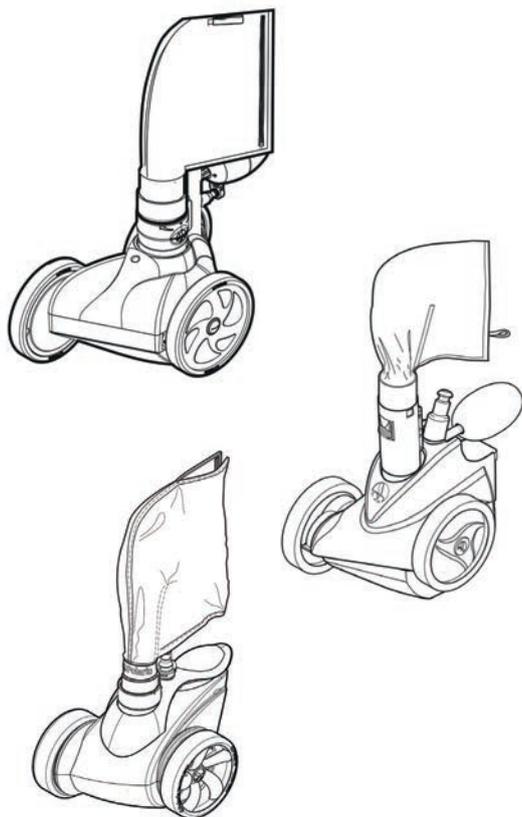


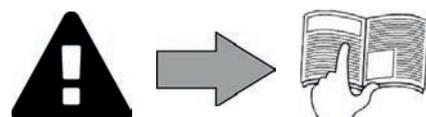
# 280/ 380/ 3900 SPORT



**Instructions for installation and use** - English  
Hydraulic cleaner  
Translation of the original instructions in French

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More documents on:  
[www.zodiac.com](http://www.zodiac.com)



# WARNINGS

## GENERAL WARNINGS

- Failure to respect the warnings may cause serious damage to the pool equipment or cause serious injury, even death.
- Only a person qualified in the technical fields concerned (electricity, hydraulics or refrigeration) is authorised to perform any servicing or repairs to the appliance. The qualified technician working on the appliance must use/wear personal protective equipment (such as safety goggles and protective gloves, etc.) in order to reduce the risk of injury occurring when working on the appliance.
- Before handling the appliance, check that power is switched off and isolated from the power supply.
- The appliance is intended to be used for pools and spas for a specific purpose; it must not be used for any purpose other than that for which it was designed.
- This appliance is not intended for use by persons (including children) having a physical, sensory or mental disability, or by persons lacking experience or knowledge of the appliance, unless they are first instructed or are supervised during the use of the appliance by a person responsible for their safety.
- Keep the appliance out of the reach of children.
- The appliance must be installed according to the manufacturer's instructions and in compliance with local and national standards. The installer is responsible for installing the appliance and for compliance with national installation regulations. Under no circumstances may the manufacturer be held liable in the event of failure to comply with applicable local installation standards.
- For any work other than the simple user maintenance described in this manual, the product should be referred to a qualified professional.
- Incorrect installation and/or use may cause serious damage to property or serious injuries (possibly causing death).
- All equipment, even postage and packing paid, travels at the risks and perils of the recipient. The latter shall issue reserves in writing on the carrier's delivery slip if damage is detected, caused during transport (confirmation to be sent to the carrier within 48 hours by registered letter). In the event that an appliance containing coolant has been turned on its side, mention your reservations in writing to the carrier.
- If the appliance suffers a malfunction, do not try to repair it yourself; instead contact a qualified technician.
- Refer to the warranty conditions for details of the permitted water balance values for operating the appliance.
- Deactivating, eliminating or by-passing any of the safety mechanisms integrated into the appliance shall automatically void the warranty, in addition to the use of spare parts manufactured by unauthorised third-party manufacturers.
- Do not spray insecticide or any other chemical (inflammable or non-inflammable) in the direction of the appliance, as this may damage the body and cause a fire.
- Zodiac® heat pump, filter pump and filter appliances are compatible with the most commonly used types of pool water treatment systems.
- Do not touch the fan or moving parts and do not place objects or your fingers in the vicinity of the moving parts when the appliance is in operation. Moving parts can cause serious injury or even death.

## SPECIFIC FEATURES APPLICABLE TO "Pool cleaners"

- The cleaner must operate in pool water at a temperature of between 15°C and 35°C.
- To avoid possible injury or damage to the cleaner, do not operate the cleaner out of the water.
- In order to prevent possible injury, bathing is prohibited when your cleaner is in the pool.
- Do not use the cleaner during shock chlorination.
- Do not leave the cleaner unattended for an extended period.

## WARNING ON THE USE OF A CLEANER IN A POOL WITH A VINYL SURFACE:

- Before installing your new cleaner, carefully inspect the lining of your pool. If the liner has eroded in some areas, or if you notice gravel, folds, roots or corrosion caused by metal beneath the liner, or if you notice that the surface (bottom and walls) is damaged, do not install the cleaner before performing the necessary repairs or before having the liner replaced by a qualified professional. The manufacturer may not be held liable in any way for damage caused to the liner.
- The surface of certain vinyl patterned surfaces can wear rapidly and the patterns disappear on contact from objects such as cleaning brushes, toys, inflatable buoys, chlorine distributors and automatic pool cleaners. The decoration on some vinyl surfaces can be scratched or worn by basic friction such as through the use of a pool brush. The colours of certain patterns can also be erased during use or when in contact with objects in the pool. The manufacturer may not be held liable for the erased patterns, wear or scratching of vinyl surfaces, which are not covered by the limited warranty.

## Recycling



This symbol means that your appliance must not be thrown into a normal bin. It will be selectively collected for the purpose of reuse, recycling or transformation. If it contains any substances that may be harmful to the environment, these will be eliminated or neutralised.

Contact your retailer for recycling information.



- Before handling the appliance, it is vital that you read this installation and user manual, as well as the "warnings and warranty" booklet delivered with the appliance. Failure to do so may result in material damage or serious or fatal injury and will void the warranty.
- Keep and pass on these documents for later consultation during the appliance's service life.
- The distribution or modification of this document in any way is prohibited, without prior authorisation from Zodiac®.
- Zodiac® is constantly developing its products to improve their quality. The information contained herein may therefore be modified without notice.

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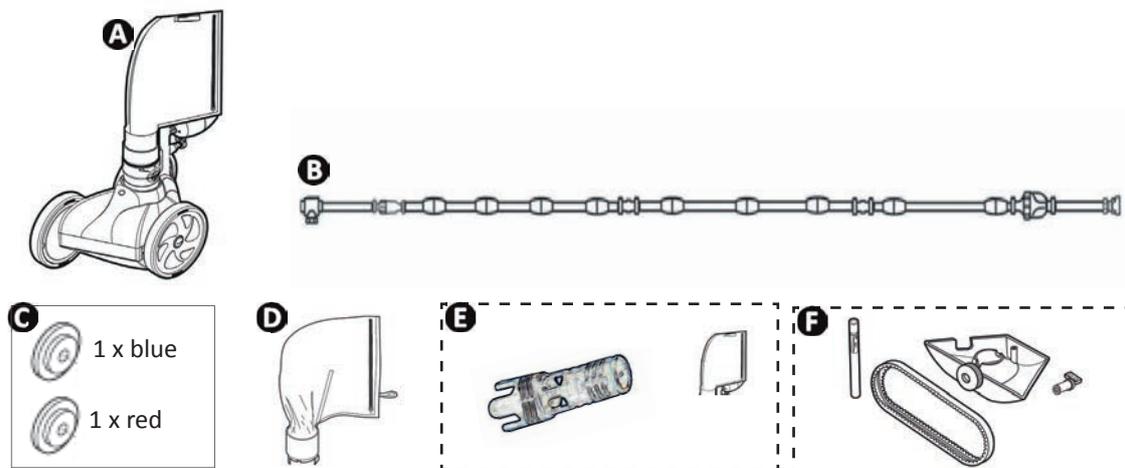
#### **Tip: to make it easier to contact your retailer**

Write down your retailer's contact details to help you find them more easily and fill in the "product" information on the back of the manual; your retailer will ask you for this information.



# 1 Specifications

## 1.1 | Description



		P280	P380	P3900 Sport
A	Cleaner		✓	
B	Feed hose and Lead hose assembly	✓	✓	✓
C	Blue and red restrictor discs <i>(The blue disc is already installed for P280 and P380)</i>	✓	✓	✓
D	Ultra-thin bag	+	+	✓
	Dual-capacity silt bag			✓
	Standard silt bag	✓	✓	+
	Leaf bag	+	+	+
	Disposable bags (EZ Bag) x 6	+	+	+
E	Tail Sweep Pro®	+	+	✓
F	Tank Tracks® Kit	+		

✓: Supplied

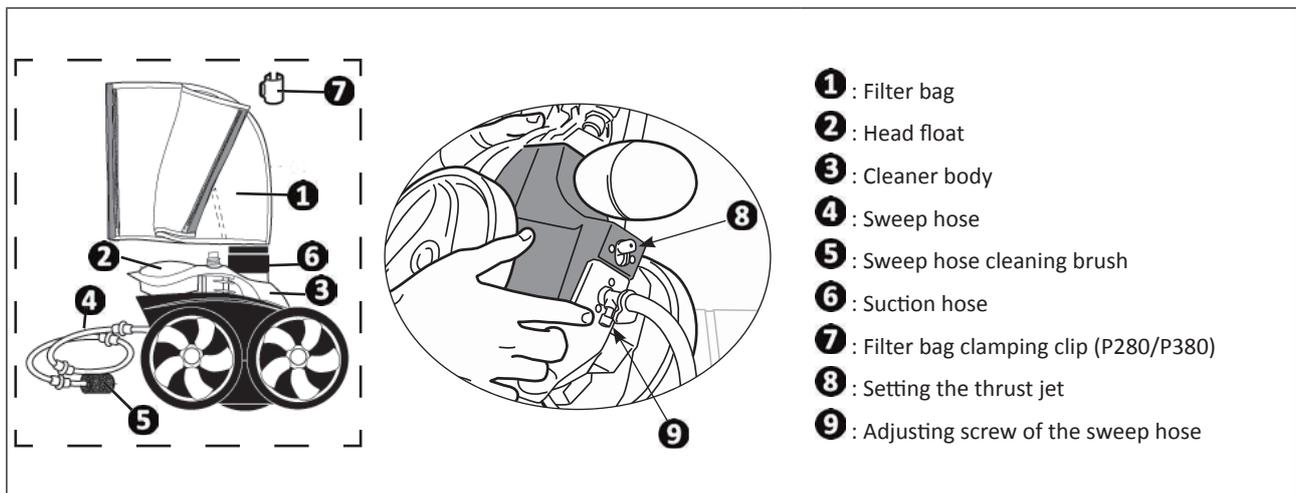
+: Available as an option

## 1.2 I Technical specifications and parts list

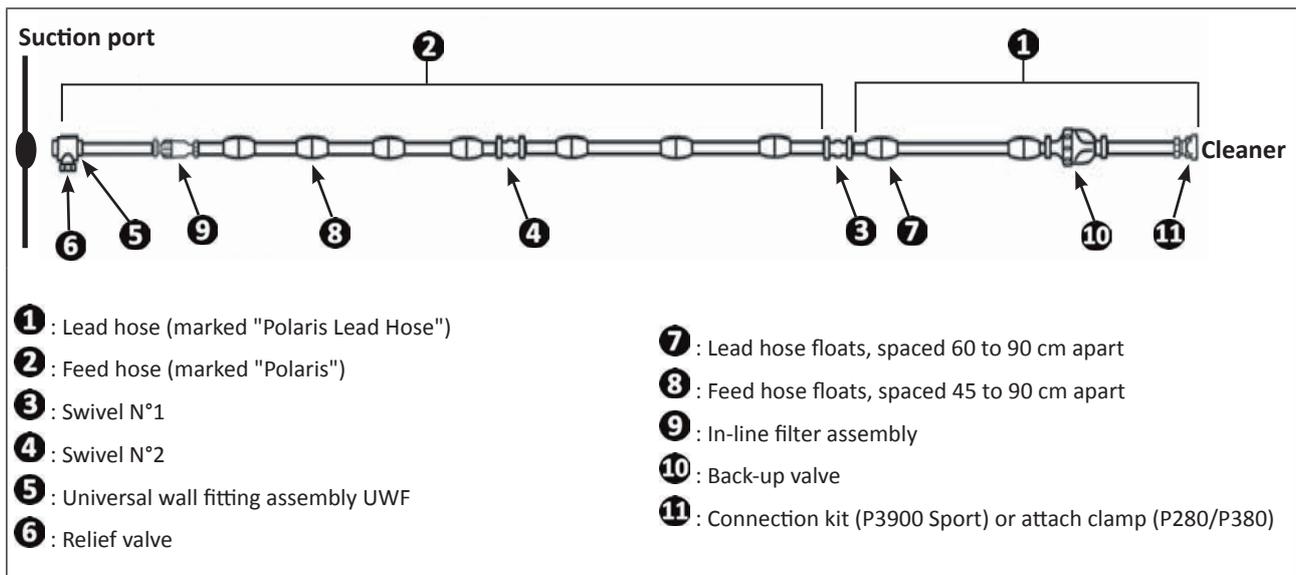
### 1.2.1 Technical specifications

	P280	P380	P3900 Sport
Energy source	Booster pump coupled to the filtration system		
Working pressure	2.2 bar	1.8 bar	Maximum 2.2 to 2.6 bar
Feed hose and Lead hose assembly length	9.60 m		
Largeur de la bouche d'aspiration (cm)	7 cm	6 cm	
Minimum power required by the booster pump	1 HP (if the distance from the equipment room is < 15 metres) 1.5 HP or more (if the distance from the equipment room is > 15 metres)		

### 1.2.2 Cleaner marking



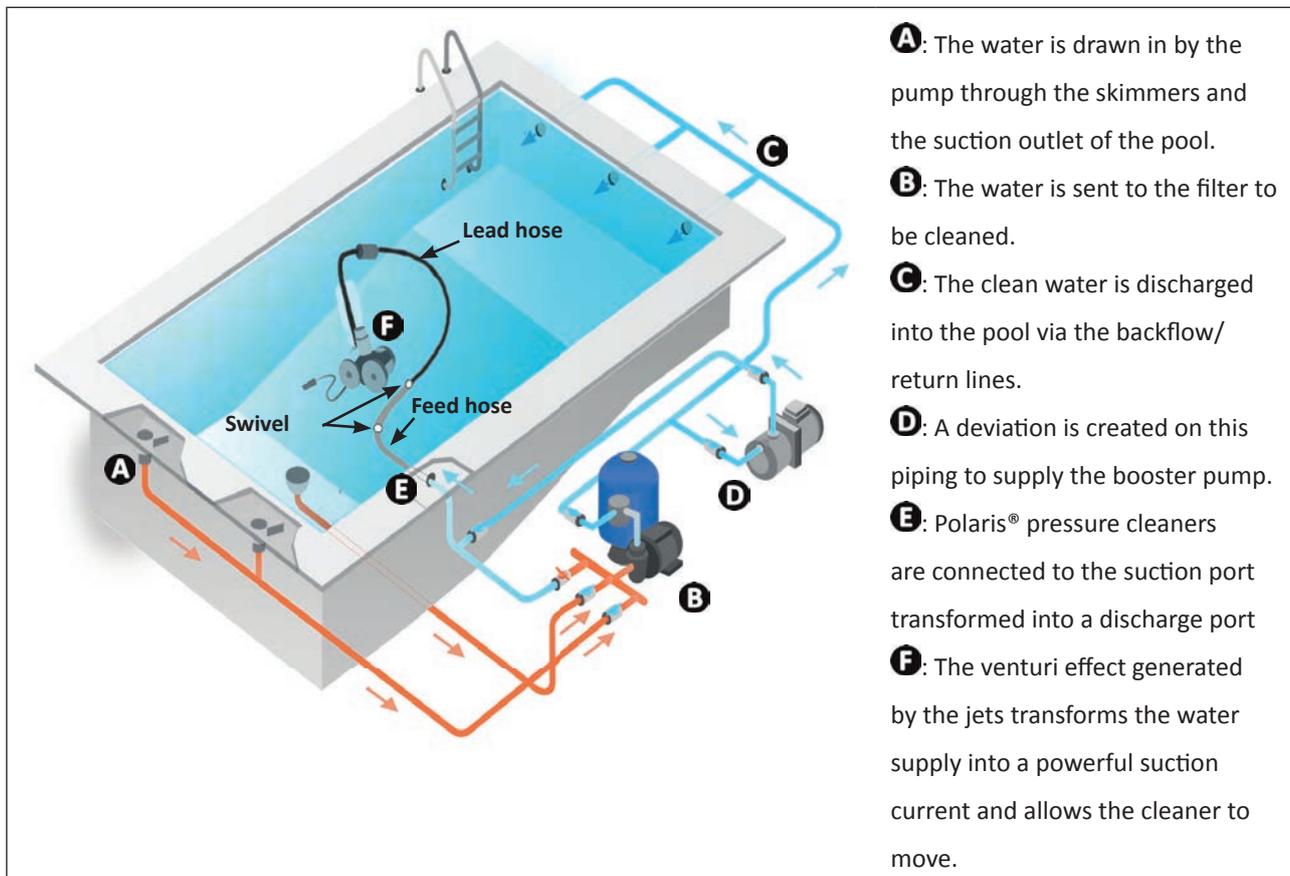
### 1.2.3 Hoses marking





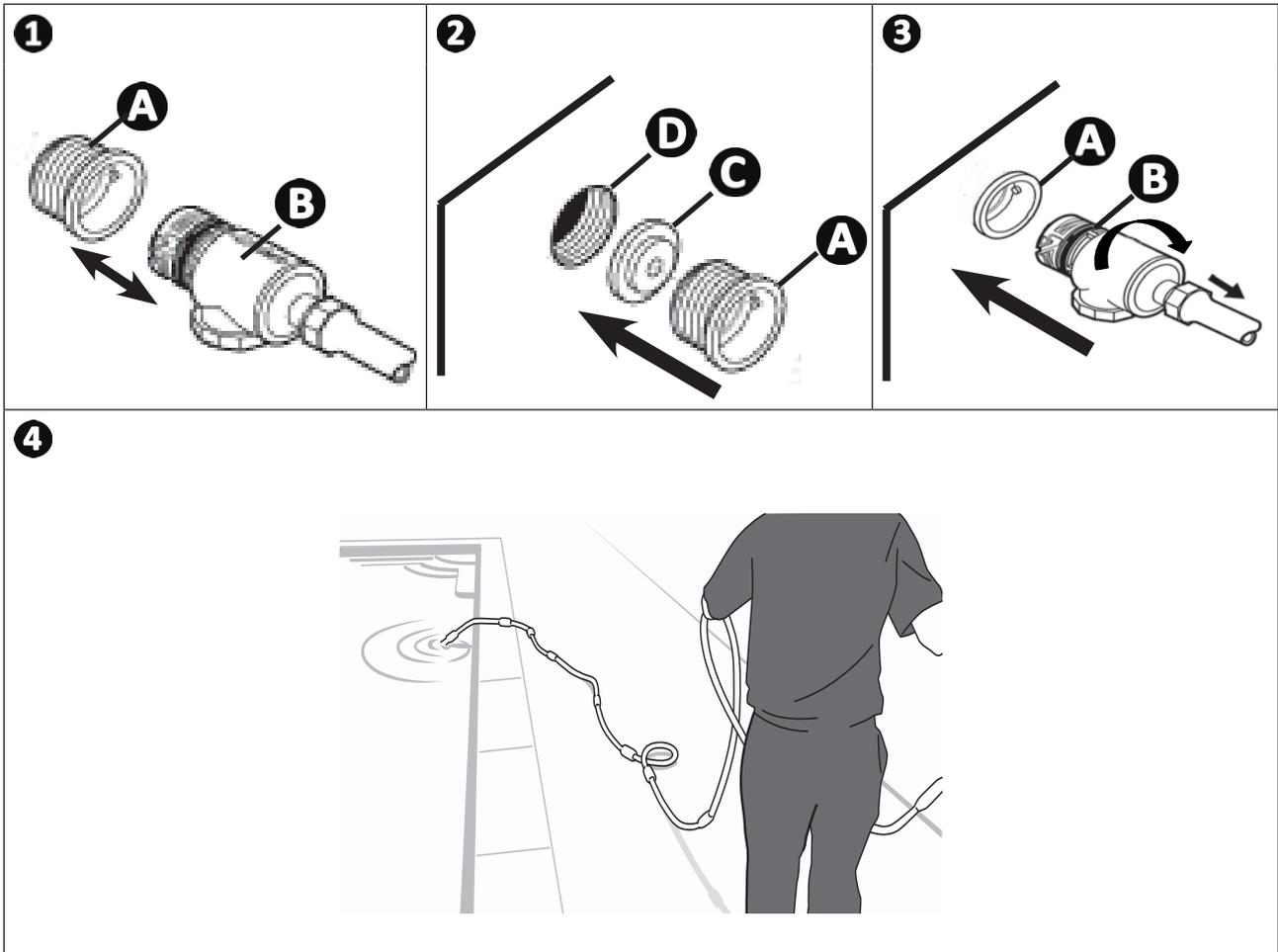
## 2 Installation

### 2.1 I Installation principle



## ➤ 2.2 I Installing the feed hose on the suction port

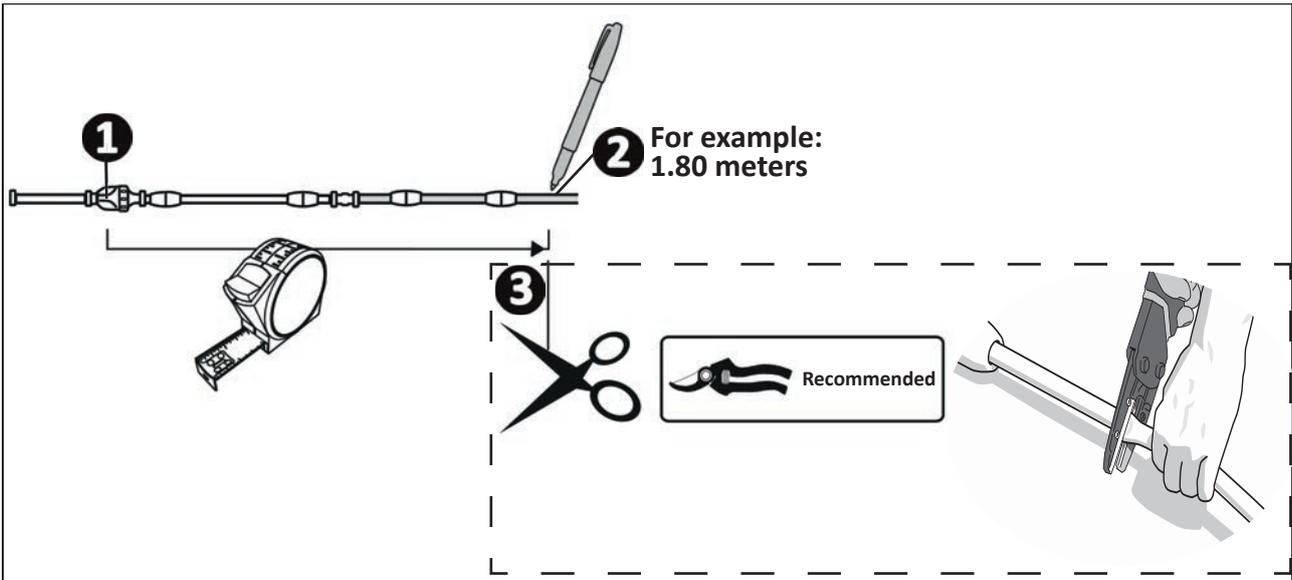
- Separate the universal wall fitting (UWF) (A) from the quick disconnect (B), see picture 1.
- Screw the universal wall fitting (UWF) (A) with the blue or red flow restrictor disc (C) onto the suction port opening (D). The blue flow restrictor disc is already installed on 280 et 380, see picture 2.
- Insert the quick disconnect (B) into the universal wall fitting (UWF) (A) by rotating in the clockwise direction, then by pulling to lock in place, see picture 3.
- Lay out the feed hose beside the pool, see picture 4.



## ➤ 2.3 I Adjusting the lead hose

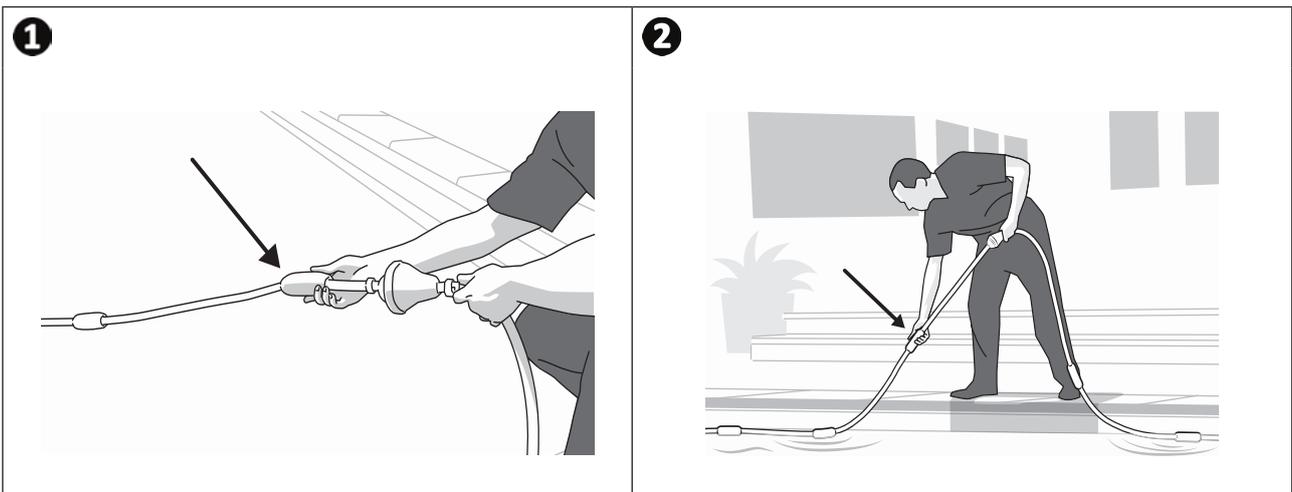
### 2.3.1 Measuring and cutting the lead hose

- Measure the deepest point of the pool (for example : 1.80 meters).
- Lay out the leader hose section (labelled "leader hose") beside the pool.
- The length of the lead hose must be equal to the maximum pool depth.
- Unwind the tape measure beside the hose and begin measurement from the end of the hose containing the back-up valve (1).
- Measure to the pool depth previously (i.e. 1.80 metres in the example) measured and mark the hose (2).
- Cut the hose at the marking. Set any excess hose aside (3).



### 2.3.2 Adjusting lead hose's floats

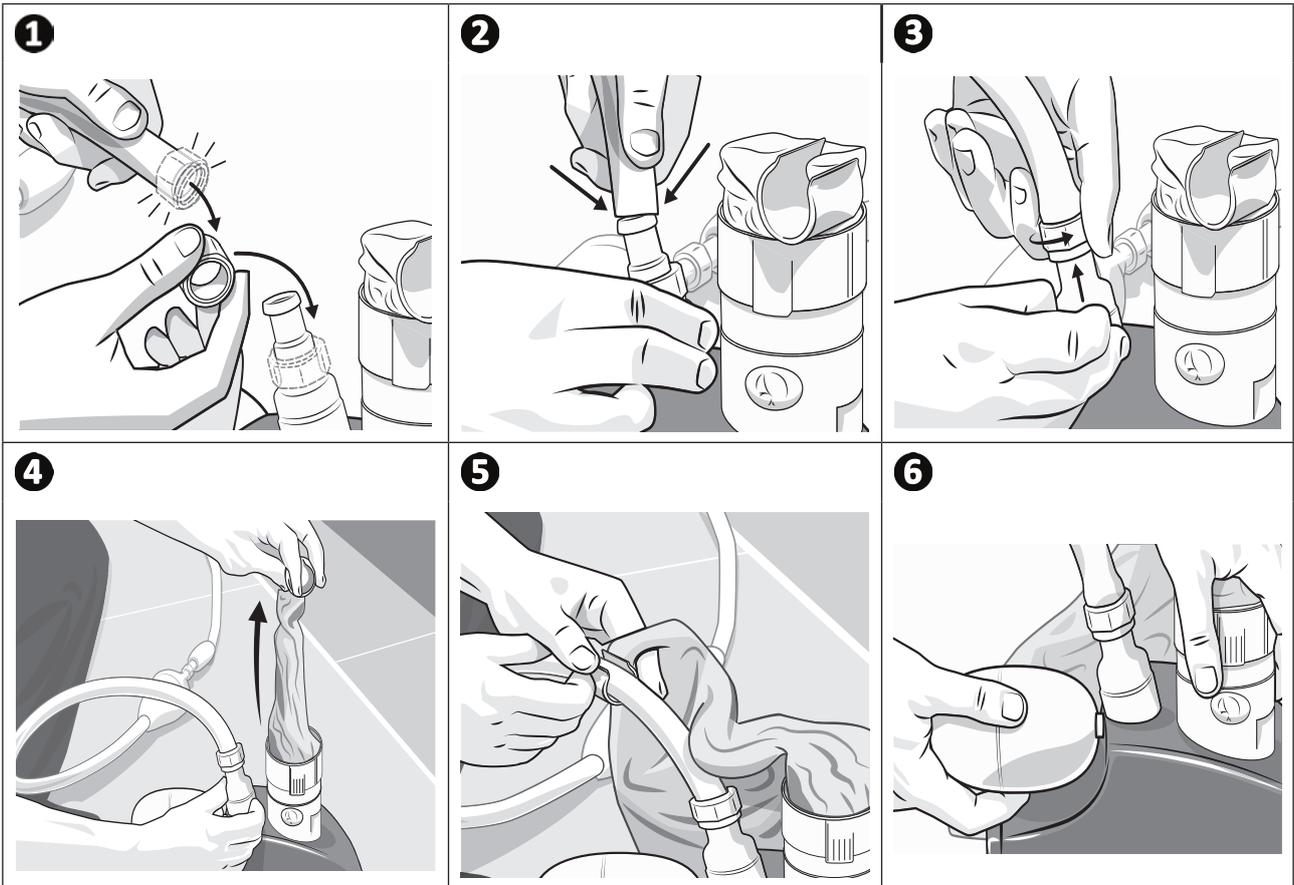
- Place each float at a distance of 60 to 90 cm.
- Slide the floats on the hose to position them.



## ➤ 2.4 | Connect the lead hose to the cleaner

### 2.4.1 P280 and P380

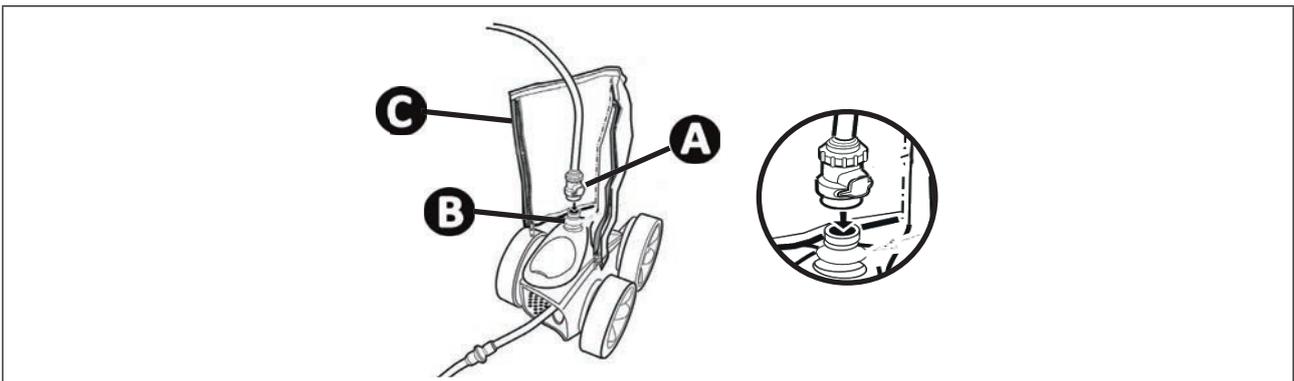
- Remove the attach clamp from the hose and place it on the cleaner, see picture **1**.
- Fasten the hose on the cleaner, see picture **2**.
- Place the attach clamp on the hose and screw, see picture **3**.
- Pull on the bag to remove it, see picture **4**.
- Attach the filter bag clamping clip on the hose, see picture **5**.
- Place the head float in accordance with the following indications, see picture **6** :
  - **P280**: position at a distance of 1.3 to 2.5 cm.
  - **P380**: Fully embed the head float.



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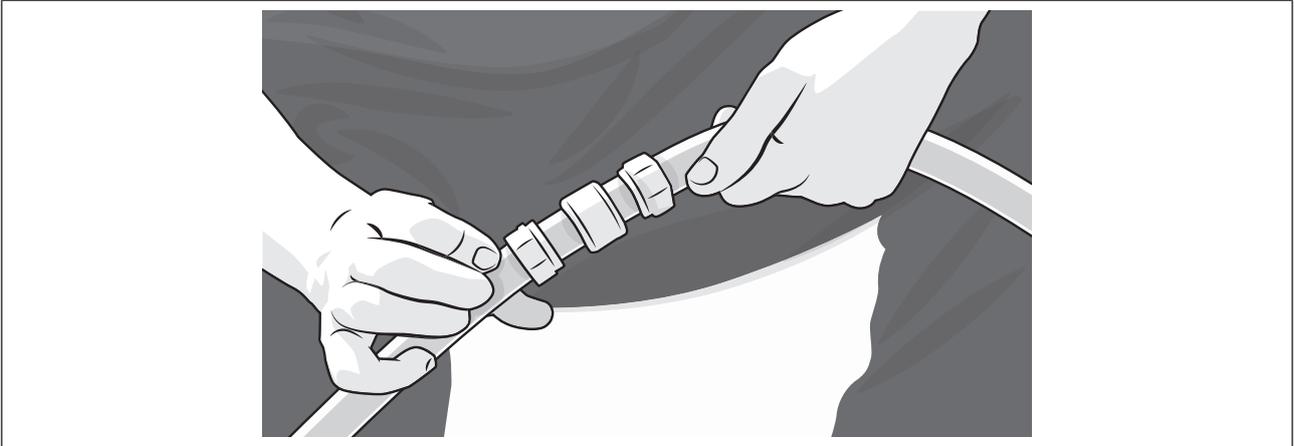
### 2.4.2 P3900 Sport

- Fasten the hose connection clips (**A**) to the hose on the cleaner (**B**).
- Pull on the bag to remove and wrap it around the hose (**B**).
- Fasten the bag using the Velcro strips (**C**) at the top and bottom.



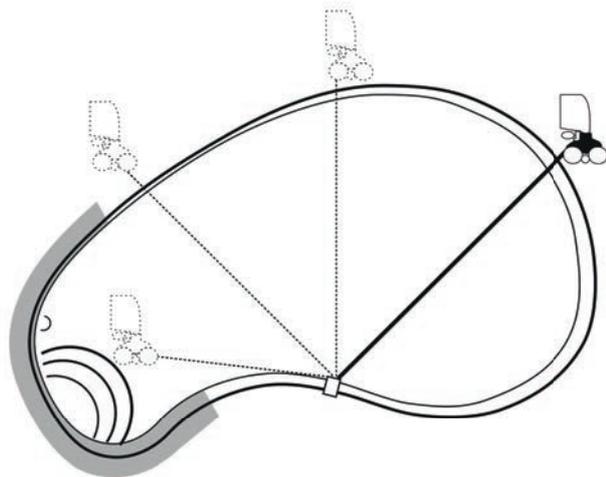
## ➤ 2.5 | Connect the lead hose to the feed hose

- Unscrew the swivel.
- Assemble the lead hose and the feed hose, screw the swivel to fasten together.



## ➤ 2.6 | Checking that the length of the assembled hoses is sufficient

- Position the cleaner to the most distant point : the hose length must deviate by at most 15 cm from this distance.
- Do not take into account steps, stairs or poolsides.

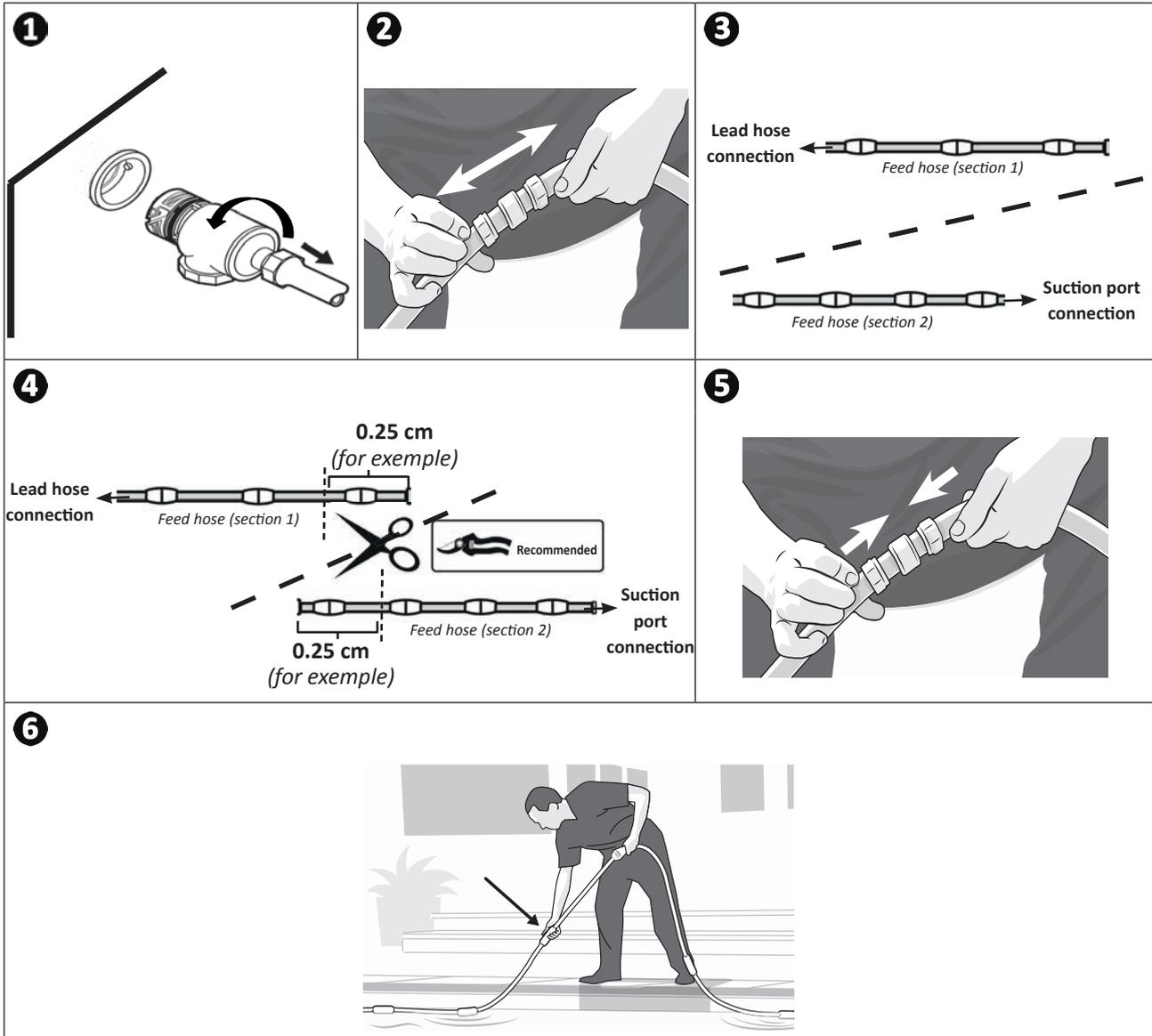


### 2.6.1 If the hose is too long = Cut the feed hose



- Don't cut the lead hose : it must stay the equal to the depth of the pool, see "2.3 | Adjusting the lead hose".

- Remove the quick disconnect from the suction port : simultaneously unscrew and pull. See picture **1**.
- Unscrew the swivel to separate the feed hose into two equal sections, see picture **2** and **3**.
- Cut the excess length, for example : 0.50 cm, by removing the same amount from each of these two sections, i.e. 0.25 cm on each section (in the example shown), see picture **4**.
- Assemble the two feed hose's sections using the swivel and attach clamps, see picture **5**.
- Adjust the distance between each float on the feed hose; the recommended distance between each float is 45 to 90 cm. Slide the floats on the hose to position them, see picture **6**.



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### 2.6.2 If the hose is too short = add a section of feed hose

- Purchase an additional hose section, a swivel and two hose attach clamps from your retailer.
- Cut the new section if necessary, see "2.6.1 If the hose is too long = Cut the feed hose".



### 3 Use

#### 3.1 I Prepare the pool

- For optimal operation, the pool water must comply with the following conditions:

<b>Water temperature</b>	Between 15°C and 35°C
<b>pH</b>	Between 6.8 and 7.6
<b>Chlorine</b>	< 3 mg/l

- Stop the filter pump.
- Clean the skimmer basket, the filter pump pre-filter and the filter where necessary.
- Start the filter pump.
- Start the booster pump. Bleed the water circuit for 2-3 minutes.
- Stop the filter pump and booster pump.
- Place the hose beside the pool in the sun for 2-3 minutes to unwind it. This will reduce tangling of the hose during cleaning.
- When the pool is dirty, especially when first installing the cleaner, remove the largest debris using a manual brush and a net.
- Remove any thermometers, toys and other objects that might damage the appliance.

**Tip : Preserve the cleaner**

After cleaning or backwashing, let the filtration system run for at least five minutes before connecting the cleaner.

#### 3.2 I Checking the rotational speed of the wheel



- Do not place your hair, loose clothing, jewellery etc. in the vicinity of the open end of the hose.
- Do not handle the cleaner while it is operating (except when checking the wheel RPM).

- Before starting the cleaner, check the rotational speed of the wheel (rpm). For maximum efficiency, the cleaner must rotate at a speed of:
  - between 28 and 32 rpm (P280-P380).
  - between 32 and 34 rpm (P3900 Sport).
- Place the cleaner on its side (2 wheels in contact with the ground) and make a marking on the wheel (1).
- Install the quick disconnect on the suction port.
- Turn on the filter pump and leave it to prime.
- Turn on the booster pump.
- Immerse the cleaner and count the number of rotations completed in 1 minute (2).

**1**

1 minute

**2**

Number of rpm			
P280-P380	P3900 Sport		
< 28	< 32	→	✗ Insufficient water flow rate
28 < 32	32 < 34	→	✓ Correct water flow rate
> 32	> 34	→	✗ Water flow rate too high

### **3.2.1 If the water flow rate is insufficient**

- In the event that a valve is installed on the cleaner line, open fully to allow the water to flow freely to the cleaner.
- Check whether the hoses, fittings and ball joints have leaks.



- **Before performing the following checks, make sure the booster pump and filter pump are shutdown.**

- Check that no debris is blocking the in-line filter screen or restricting the water flow.
- Clean the skimmer, filter and basket of the pump.
- Remove the blue or red restrictor disc from the universal flow restrictor (UWF), see "**2.2 I Installing the feed hose on the suction port**".

### **3.2.2 If the water flow rate is too high**



- **Before performing the following checks, make sure the booster pump and filter pump are shutdown.**

- Position the blue flow restrictor disc (see "**2.2 I Installing the feed hose on the suction port**") and check the rotational speed of the wheel (see "**3.2 I Checking the rotational speed of the wheel**").
- If the water flow rate is still too high, position the red flow restrictor disc (see "**2.2 I Installing the feed hose on the suction port**") and check the rotational speed of the wheel (see "**3.2 I Checking the rotational speed of the wheel**").
- If the flow rate remains too high, unscrew the relief valve until the correct wheel rotational speed is obtained, see "**2.2 I Installing the feed hose on the suction port**".

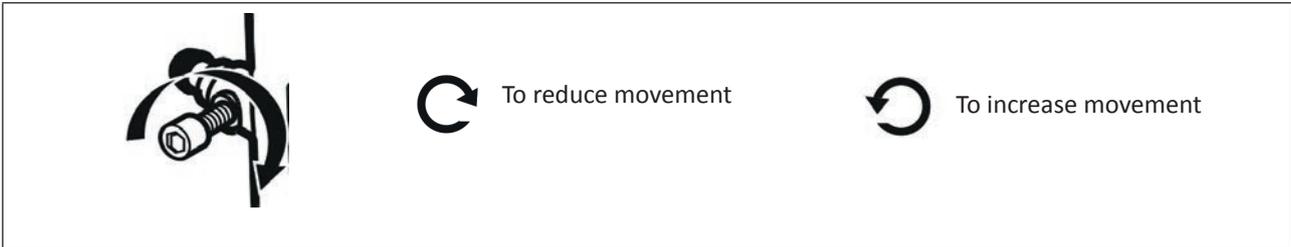


- **The relief valve must only be adjusted if a restrictor is installed.**

### ➤ 3.3 | Configuring the sweep hose

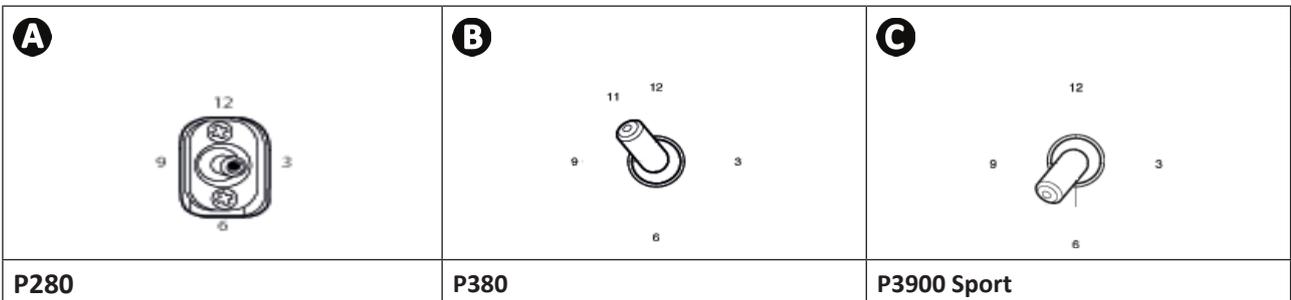
The sweep hose must move slowly. To increase or reduce sweep hose movements:

- Stop the booster pump.
- Rotate the adjusting screw of the sweep hose to suit the needs.



### ➤ 3.4 | Setting the thrust jet

- The default setting differs depending on the cleaner:



- The jet is located at the rear of the cleaner and thrusts the cleaner in a given direction.
- Depending on the cleaner's behaviour, this movement can be changed by adjusting the rear jet:

Robot behaviour	Result	Rear jet adjustment
The cleaner is in contact with the bottom of the pool and moves in a straight line	✓	/
The cleaner "flies" around the pool and/or does not make contact with the pool bottom.	✗	A
The cleaner turns too far to the right		B
The cleaner turns too far to the left		C
When the cleaner reaches the walls, it doesn't rise and change direction		D

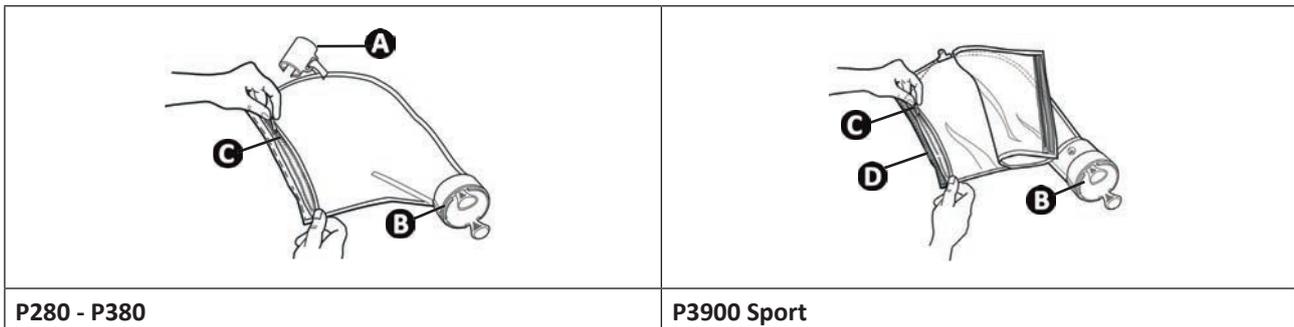


## 4 Maintenance

### 4.1 I Emptying the filter bag

To maintain optimal movement and suction capabilities, the bag should be emptied of all debris as soon as it is half full.

- Remove the filter bag clamping clip **A** (P280 - P380) from the hose or the Velcro strips **D** (P3900 Sport).
- Rotate the connector **B** until it is released from the hose after an audible click.
- Remove the Velcro strips **D** (P3900 Sport).
- Open the zip **C** and remove the debris.
- To reinstall the bag, align the markings between the connector **B** and the cleaner's suction hose, then click it in place.
- Attach the filter bag clamping clip **A** (P280 - P380) onto the hose or place the Velcro strips **D** (P3900 Sport).

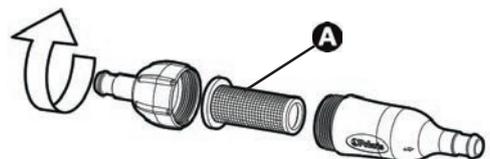


#### **Tip: A dry bag is easier to clean**

It is easier to clean the bag when it is dry. Remove the bag and leave to dry before emptying. Alternate between 2 filter bags so as not to temporarily stop operation.

### 4.2 I Cleaning the in-line filter

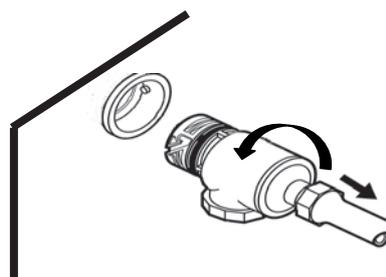
- Disassemble the in-line filter assembly.
- Rinse the filter **A** in clean water.
- Reposition by pressing down firmly.



### 4.3 I Storing and winterising

- Before storing the cleaner for the winter, empty all the water out (damage due to ice is not covered by the guarantee).
- Clean the whole cleaner and the hoses in clean water and leave to dry.
- Store in a dry place, protected from freezing temperatures and away from direct sunlight.
- Remove the universal fitting from the pool wall : simultaneously unscrew and pull.

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## 5 Troubleshooting



- Before you contact your retailer, please carry out these few simple checks using the following tables if a problem occurs.
- If the problem continues, contact your retailer.

### 5.1 | Cleaner behaviour

<p>The cleaner becomes stuck on the steps and other obstacles for more than 3 minutes.</p>	<ul style="list-style-type: none"> <li>• Check the rotational speed of the wheel, see "3.2   Checking the rotational speed of the wheel".</li> <li>• Check the behaviour of the back-up valve: remove from the water and check that water is expelled normally.</li> <li>• Adjust the thrust jet, see "3.4   Setting the thrust jet".</li> <li>• Remove anything that could hinder the cleaner's movements.</li> </ul>
<p>The cleaner moves very slowly and operates at a lower than normal power level.</p>	<ul style="list-style-type: none"> <li>• Check the rotational speed of the wheel, see 3.2   Checking the rotational speed of the wheel".</li> <li>• Check the in-line filter assembly and clean if necessary, see "4.2   Cleaning the in-line filter".</li> <li>• Clean the skimmer basket, the pump basket and the pool filter.</li> <li>• Check whether the hoses, fittings and ball joints have leaks. This would explain a drop in water pressure.</li> </ul>
<p>The cleaner "flies" around the pool and/or does not make contact with the pool bottom.</p>	<ul style="list-style-type: none"> <li>• Check the rotational speed of the wheel, see "3.2   Checking the rotational speed of the wheel".</li> <li>• Check the behaviour of the back-up valve: remove from the water and check that water is expelled normally.</li> <li>• Check the positioning of the rear thrust jet, see "3.4   Setting the thrust jet".</li> </ul> <p><b>P280-P380:</b></p> <ul style="list-style-type: none"> <li>• Check that the blue flow restrictor disc is properly installed in the universal fitting (UWF) to reduce the flow rate.</li> <li>• If the blue restrictor disc is insufficient, install the red flow restrictor disc to further reduce the flow rate.</li> </ul>
<p>The robot does not move backwards.</p>	<ul style="list-style-type: none"> <li>• Check the behaviour of the back-up valve: remove from the water and check that water is expelled normally.</li> <li>• Check the rotational speed of the wheel, see "3.2   Checking the rotational speed of the wheel".</li> <li>• Empty the filter bag if full or half-full, see "4.1   Emptying the filter bag".</li> <li>• Check that the feed hose is floating.</li> </ul> <p><b>P280-P380:</b></p> <ul style="list-style-type: none"> <li>• Check that the head float does not contain any water; replace if necessary.</li> </ul>
<p>The cleaner only rotates in one direction.</p>	<ul style="list-style-type: none"> <li>• Adjust the thrust jet, see "3.4   Setting the thrust jet".</li> <li>• Check that the feed hose is floating.</li> </ul>
<p>The feed hose becomes tangled.</p>	<ul style="list-style-type: none"> <li>• Remeasure the hose length and check that it corresponds to that required by the shape of the pool, see "2.3.1 Measuring and cutting the lead hose".</li> <li>• When the cleaner is in operation, check that the ball joints and hose fittings rotate freely.</li> <li>• Check that the feed hose is floating.</li> </ul> <p><b>P280-P380:</b></p> <ul style="list-style-type: none"> <li>• When the cleaner is not in operation, manually move each of the wheels. All wheels must rotate simultaneously.</li> </ul> <p><b>P3900 Sport:</b></p> <ul style="list-style-type: none"> <li>• When the cleaner is in operation, hold it below the surface of the water and check that all 3 wheels rotate simultaneously.</li> </ul>

The cleaner doesn't clean the entire pool.	<ul style="list-style-type: none"> <li>• Check that the hose reaches the furthest point in the pool (to the nearest 15 cm). If this is not the case, order a new section of hose from your retailer, see "<b>2.6 I Checking that the length of the assembled hoses is sufficient</b>".</li> <li>• Adjust the thrust jet to improve cleaning coverage, see "<b>3.4 I Setting the thrust jet</b>".</li> </ul> <p><b>P280-P380:</b></p> <ul style="list-style-type: none"> <li>• When the cleaner is in operation, out of water hold upside down and look inside the suction hose. You should see 3 separate jets (P380) or 2 separate jets (P280) with the same flow rate. <b>Contact your retailer if you cannot visualise the jets.</b></li> </ul>
The cleaner turns in circles, lying on its side.	<ul style="list-style-type: none"> <li>• Remove and shake the head float. Replace it if it contains water.</li> <li>• If the filter bag is full, its weight could cause the cleaner to tip over onto its side.</li> <li>• Check the hose floats to ensure that they are regularly spaced apart, see "<b>2.3.2 Adjusting lead hose's floats</b>".</li> </ul> <p><b>P3900 Sport:</b></p> <ul style="list-style-type: none"> <li>• Check the rotational speed of the wheel, see "<b>3.2 I Checking the rotational speed of the wheel</b>".</li> </ul>
The sweep hose has been sucked into the suction hose.	<ul style="list-style-type: none"> <li>• Check that nothing is blocking the end of the sweep hose.</li> <li>• Replace the cleaning brush if worn or missing.</li> <li>• Adjust the sweep hose to obtain balanced movements, see "<b>3.3 I Configuring the sweep hose</b>".</li> </ul> <p><b>P3900 Sport:</b></p> <ul style="list-style-type: none"> <li>• Check the rotational speed of the wheel, see "<b>3.2 I Checking the rotational speed of the wheel</b>".</li> </ul>
The sweep hose continuously sprays the area around the pool.	<ul style="list-style-type: none"> <li>• Adjust the speed of the sweep hose, see "<b>3.3 I Configuring the sweep hose</b>".</li> <li>• Replace the cleaning brush of the sweep hose if worn or install a brush if missing.</li> </ul> <p><b>P280-P380:</b></p> <ul style="list-style-type: none"> <li>• Add a Tail Sweep Pro® to reduce water spray.</li> </ul>
The front end of the cleaner is constantly lifting itself up.	<ul style="list-style-type: none"> <li>• Check the rotational speed of the wheel, see "<b>3.2 I Checking the rotational speed of the wheel</b>".</li> <li>• Point the thrust jet downwards, see "<b>3.4 I Setting the thrust jet</b>".</li> <li>• Check the behaviour of the back-up valve: remove from the water and check that water is expelled normally.</li> <li>• Check whether water has infiltrated the cleaner's head float.</li> </ul>
The cleaner turns too far to the right	<ul style="list-style-type: none"> <li>• Check the positioning of the rear thrust jet, see "<b>3.4 I Setting the thrust jet</b>".</li> </ul>
The cleaner turns too far to the left	<ul style="list-style-type: none"> <li>• Check the positioning of the rear thrust jet, see "<b>3.4 I Setting the thrust jet</b>".</li> </ul>
When the cleaner reaches the walls, it doesn't rise and change direction	<ul style="list-style-type: none"> <li>• Check the positioning of the rear thrust jet, see "<b>3.4 I Setting the thrust jet</b>".</li> </ul>

Votre revendeur  
*Your retailer*

Modèle appareil  
*Appliance model*

Numéro de série  
*Serial number*


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