

VEKTRO[®] AUTO

AUTONOMOUS POOL ROBOT
USER MANUAL



RC32

By  **KOKIDO[®]**
Pool Product Innovations

Table Of Contents

SAFETY WARNINGS & INSTRUCTIONS	P.7
HOW THE ROBOT WORKS	P.10
GETTING STARTED	P.11
Charging The Battery	P.11
Set-Up Before Use	P.12
Floor Squeegee assembly	P.12
Clip-on Rake/ Brush Assembly	P.12
Adjustment of Trajectory	P.13
Locking pin	P.13
Bumper	P.13
Pool Preparation	P.13
OPERATION	P.14
EMPTYING THE DEBRIS COMPARTMENT	P.15
MAINTENANCE & STORAGE	P.16
BATTERY DISPOSAL	P.17
How to remove the battery pack	P.17
TROUBLESHOOTING	P.19


Remark: Product/parts photos/drawings in this manual are for demonstration only.
Product/parts in photos/drawings may vary with the model purchased.

SAFETY WARNINGS & INSTRUCTIONS

Read and follow all instructions in this manual and on the equipment. Failure to do so could result in severe or fatal injuries.

SAVE THESE INSTRUCTIONS

WARNING!

- This is not a TOY. Children should be kept out of reach from this robot and its accessories.
- Never allow children to operate this product.
- You should not operate this electric vacuum when people/pets are present in the water.
- This robot is not intended for use by someone with reduced physical, sensory or mental capabilities or a lack of experience and knowledge unless they have been given instructions concerning the appliance and are under supervision of the person responsible for their safety.
- Make sure the robot is fully immersed in the water before operation. The minimum water level required to operate the robot must reach above the swivel head of the robot. Operating the robot when it is not immersed in the water correctly could damage the unit and void the warranty as a result.
- Maximum operating depth in water is 3 meters (10 ft).
- Maximum water temperature: 5°C (41°F) –35°C (95°F)
- Only use the detachable supply unit (external adaptor) provided with this robot to charge the battery.
-  Detachable supply unit (external adaptor)
- Connect the external adaptor to a power source through a residential current device (RCD) / a ground fault circuit interrupter (GFCI). If in doubt, consult a qualified professional electrician.
- Do not use this robot if any damage is detected.
- Replace damaged parts as soon as possible. Only use parts certified by the distributor or manufacturer.
- Turn off the robot, disconnect the external adaptor from the power source, and unplug the external adaptor from the charging cable, before detaching the robot from the charging cable.
- Disconnect the robot from the supply mains and make sure the robot is power OFF prior to servicing it such as cleaning the filter and swivel smoothing-ring.
- The battery installed is a rechargeable Li-ion battery pack. Never attempt to replace it.
- The robot is only to be recharged with external adaptor and charging cable delivered with this product.
- DO NOT handle the robot, external adaptor and charging cable while it is charging with wet limbs and without shoes.
- You should not operate this robot when people/pets are present in the water.
- DO NOT use this robot without an intact filter in place, otherwise your warranty will be voided as a result.

- Suction entrapment hazard: This robot generates suction. Do not allow hair, body, or any loose parts of your clothing to make contact with the suction hole of the robot during its operation.
- Never insert body parts, clothing or other objects into the openings and moving parts of the robot.
- DO NOT use this robot to pick up any toxic substance, flammable or combustible liquids such as gasoline, or in the presence of explosive or flammable fumes.
- Under no circumstances should you attempt to disassemble the robot and replace the impeller, motor, and battery by yourself.
- Never insert fingers and any object to touch the impeller.
- This robot shall not be used by children.
- The battery must be removed from the robot before it is scrapped.
- This robot contains a battery that are only to be removed by skilled persons.
- The robot must be disconnected from the supply mains as the battery is removed.
- For detail regarding battery dsiposal, refer to the section "Battery Disposal" in this manual
- The battery must be disposed safely in accordance with local ordinances or regulations.
- The robot contains a maintenance-free, rechargeable lithium-ion battery pack, which must be disposed properly. Recycling is required; please contact your local authorities for more information.

- External adaptor and charging cable:
 - Never use the external adaptor and charging cable for anything other than charging the battery of the robot that is supplied in the same pack.
 - The external adaptor and charging cable should not be used outdoors, nor-exposed to rain, humidity, any liquid or heat.
 - The transformer (or external adaptor) is to be located outside zone 1
 - Keep the external adaptor and charging cable out of reach of children.
 - Never use the external adaptor and charging cable if any damage is detected.
 - DO NOT handle the external adaptor and charging cable with wet hands.
 - Keep the external adaptor disconnected from power when it is not in use.
 - Never attempt to open the external adaptor.
 - If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or an equally-qualified person in order to prevent hazards of any kind.
 - Make sure the robot is completely dry before charging.

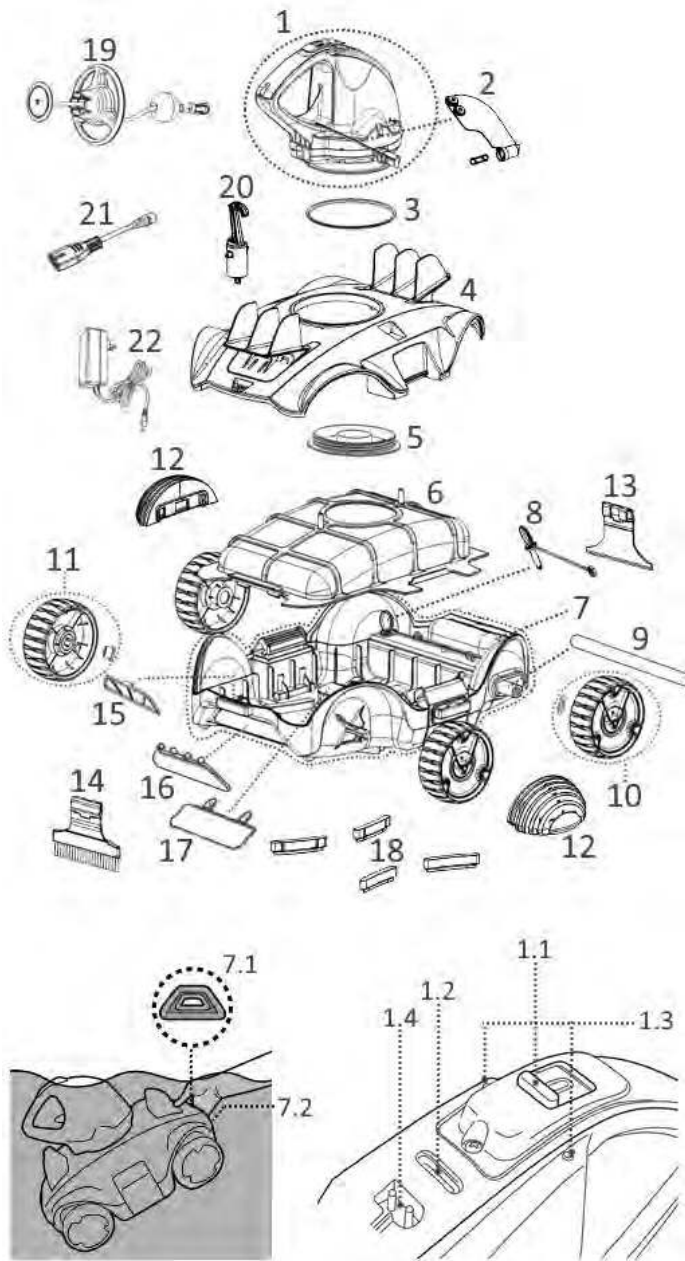
CAUTION!

- This robot is designed for underwater use only; it is not an all-purpose vacuum cleaner. DO NOT attempt to use it to clean anything other than your pool.

- Use only original accessories delivered with this product.
- DO NOT use this robot right after pool-shocking. It is recommended to first leave the pool circulating for at least 24-48 hours.
- If you are planning on using the robot in a saltwater pool, make sure all salt are dissolved before placing it into the water.
- It is not recommended to use this robot with another automatic cleaner/cleaner simultaneously.
- Avoid picking up hard, sharp objects with this product which may damage the robot and filter.
- To avoid damaging the external adaptor and charging cable, do not attempt to carry the robot by the cord of external adaptor / charging cable or pull the cord to disconnect it from the power source and charging cable.
- Charge the robot indoors in a clean, dry area with good ventilation and away from sunlight.
- DO NOT leave the robot charged for over 10 hours.
- If the robot will not be used for an extended period, detach it from the charging cable and use a damp cloth to clean and dry the robot and its accessories. Make sure to charge the robot to about 30% to 50% of the battery capacity before it is stored. Store in a well-ventilated area away from sunlight, heat, ignition sources, pool chemicals, and children. Recharge the robot every three months.
- All actions concerning the disassembly of the swivel head (ie. battery disposal) can only be carried by an authorized technician.

Above warnings and cautions are not intended to incorporate all possible instances for risks and / or severe injuries. Pool / spa owners should always exercise extra caution and common sense when utilizing the product.

HOW THE ROBOT WORKS



Replacement Parts Number

1.	Swivel head	RC30ASM07/GRY RC30ASM07/GRY/US(USA)
1.1.	Sliding switch	-----
1.2.	Power indicating light	-----
1.3.	Water sensors	-----
1.4.	Charging port	-----
2.	Side flap (with side side pin)	RC30-07/SCP
3.	Swivel smoothing-ring	RC30-08-004/GRY
4.	Top cover	RC32ASM03/GRY
5.	Swivel head bottom screw plate	RC30-05-005/GRY
6.	Filter cover	RC30-09/GRY
7.	Base	RC32ASM04/GRY RC32ASM04/GRY/US (USA)
7.1.	Orange triangle pattern	-----
7.2.	Grip (under Orange triangle pattern)	-----
8.	Locking pin	RC30-10-014
9.	Wheel axle	
10.	Rear wheel (with washer)	RC30ASM08/GRY
11.	Front wheel (with washer)	RC30-12/GRY
12.	Bumper x 2	RC30-18/GRY
13.	Clip-on rake	RC32ASM10/GRY
14.	Clip-on brush	
15.	Draining filter plate	
16.	Drainage outlet flap	RC30ASM09/GRY
17.	Suction mouth flap	
18.	Floor Squeegee x 4	RC30-10-012/GRY
19.	Float	RC30ASM06/GRY
20.	Hook (with V-clip) for Telescopic pole)	RC30-16/GRY
21.	Charging cable	RC30-17-001
22.	Adaptor	RC30-17-002 (EU) RC30-17-002/US (USA) RC30-17-002/AU (Australia/New Zealand)

The robot has a water-propelling nozzle at the bottom of the swivel head. Water is first sucked in through the suction mouth at the bottom of the robot, which then goes through the filter and is discharged via the propelling nozzle. Water jetting from the nozzle propels the robot forward. Once the robot stops against an obstacle such as the pool wall, its side flap sways and its swivel head turns 180°, allowing the robot to move in the opposite direction. The robot moves in a generally straight pattern in one direction and in an arc pattern in the other direction. The robot vacuums the pool bottom as it moves, collecting debris in its compartment.

GETTING STARTED

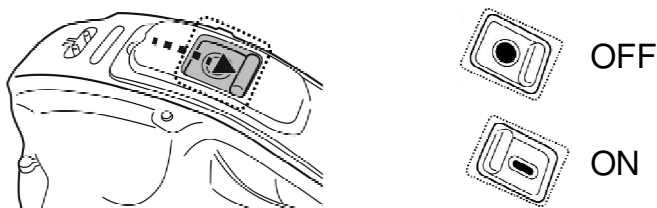
Charging The Battery

IMPORTANT NOTE: Fully charge the robot (about 5-6 hrs) before using it for the first time.

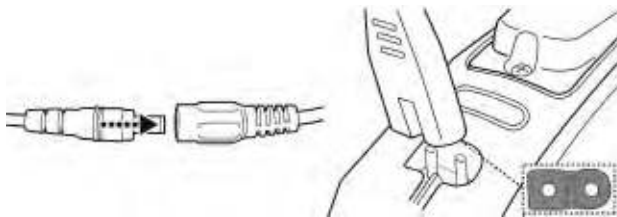
WARNING!

- Use only the original external adaptor and charging cable provided.
- Make sure the robot and the charging port are clean and dry before set-up.
- Make sure the robot is off by sliding the switch to the OFF position.

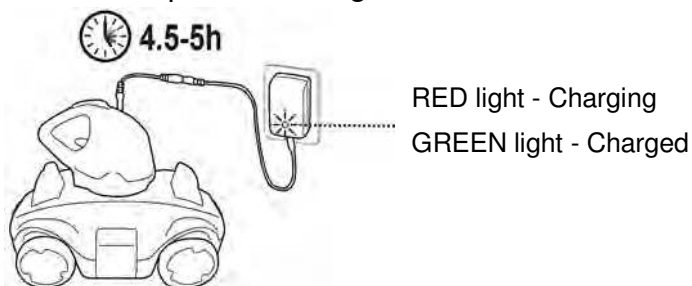
1. Place the unit on a flat surface. Slide the switch to the OFF position.



2. Connect the adaptor cable to the charging cable. Align and insert the plug of the charging cable into the charging port at the top of the unit.



3. Connect the external adaptor to the power source. Once the robot begins charging, the indicator light on the external adaptor will turn red. Normally, it takes about 4.5-5 hours to reach a full charge. The indicator light on the external adaptor will turn green when the robot is charged.



- Immediately disconnect the external adaptor from the power source if you detect any of the following:
 - Offensive or unusual odor
 - Excessive heat
 - Deformation, cracks, leaks
 - Smoke
4. When charging is complete, disconnect the external adaptor from the power source and unplug the charging cable from the unit and external adaptor.

Normally the robot can operate up to 90 minutes on a full charge.

Note: Clean the debris compartment regularly. Excessive debris inside the debris compartment increases the burden to the motor operation and shortens the operating duration as a result.

NOTE: Rechargeable lithium-ion battery is classified as a consumable item. It has a limited life and will gradually lose its capacity to hold a charge. Therefore, the running time of the robot will gradually reduce after repeated charging and discharging throughout its product life.

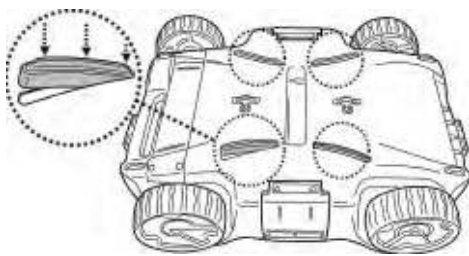
Replace the battery by swapping for a new swivel head. Follow step 1 in “How to remove battery pack” section to detach the swivel head and reverse the steps to install a new one.

NOTE: Let the robot rest for around 30 to 40 minutes before charging it again.

Set-Up Before Use

Floor Squeegee Assembly

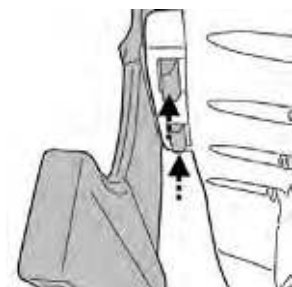
Align and insert all squeegees into the notches at the underside of the robot



Clip-on Rake/ Brush Assembly



TIPS: Press on the two hook ends to remove the rake/brush



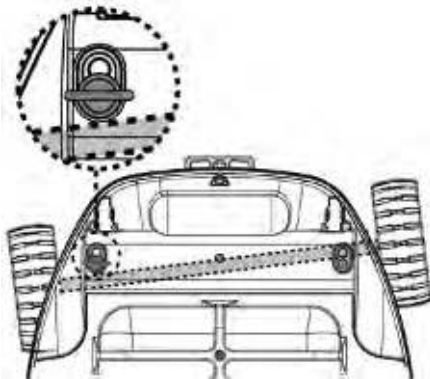
Adjustment of Trajectory

Locking Pin

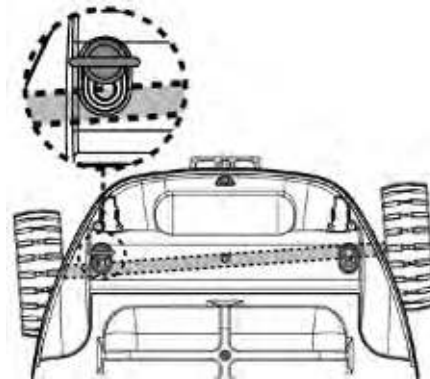
The trajectory of the robot is dependent on the position of the pin that fixes the axle to a certain angle. There are two locking pins: the one on the right is fixed and should remain untouched. Alter only the position of the pin on left.

Recommended settings:

For pools where the shortest length is 3 meters or below. (Factory setting)



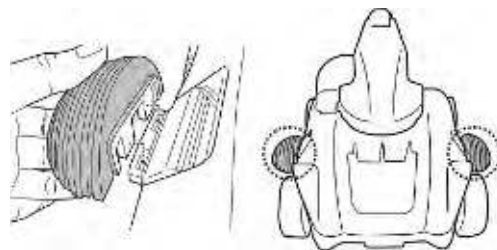
For pools where the shortest length is 3 meters or above



Bumper

The bumper is optional and can be used in the following situation:

If the robot tends to follow the perimeter of the round pool, clipping a bumper on each side of the robot will eliminate this pattern.



Pool Preparation

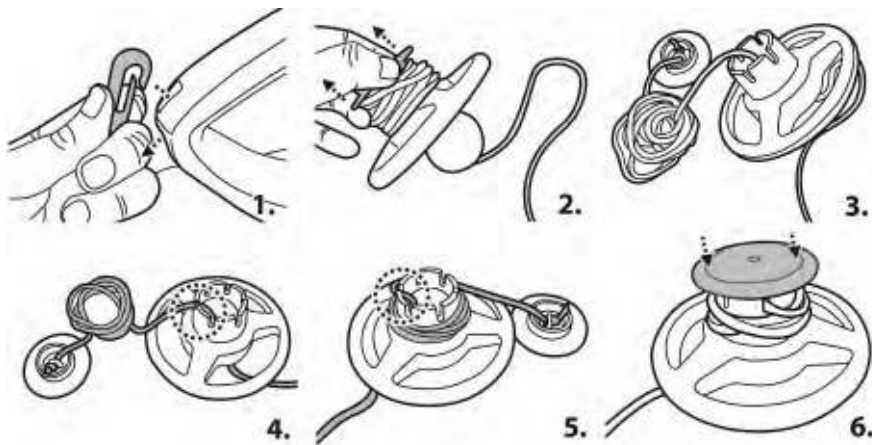
- If there are stones, roots or metal corrosion in contact with the underside of the liner, discard them prior to using the robot. If necessary, seek assistance from a qualified professional.
- If the liner is brittle, damaged or wrinkled, contact a qualified professional to perform the necessary repairs or perform a liner replacement prior to using the robot.
- It may be advisable to turn off the filtration system as water circulation in the pool may affect the movement pattern of the robot.
- Remove any pool ladder, surface skimmer, and other floating objects from the pool as they may obstruct the movement of the robot's float and, consequently, the movement of the robot also.

- If you are using a saltwater pool, make sure all salt are dissolved before placing the robot into the water.

OPERATION

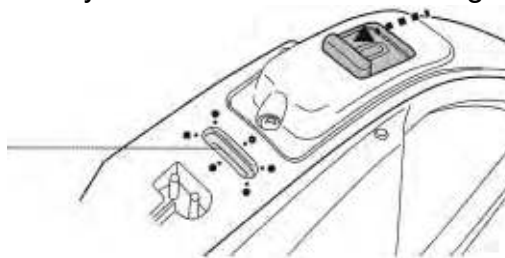
WARNING! Make sure the robot is off.

1. Bring your robot to the side of your pool. NOTE: Do not place the robot in the pool corner and against the pool wall as starting location. Attach the hook of the float to the handle of the swivel head. Pry to detach the float cover and release the rope from the float to a length equivalent to the depth of pool water plus about 0.5 meters (1.6 feet). Put the rope inside the notch and roll the rope around the post until the cover almost reaches the post. Put the rope inside the notch and close the cover as shown.



2. Slide the power switch to the ON position and the power indicator light will turn on.
ATTENTION: Motor activates only when the robot is submerged in water completely

Power indicator light
(Green)



3. Immerse the robot into the water and operation will automatically begin as water level covers the sensors at the top of the swivel head. Let the robot sink to the pool floor and observe the cleaner's first forward and reversed movements across the pool bottom. If the robot runs along the pool wall instead of perpendicular to it, reposition it to make sure that its front/back faces the pool wall.

Power indicator light starts to blink when 10 minutes of usage remains.

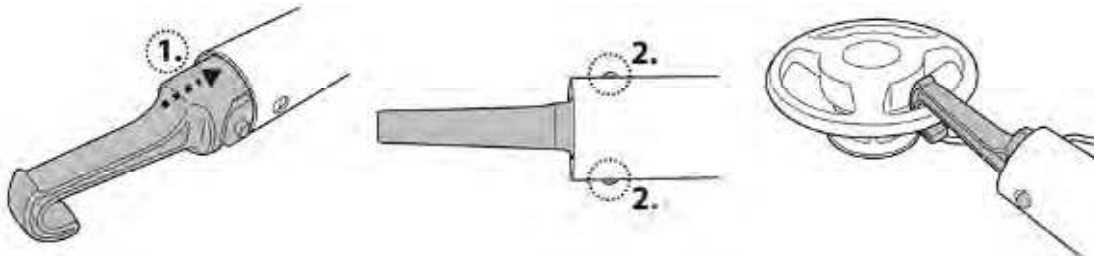
Power indicator light :

No light - Power off / no power
Light - Power on

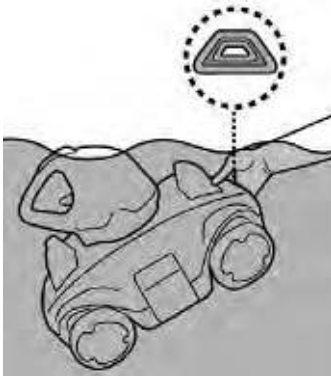
Blinking light - Battery power will be exhausted within 10 minutes.

NOTE:

- Refrain from making any physical contact with both water sensors.
- To retrieve the robot from the pool, if you cannot catch it by hand use the hook provided. Attach the hook to a telescopic pole (not provided) and use it to retrieve the float



As the robot reaches the water surface, locate the end with orange triangle (as shown in the image below) and grab onto the robot via the grip (Note: holding the other end of the robot will lead to escape of debris through the drainage outlet) to lift the cleaner to drain the water out of the robot.



5. Slide the power switch OFF. Rinse the robot with fresh water after every use. DO NOT use any detergent.

NOTE: To ensure the most efficient cleaning, when your pool is quite dirty, it is recommended to empty the debris compartment after the first 30min of operation, or whenever the robot's movement has slowed down noticeably. Then return the robot (with an emptied debris compartment) to the pool, and let it run through the remaining of its cycle.

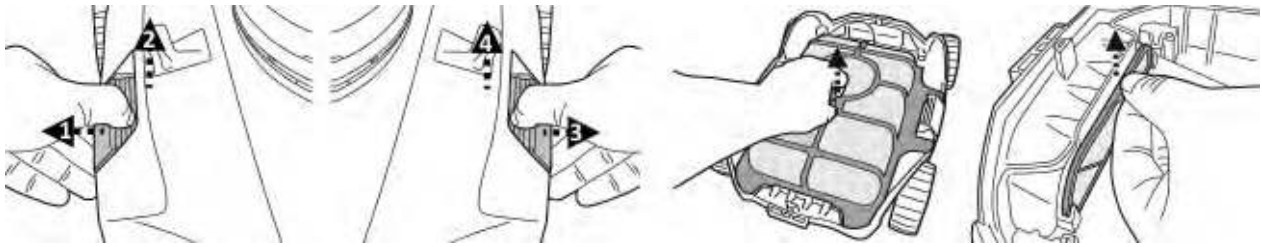
EMPTYING THE DEBRIS COMPARTMENT

WARNING! Using the robot without its filter cover in place will VOID your warranty.

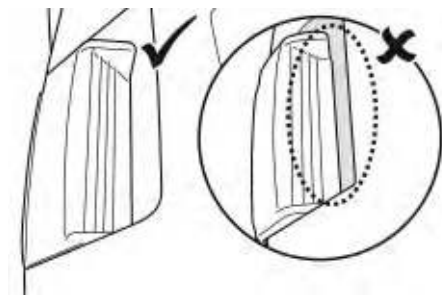
In order to maximize the cleaning efficiency, clean the debris compartment and the filter cover before and after each use.

CAUTION! Before cleaning the debris compartment, make sure the robot is OFF.

1. Place the cleaner on a flat surface. Pull one side clip outwards to lift one side of the cover and repeat the steps on the other side to lift the entire top cover to expose the filter cover and filter plate.



2. Detach the filter cover and filter plate and remove the debris from the compartment. It is recommended to clean the filter cover net and draining filter plate with splashing water. If brushing is deemed necessary, use only a soft brush to clean it carefully and gently to avoid damaging it.
3. After cleaning, make sure that both draining filter plate and filter cover are in place and the body top cover is correctly installed and secured by the side clips.



CAUTION! Replace a damaged filter cover immediately with a new one before the next operation.

MAINTENANCE & STORAGE

NOTE:

1. Battery discharges on its own during storage. Make sure to fully charge the robot before storage.
2. You must re-charge the battery at least once every three months when it is not in use.
 - Unplug the external adaptor from the socket and then unplug the charging cable from the external adaptor and robot.
 - Detach accessories from the robot. If necessary, rinse the robot and accessories with fresh water. **DO NOT** use detergent.
 - Be sure to drain the water from the robot before storing it.
 - Use a damp cloth to clean and dry the robot and its accessories.
 - Store them in a well-ventilated area away from sunlight, heat, ignition sources, pool chemicals and from children. Ambient temperature for storage should be 10°C – 25°C (50°F – 77°F). **NOTE:** A higher storage temperature may reduce the battery life.

WARNING!

- Under no circumstances should you attempt to disassemble the swivel head and replace the impeller, motor and battery by yourself.
- To replace a damaged squeegee, push it out of the cavity and replace with a new one.

CAUTION!

- Excessive heat can damage the battery and reduce the lifespan of your robot as a result.
- Consult your dealer regarding battery replacement if the following happens:
 - Battery does not charge fully.
 - Battery operation time is noticeably reduced. Observe and record the run times of the first few operations (on a full charge). Use these run times as a reference point to compare with run times of older batteries.
- The battery must be removed from the robot before it is scrapped.
- The robot must be disconnected from the supply mains when the battery is being removed.
- The battery is to be disposed safely in accordance with local ordinances or regulations.

NOTE: Incorrect maintenance may reduce the battery life and affect its capacity as a result.

BATTERY DISPOSAL

Your robot is equipped with a maintenance-free rechargeable lithium-ion battery pack, which must be disposed of properly. Recycling is required; please contact your local authority for more information.

WARNING! Never attempt to disassemble a battery pack

- Remove all personal items such as rings, bracelets, necklaces and watches when the battery pack is unwired from the robot.
- A battery can produce a short circuit current high enough to weld a ring (or similar item) to metal, causing a severe burn in the process.
- Wear complete eye protection, gloves and protective clothing when the battery pack is being removed.
- Avoid touching the wires altogether and avoid contact between them and any metal items, which could cause sparking and/or short circuit the battery.
- Never smoke or allow a spark or flame in the vicinity of the battery or the robot.
- Do not expose the battery to fire or intense heat as this may result in an explosion.

CAUTION!

If a battery leak occurs, avoid any contact with the leaking fluids and place the damaged battery in a plastic bag.

- If leaking fluids come in contact with skin and clothing, wash immediately with plenty of soap and water.
- If leaking fluids come in contact with eyes, do not rub eyes, immediately flush eyes with cool running water for at least 15 minutes and do not rub them. Seek medical attention as soon as possible.

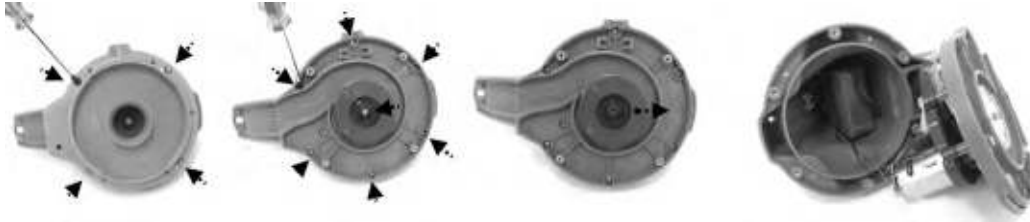
How to remove the battery pack (To be done by authorized technician)

Recommended tools (not included): Screwdriver.

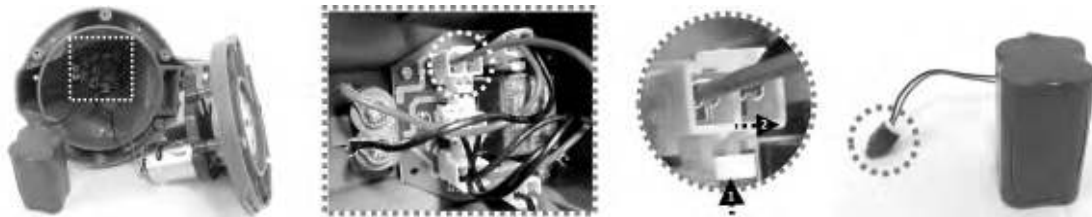
1. Follow section "EMPTYING THE DEBRIS COMPARTMENT" to release the top cover (preassembled with the swivel head). Place the cover upside down and release the swivel head by turning its bottom locking plate anticlockwise. Remove the swivel smoothing-ring.



2. Use the screwdriver to unscrew the 4 screws located at the bottom of the head to release the bottom plate first. Then unscrew all the screws at the base as shown. Remove the impeller and pry open the base to expose head inside.





3. Remove out the battery pack to expose the PCBA. To detach the battery connection wire, press on the clip of the connector to pull it out. NOTE: Wrap the connector immediately with insulating tape in order to avoid any short circuit caused by the contact of both wire terminals.



TROUBLESHOOTING

Problem	Possible Cause	Solution
Robot does not capture the debris	Battery is running out	Charge the robot again.
	Impeller is jammed	Power off the robot and inspect the hole under the swivel head to see if the impeller is jammed by large debris. If necessary, contact your dealer for further instructions. WARNING! Make sure the robot is off before the unit is serviced.
	Suction mouth is clogged	Remove clogged objects from the suction mouth.
	Impeller is broken	Contact your dealer for replacement.
	Debris compartment is full	Clean both debris compartment and filter cover.
Robot stopped moving in the middle of pool but swivel head is still turning	Robot stopped by obstacle or large creases in the pool liner.	Check to see that if there is anything obstructing the cleaner. Remove the obstacle.
	Robot is stopped by suction from the main drain of pool floor	Turn off the filtration system as instructed in manual.
Robot does not cover the entire pool	Debris compartment is full	Clean the debris compartment
	Operation time is shorter as expected	Clean the filter compartment and recharge the robot for 4.5- 5 hrs
	Moving direction is interrupted by water circulation generated by filtration system	Turn off the filtration system as instructed in manual.
	Wheel is jammed	Check and remove debris from the wheel.
	Position of wheel axle is not set properly. Bumper is required	Follow instruction to adjust wheel axle setting and apply bumper.
	Robot moves along the pool wall of round pool	Make sure the bumpers have been installed as instructed in manual.
Robot moves along the pool wall	Position of wheel axle is not set properly / bumper is required	Follow instruction to adjust wheel axle setting and apply bumper.
Robot trapped in the narrow ledge of an in-ground pool	Not enough space for robot turning in other direction	Follow instruction to put bumper on both end of robot.
Robot moves slowly or does not move at all.	Debris compartment is full	Clean both debris compartment and filter cover.
	Suction mouth is clogged	Remove clogged objects from the suction mouth
	Filter cover screen is clogged	Flush the screen with water to remove small particles. If brush is deem necessary, use a soft brush to clean the screen gently.
	Impeller is jammed	Power off the robot and inspect the hole under the swivel head to see if the impeller is jammed by large debris. If necessary, contact your dealer for further instructions. WARNING! Make sure the robot is off before the unit is serviced.
Swivel head does not turn or turn noticeably slowly	Swivel head bottom is jammed	Check and remove any debris that may be trapped under the swivel head.
	Side flap does not come up.	Check and remove any debris that hinders the movement of the flap.
		Check that the two floats are on the flap.
	Swivel smoothing- ring is broken	Replace with a new swivel smoothing-ring. Contact your dealer for replacement parts.
Swivel head bottom plate fitting on the head is stripping threaded	Unfasten the plate completely and fasten again. (Avoid stripping threaded fitting.)	

Debris escapes from the robot	Suction mouth's flap (at cleaner bottom) is damaged	Suction mouth's flap works like a door to prevent the debris from escaping from the debris compartment. Contact dealer for replacement parts and instruction.
	Debris clogged at suction mouth and prevents the flap to close.	Remove clogged debris from the suction mouth.
	Draining filter plate is broken or not in place	Make sure the draining filter plate is in place and replace with a new one if necessary before next use.
Debris leaks outside at the filter cover	Filter cover net is damaged	Replace with a new filter cover. Contact your dealer for replacement parts.
Float sinks	Float is broken and water leaks in	Replace with a new float. Contact your dealer for replacement parts.
Robot cannot be charged / recharged	Battery is damaged	Contact dealer for battery replacement. WARNING! DO NOT replace the battery by yourself. This could result in severe or fatal injuries and the warranty will be voided as a result.
	Charging cable is not completely connected with external adaptor and robot.	Make sure that the charger cable is connected with external adaptor and robot properly and completely. Refer to instruction manual.
	External adaptor is out of order	Contact dealer for replacement. WARNING! Using the wrong external adaptor will result in damaging the robot / battery and voiding the warranty as a result.
Environmental Programmes, WEEE European Directive		
	Please respect the European Union regulations and help to protect the environment. Return non-working electrical equipment to a facility appointed by your municipality that properly recycles electrical and electronic equipment. Do not dispose them in unsorted waste bins. For items containing removable batteries, remove batteries before disposing of the product.	
	© 2018 Kokido Development Ltd. 18009027 All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of Kokido Development Ltd. (V1)	

If soft copy of this instruction manual is required, please contact our customer service by email: customerservice@kokido.com

SAVE THESE INSTRUCTIONS

Manufacturer: Kokido Development Limited. Unit 1319, Sunbeam Centre, 27 Shing Yip Street, Kwun Tong, Kowloon, HK



- (GB) We reserve the right to change all or part of the features of the articles or contents of this document, without prior notice.
International patents pending
- (FR) Nous nous réservons le droit de modifier tout ou partie des caractéristiques des articles ou des contenus de ce document, sans notification préalable.
Brevets internationaux en attente
- (ES) Nos reservamos el derecho de modificar la totalidad o parte de las características de los artículos o contenidos de este documento sin aviso previo.
Patentes Internacionales pendientes
- (NL) Wij behouden ons het recht voor om zonder voorafgaande kennisgeving de artikelen of de inhoud van dit document te wijzigen.
In afwachting van internationale patenten
- (IT) Ci riserviamo il diritto di modificare integralmente o parzialmente le caratteristiche degli articoli o del contenuto del presente documento senza preavviso.
Patenti internazionali in attesa
- (DE) Wir behalten uns das Recht vor, die Eigenschaften der Artikel oder den Inhalt dieses Artikels ohne vorherige Ankündigung ganz oder teilweise zu ändern.
International zum Patent angemeldet.

