting from a shaped wall	Chapter 7, Robot Leaves Unclean Spots in the Pool, page 6
Tunnels in pool	Chapter 7, Robot Leaves Unclean Spots in the Pool, page 6
Unclean spots in pool	Chapter 7, Robot Leaves Unclean Spots in the Pool, page 6
Worn vacuum strips	Chapter 8, Robot Doesn't Pick Up Dirt, page 7

**Note:** Where relevant, external links point to detailed instructions on the replacement or checking of specific parts beyond the scope of this document.

## 2 Robot Works Along Walls for a Long period of Time

### ➤ In this chapter...

*Slippery Pool Surface*

*page 2*

### 2.1 Slippery Pool Surface

- 1 Check if the chemicals in the pool are balanced.
- 2 Change the pool length settings to the width of the pool. For example, if the pool size is 25x15, change it to 15m instead of 25m and change the scanning mode to "Lines to" (see changing pool length [Video](#)).

## 3 Robot Doesn't Drive in Straight Lines

### ➤ In this chapter...

*Robot in Shape Mode* *page 3*

*Starting Point from a Shaped Wall* *page 3*

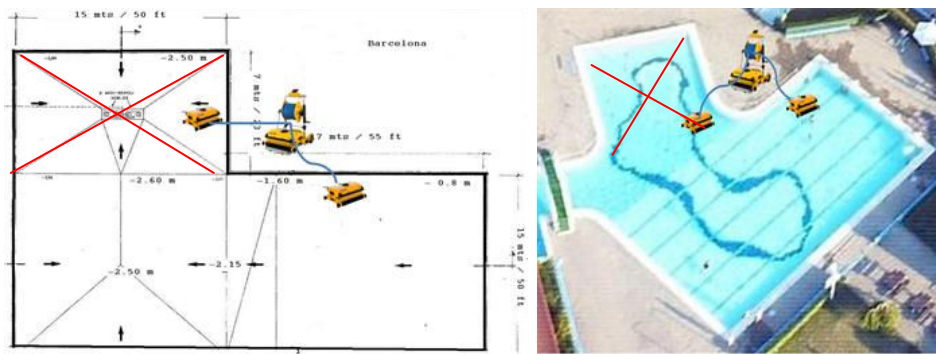
*Deviation Greater Than 10° Degrees* *page 3*

### 3.1 Robot in Shape Mode

If possible, change the scanning mode to "Rectangular".

### 3.2 Starting Point from a Shaped Wall

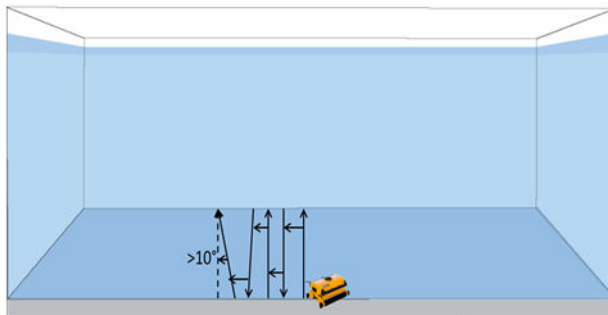
Make sure the starting point is always from a straight wall and flat floor.



**Important:** The third line wall should also be straight.

### 3.3 Deviation Greater Than 10° Degrees

If, within 20 minutes from the start of scanning, the deviation is greater than 10° degrees after a few lines, replace the Navigation box (see wave 200XL [Link](#) and/or [Video](#)).



## 4 Not Enough Space between Lines

➤ **In this chapter...**

*Flat Pool Floor*

*page 4*

*Sloped Pool*

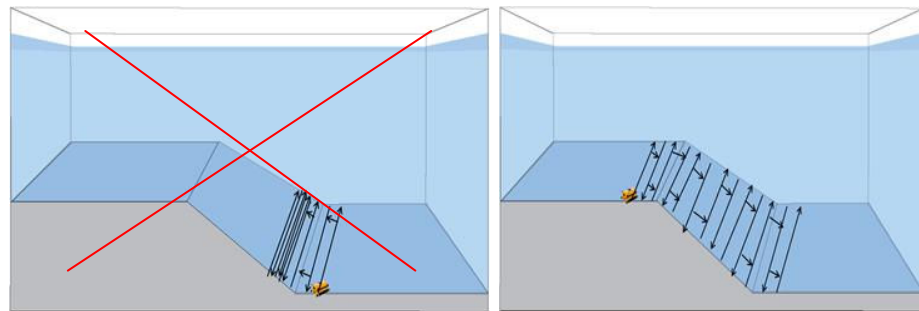
*page 4*

### 4.1 Flat Pool Floor

If the pool floor is flat and is not enough space between the lines, change the line spacing to Medium or Coarse (see [change the line spacing to medium Video](#) and [change the line spacing to Coarse Video](#)).

### 4.2 Sloped Pool Floor

- 1 If the robot works "Up the slope", change the scanning direction to "Down the slope." (**Wave 300 only**)



"Up the slope"

"Down the slope"

- 2 Change the line spacing to Medium or Coarse (see [change the line spacing to medium Video](#) and [change the line spacing to Coarse Video](#)).

## 5 Too Much Space between Lines

➤ **In this chapter...**

*Flat Pool Floor*

*page 4*

*Sloped Pool*

*page 5*

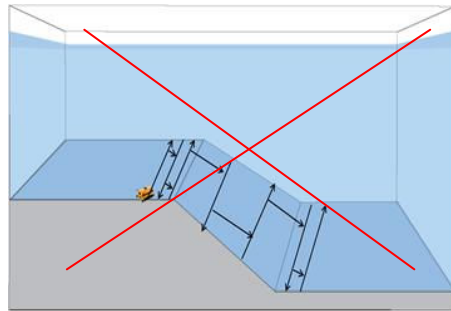
### 5.1 Flat Pool Floor

If the pool floor is flat and there is too much space between the lines, change the line spacing to Medium or Fine (see [change the line spacing to medium Video](#) and [change the line spacing to Fine Video](#)).

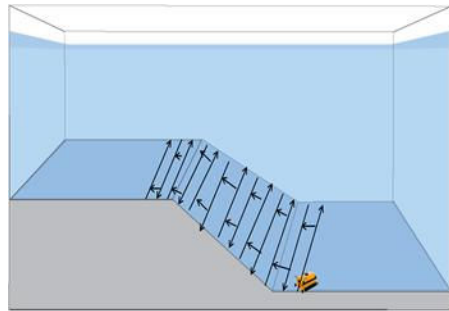


## 5.2 Sloped Pool Floor

- 1 If the robot works "Down the slope," change the scanning direction to "Up the slope." (**Wave 300 only**)



"Down the slope"



"Up the slope"

- 2 Change the line spacing to Medium or Fine (see [change the line spacing to medium Video](#) and [change the line spacing to Fine Video](#)).

## 6 Robot Doesn't Climb Slope

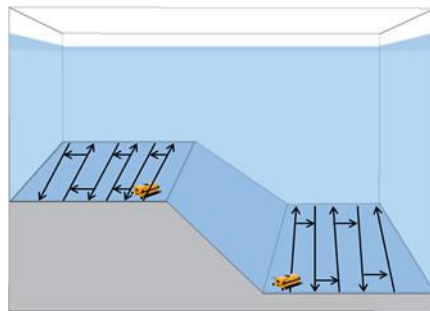
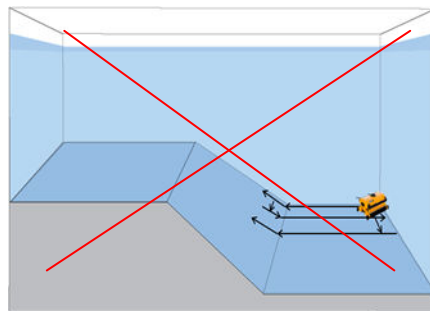
### ➤ In this chapter...

*Robot Drives the Width of Slope*

*page 5*

### 6.1 Robot Drives the Width of Slope

- 1 Clean the filter (see wave 200XL filter cleaning [Video](#) or wave 300XL filter cleaning [Video](#) ).



- 2 For pools with a diving area, split the pool into two cleaning sections (Pool A and Pool B).

## 7 Robot Leaves Unclean Spots in the Pool

### ➤ In this chapter...

*Robot in "Lines to" Scanning Mode* page 6

*Robot Doesn't Clean Areas Near Rounded Walls* page 6

*Niches, Tunnels, or Maze Areas in the Pool* page 6

*Pool Floor Not Flat or with Bumpers* page 6

*Shaped Pool (No Rectangular Walls)* page 7

*Dirt Near Pool Wall* page 7

### 7.1 Robot in "Lines to" Scanning Mode

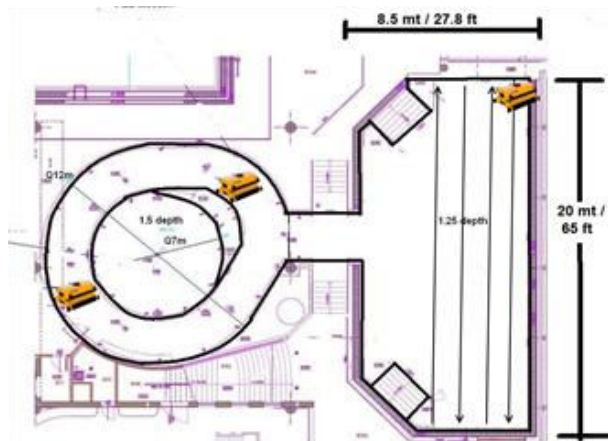
Change the cleaning mode to "Crisscross" and extend the cycle time (see change the cleaning mode to "Crisscross" [Video](#)).

### 7.2 Robot Doesn't Clean Areas Near Rounded Walls

Change the cleaning mode to "Maze scanning" and extend the cycle time (see change the cleaning mode to "Maze scanning" [Video](#)).

### 7.3 Niches, Tunnels, or Maze Areas in the Pool

Clean the specific area via remote control.



### 7.4 Pool Floor Not Flat or with Bumpers

Change the cleaning mode to "Maze scanning" and extend the cycle time (see change the cleaning mode to "Maze scanning" [Video](#)).

## 7.5 Shaped Pool (No Rectangular Walls)

Change the cleaning mode to "Maze scanning" and extend the cycle time (see change the cleaning mode to "Maze scanning" [Video](#)).

## 7.6 Dirt Near Pool Wall

Change the cleaning mode to "Crisscross" or clean the specific area via remote control (see change the cleaning mode to "Crisscross" [Video](#)).

# 8 Robot Doesn't Pick Up Dirt

### ➤ In this chapter...

<i>Blocked</i>	<i>page 7</i>
<i>Sand in Pool</i>	<i>page 7</i>
<i>Leaves in Pool</i>	<i>page 7</i>
<i>Worn Vacuum Strips</i>	<i>page 8</i>

## 8.1 Blocked Filter

Clean the filter (make sure to wash it properly) (see wave 200XL filter cleaning [Video](#) or wave 300XL filter cleaning [Video](#)).

## 8.2 Sand in Pool

Change the fine filter to 100 microns in wave 200XL.

Change the fine filter to 150 microns in wave 300XL.

## 8.3 Leaves in Pool

Remove the net spiral filter and use the cartridge only. **(Wave 200XL only)**

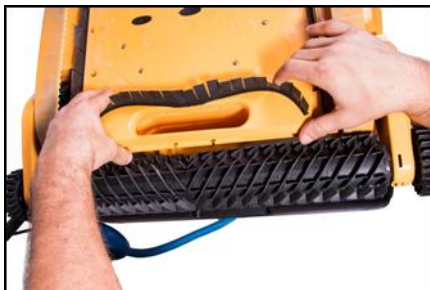
Change the fine filter to 150 microns. **(Wave 300XL only)**



## 8.4 Worn Vacuum Strips

Replace the vacuum strips (see wave 200XL [Link](#)).

### **Wave 200XL vacuum strips**



### **Wave 300XL vacuum strip**



## 9 Robot Stays in the Deep Area

### ➤ In this chapter...

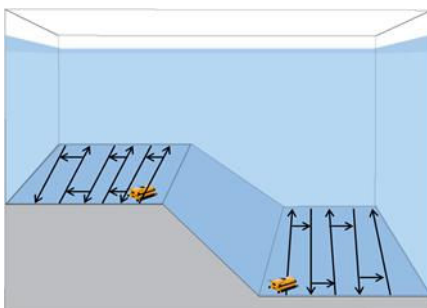
*Slope Greater Than 35° Degrees* *page 8*

*Blocked Filter* *page 9*

*Slippery Pool Floor* *page 9*

### 9.1 Slope Greater Than 35° Degrees

Split the pool into two cleaning sections (Pool A and Pool B).



## 9.2 Blocked Filter

Clean the filter (see wave 200XL filter cleaning [Video](#) or wave 300XL filter cleaning [Video](#)).

## 9.3 Slippery Pool Floor

Check if the chemicals in the pool are balanced.

# 10 Floating Cable Gets Stuck between Swimming Lanes Floats

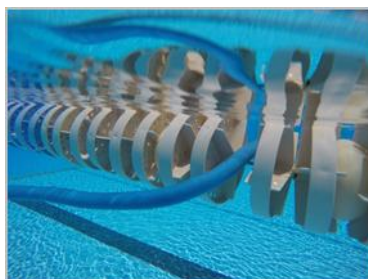
### ➤ In this chapter...

*Gaps between Floats*

*page 9*

## 10.1 Gaps between Floats

- 1 Place the floats closer to one side and make sure there are no gaps between the floats.
- 2 Take out the swimming lines before operating the robot.



# 11 Robot Stops before End of Cycle

### ➤ In this chapter...

*Robot in "Lines to" Mode*

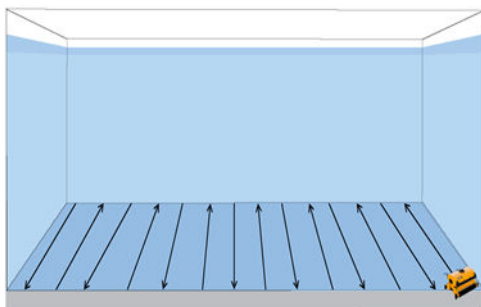
*page 9*

*Alert LED On*

*page 10*

## 11.1 Robot in "Lines to" Mode

There is no problem. The robot is supposed to stop cleaning the pool when it reaches the wall at the other side of the pool.



## 11.2 Alert LED On

Refer to the error troubleshooting file (see wave 200XL [Link](#)).

# 12 Robot Drives Back before Capitalize the Line

### ➤ In this chapter...

*Pool Length Not Set Up Correctly* *page 10*

*Driving System Failure* *page 10*

## 12.1 Pool Length Not Set Up Correctly

Change the pool length at the MMI to the correct pool size (see changing pool length [Video](#)).

## 12.2 Driving System Failure

- 1 Check if something is stuck in the driving system/clean the driving system (see Wave 200XL Drive Overload error instructions [Link](#)).
- 2 The timing belt is too loose (see dismantling & assembling the Wheels and its Parts [Video](#)). **(Wave 200 only)**

## 13 Robot Not Communicating with the Remote Control

### ➤ In this chapter...

*Distance between Remote Control and Caddy is Greater Than 50m* *page 11*

*Remote ID* *page 11*

### 13.1 Distance between Remote Control and Caddy is Greater Than 50m/164 ft

The distance between the remote control to the robot should be up to 50 meters/164 feet and no more.



### 13.2 Remote ID

Make sure the ID of the remote control and MMI are the same (see [Video](#)).