

AquaVac[®] 6 Series Troubleshooting Guide

0

CH BALAR



Copyright 2019 Hayward Industries Inc.



High Voltage Electrocution Hazard

Hazardous voltage can shock, burn, cause serious injury and or death. To reduce the risk of electrocution and or electric shock hazards:

- Only qualified technicians should repair the cleaner
- Replace damaged cords/wiring immediately
- Insure cleaner is plugged into a ground-fault circuit interrupter (GFCI)
- NEVER use an extension cord



Table of Contents

Operation Instructions	Pg.	4-5
Power Supply Icons	Pg.	6
How To:	Pg.	7-27
Clean debris from the canister		8-9
Replace Rollers		10
Disassemble cleaner		11-20
Customize wireless settings		22
Rename cleaner		23
Use direct drive and spot clean		24
Update Firmware		25-27
Turn lights on and off		28
Reset Wi-Fi and Unit		29
Troubleshooting AV650:	Pg.	30-43
Lights on power supply		31-37
Cleaning pump and thrust sleeve		38
Reset Wi-Fi connection on mobile device		39
Forgot / Wrong Wi-Fi password		40
PS Wi-Fi not connected to mobile device		41
Wi-Fi is off on mobile device		42
Re-initialize communication with power supply		43
Replacement Part Numbers		44

Operation Instructions READ BEFORE USING THE CLEANER

- Do not operate outside the pool. This will damage the motor seal and void the warranty.
- Do not drag the cleaner out of the pool against the side wall. This could damage the cleaner and/or the pool wall.

RISK OF EQUIPMENT DAMAGE

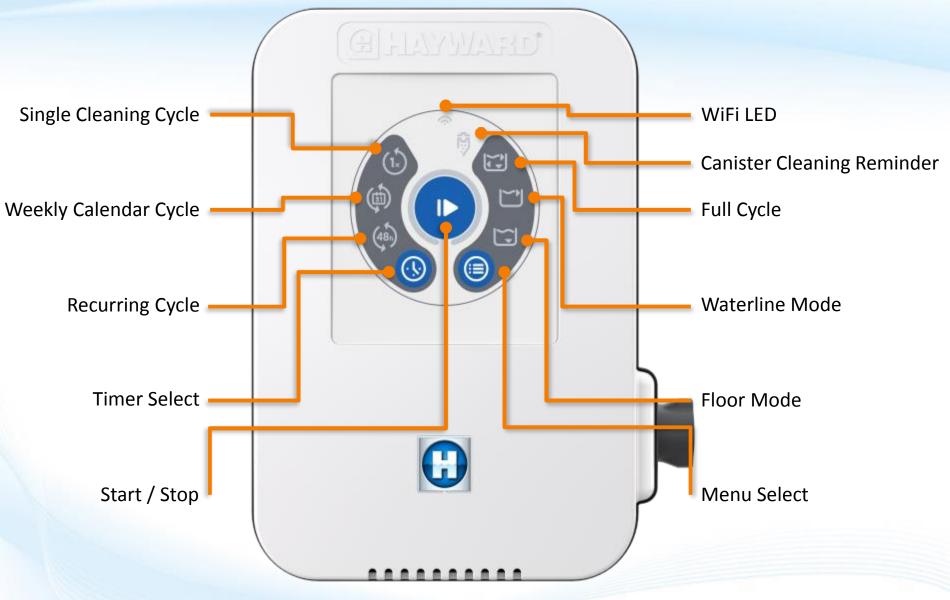
- Only operate the cleaner for the period of time necessary to clean the pool. Excessive use is unnecessary and will cause cleaner parts to prematurely wear.
- Regularly inspect the cleaner, cables and control unit. Do not use if damaged or if any rough edges are visible on the cleaner. This can cause damage to the pool.
- Cleaner filter cartridges or debris canister should be thoroughly cleaned after each use or as often as needed to ensure the cleaner's optimal performance.
- Never store the cleaner with dirty filter cartridges or debris canister.



Operation Instructions OPERATING CONDITIONS

- Water temperature operation range: min 50°F / 10°C, max 95°F / 35°C. Maximum operating depth: 3 m (10 ft.)
- Operating the cleaner in temperatures above or below this range may affect performance, and cause premature wear or failure.
- Ambient air temperature: max 104°F / 40°C.
- To protect from permanent damage, if the cleaner is exposed to extremely hot ambient temperature, the powersupply will limit or suspend operation until its temperature is down to an acceptable operating level. To limit overheating and reduced performance, it is recommended to keep the control unit out of direct sunlight and keep the cooling fan unobstructed.

AV650 Power Supply Icons



O HAYWARD



AquaVac[®] 6 Series How To:



How To: Clean Debris from the Canister

Some water is kept inside the canister to enable the self cleaning and flushing function for a true touch-free debris disposal. If desired most of the water can be removed by tilting the canister toward the inlet check valve. Doing so may result in having to rinse the canister after flushing the debris.



Turn Power off and Lift handle

Grab the handle on the canister and lift upright to a 90 degree position.

Remove canister from cleaner



Lift the canister out of the cleaner by holding the handle and lifting straight up.

NOTE: Operating the cleaner with a full filter or debris canister will result in reduced performance, limited wall climbing capability and limited debris pick up. Empty and clean the filter or canister, when needed, to maintain optimal performance. Heavier debris such as sand, pebbles, and rocks may require more frequent cleaning, since they have a greater effect on the weight and buoyancy of the cleaner.



How To: Clean Debris from the Canister

Twist canister right and left



Twist the canister right and left to agitate water and loosen debris, which may be packed inside canister.

Rinse and close lid





If needed, rinse the canister with a garden hose. Close the bottom lid of the canister.

Squeeze red latch to flush



When above desired disposal area, squeeze the red latch so bottom lid opens and debris is flushed out.

Replace canister on cleaner



Replace canister in cleaner and press handle down until a "click" is heard, to ensure the canister is locked.

How To: Replace Rollers

Remove bottom throat



Turn the cleaner upside down and remove the three T-20 Torx screws (shown above).

Remove bottom roller brushes





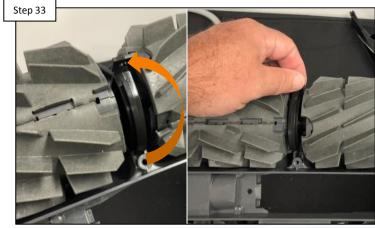
Turn cleaner upside down and remove the four screws from the locations indicated above.

Remove bottom throat



Once the three screws are removed, lift the bottom throat (as shown above) to remove.

Remove roller brush catches



Pivot each catch, that you removed the screws from to release the roller brushes to be removed and replace.



Turn Power off and Lift handle



Grab the handle on the canister and lift upright to a 90 degree position.

Place cleaner on its side



Place the cleaner on its side so you can access the side wheels of the cleaner.

_Remove canister from cleaner



Lift the canister out of the cleaner by holding the handle and lifting straight up.

_Remove hub caps from cleaner



Use a small flat head screwdriver to remove the hub caps from each wheel. Repeat steps on opposite side.





Using a T-20 Torx screwdriver remove the screw from each of the 3 wheels.

_Remove wheels from cleaner



Remove the wheel assembly from the cleaner. Repeat these steps on the opposite side of cleaner.



Step 7: Using a T-20 Torx screwdriver Remove the 17 screws on the cleaner, see locations below:



Remove Side Covers



Locate cleaner on its side and locate the eight tabs that hold the side covers on.

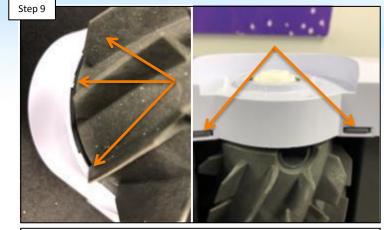
<u>Pry up and out with screwdriver</u>

Step 10



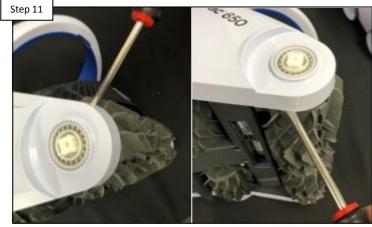
Use a flat head screwdriver to pry up and out on the end of the cleaner at each of the three tabs. You should hear a "click" sound when released.

8 Tabs total on each side



There are 3 locking tabs on each end of the cleaner and 2 locking tabs on either side of the middle roller.

On both ends of the cleaner



Repeat the same steps on the opposite end of the cleaner to make sure that all 3 tabs are loose from the frame of the cleaner.

C HAYWARD

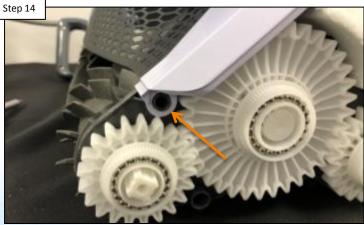
How To: Disassemble Cleaner Release 2 middle tabs

Pry middle tabs on side cover



Once the ends of the cover are loose, lightly pry out on the two middle tabs of the side cover.

Remove front handle cover



Using a flat head screwdriver lightly pry out on the round tab to release the front handle cover.

Step 13

As you pry out you will hear a "click" and the side cover should be free to remove.

Pull straight away from cleaner



Repeat on opposite side if needed, pull cover straight away from the cleaner to remove.

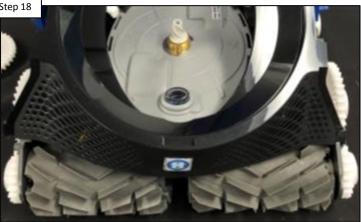
Remove rear handle cover



Release the tab on both sides of the cleaner and pull straight sway from the cleaner.

Remove front shell cover

Step 18



Remove the shell cover from the front of the cleaner.

Remove front handle



Remove the front handle by pushing each side away from the cleaner.

Pry gently on tabs

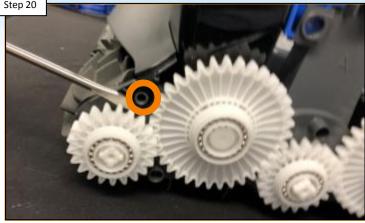


Use a flat screwdriver to release each side of the cover.



Remove front shell cover

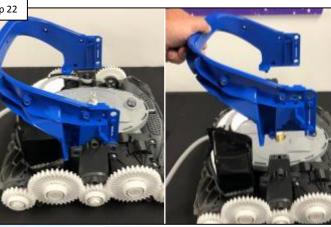
Step 20



Using a flat screwdriver pry tab loose on the rear cover shell from both sides.

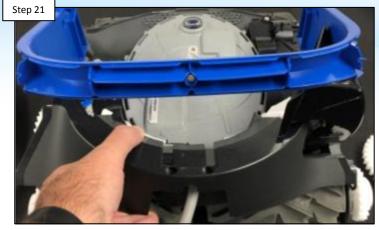
Remove rear handle





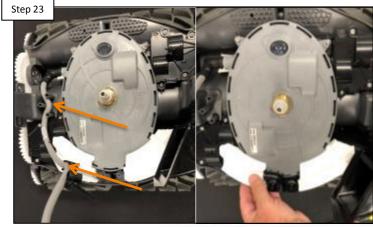
Remove rear handle by pulling the handle straight up from the cleaner.

Pull straight away from cleaner



Remove rear shell cover by pulling straight back away from cleaner.

Remove Styrofoam floats



Lift power cord up to remove from Styrofoam and tracks, remove both pieces of foam lifting straight up.



Remove screws from motor box

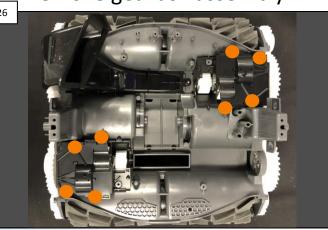




Remove the four screws (using a T-20 Torx screwdriver) from the motor box assembly.

Remove gearbox assembly





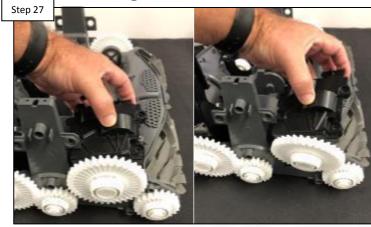
Remove the 4 screws from each of the two gear boxes.

Remove motor box



Once the four screws are removed from the motor box assembly, you can lift the motor box out of the cleaner.

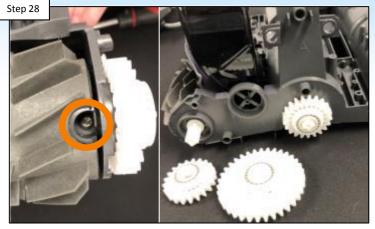
<u>Remove gearbox on other side</u>



Lift and pull forward to remove each gear box.



Remove screws from rollers



Remove the T-20 Torx screws from the end of each roller and remove the gear wheels.

Remove bottom throat



Once the three screws are removed, lift the bottom throat (as shown above) to remove.

Remove bottom throat



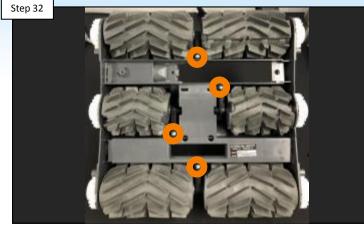
Turn the cleaner upside down and remove the three T-20 Torx screws (shown above).

Remove top throat



Turn cleaner back over and remove the top throat as indicated above.

Remove bottom roller brushes



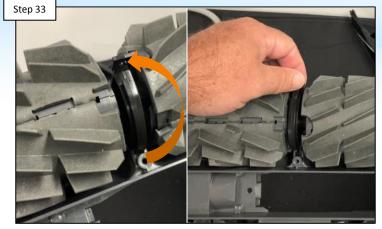
Turn cleaner upside down and remove the four screws from the locations indicated above.

<u>Dis</u>connect power from motor box

Step 34

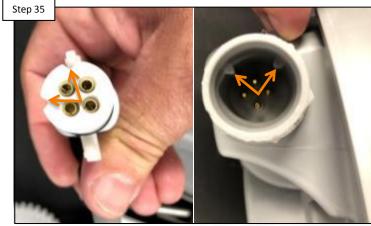


Squeeze the 2 clips in on the power cord where it is connected to motor box and pull outward to remove. Remove roller brush catches



Pivot each catch, that you removed the screws from to release the roller brushes to be removed.

<u>Connect</u> power cord to motor box



Align the 2 triangle shaped indentions on the power cord to the motor box and press inward to lock.



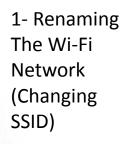
AquaVac[®] 650 Series How To:



How To: Customize wireless settings

You can customize 3 settings on the wireless setting page

Resetting the Power Supply to factory default settings will rename the SSID and password to factory settings and move back security to WEP





2- Disabling the WEP security (No more password required)

AV650 7	3- Change the password (must be 13 characters)
ADDIVACESCI, 42.44 Present Confirm passing Decemption syste	
Charlest Higher CAHCES. ON CAHCES. ON CHACES. ON CHACES	



How To: Rename the cleaner

- At anytime, you can rename your cleaner
 - Just enter the new name (Default is AV650)
 - Press OK to confirm and go back to previous menu
 - Press Cancel to go back to previous menu

Resetting the Power Supply to factory default settings will erase the cleaner name





How To: Use direct drive & spot clean

- On the AquaVac Connect App main page, press the direct drive icon (Bottom left)
- To drive the cleaner where you want, simply use the joystick (Remember that the right and left commands will be reversed if the cleaner is driving toward you)
- When the dirty area of the pool is reached, simply activate the Spot Clean function by pressing the icon on the up and left part of the joystick
 - The cleaner will start moving frontward and backward then turn to do a star cleaning pattern that covers an area of about 5' radius
 - When the Spot clean cycle is completed, the App will go back to Direct Drive
- If no action is performed for 30 seconds on Direct Drive, the App will go back to main menu and resume the previous selected cleaning cycle. If no cycle was running, it will simply go back to Stand-By mode.



C HAYWARD

How To: Update firmware

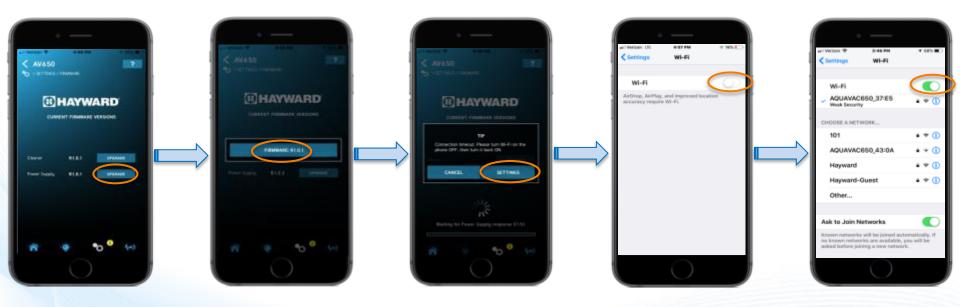
- When updating your app, if a new firmware update is available, it will be loaded to your app to be pushed to the cleaner or power supply on your next connection
- A yellow number will appear close to the settings icon on the App if a new firmware is available
- By pressing the settings icon, you'll access the main settings menu
- Press the firmware update icon to enter the update menu





How To: Update firmware (cont.)

- 1. Press the Upgrade tab for the power supply
- 2. It will display the version that you are about to install, press on it
- 3. You need to reset your Wi-Fi connection by pressing the settings button
- 4. In your Wi-Fi setting, turn Wi-Fi off and back on
- 5. Verify that the connection with the AquaVac network is re-established then go back to the AquaVac connect App



How To: Update firmware (cont.)

- 1. Back in the AquaVac Connect app, the progress bar will show the upgrade progress
- 2. When done, reset your Wi-Fi connection again by pressing the settings button
- 3. In your Wi-Fi setting, turn Wi-Fi off and back on
- 4. Verify that the connection with the AquaVac network is re-established then go back to the AquaVac connect App
- 5. In the AquaVac Connect app, you should have an upgrade complete check mark. You can go back to main menu and use your cleaner normally



How To: Turn lights on and off

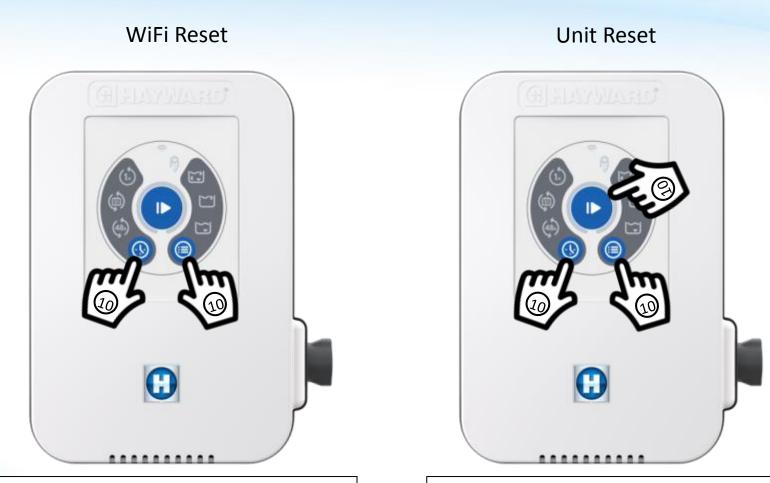


seconds.

C HAYWARD

seconds.

How To: Reset Wi-Fi and Unit



Press and hold the Schedule and Cleaning Mode buttons down for 10 seconds.

Press and hold the Start, Schedule, and Cleaning Mode buttons down for 10 seconds.

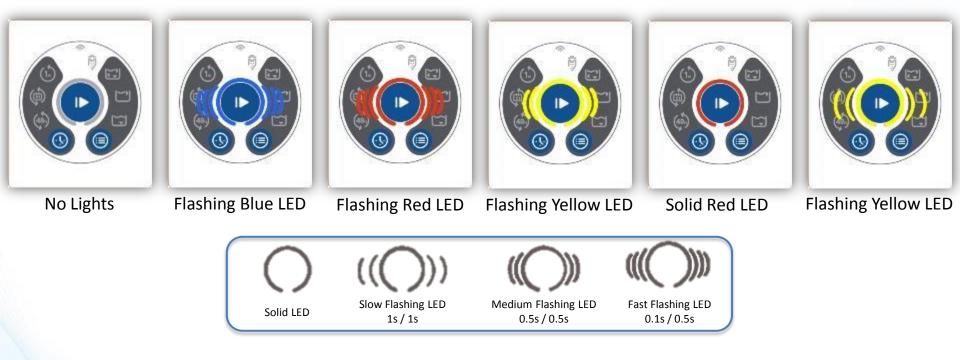




AquaVac[®] 650 Series Troubleshooting



Lights on power supply





Lights on PS: No lights

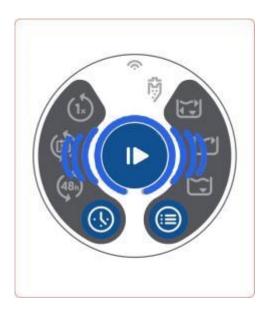


- Connect Power Supply to appropriate GFCI Outlet
- If connected and still no power
 - Verify that the power outlet works properly
 - GFCI not tripped
 - Main breaker not tripped
 - Try another power outlet
- If power outlet is ok but still no light on Power Supply
 - Replace Power Supply cord
 - Replace Power Supply



Lights on PS: Fast flashing blue light

(1st time AC Power Up)



Flashing Blue LED

- The Power Supply can't detect or communicate with the cleaner
- Causes
 - Floating cable not properly connected to Power Supply
 - Floating cable connection issue with motor box
 - Floating cable is damaged (loss of conductivity)
- Solutions
 - Disconnect and reconnect floating cable to Power Supply
 - Press Pause/Play Button
 - Try to Power Cycle the Power Supply
 - Try to perform a full reset of Power Supply
 - Clean male and female connector pins if corrosion is observed (Use electrical connector cleaner)
 - Floating cable needs to be serviced
 - Motor Box needs to be serviced



Lights on PS: Fast flashing red light



Flashing Red LED

- The cleaner is experiencing an issue that can be resolved by the user, unable to communicate with cleaner after it has established a good connection
 - Cleaner stuck on an obstacle Relocate the cleaner
 - Drive Motor block Remove any object or debris from rollers or drive train
 - Pump is blocked Clean pump and thrust sleeve



Lights on PS: Medium flashing yellow Light



Flashing Yellow LED

- The Power Supply is overheating (Limp Mode) cleaner is still operating at reduced power
- Causes
 - Power Supply is exposed for a long period of time to very high temperature or excessive solar load
- Solution
 - Relocate the Power Supply in a shady or cooler area
 - Let the Power Supply cool down



Lights on PS: Solid red light

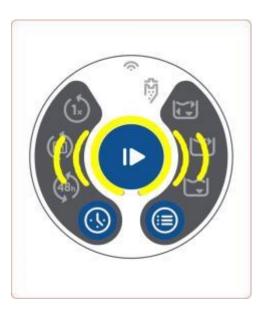


Solid Red LED

- System Fault Detected
- Causes
 - 3 unresolved consecutive errors
 - Major system malfunction
- Solutions
 - Disconnect the Power Supply
 - Disconnect the cleaner power cord from the Power Supply
 - Reconnect the Power Supply
 - Reconnect the cleaner
- Your cleaner may require to be serviced by a Hayward Authorized Service Center (HASC)



Lights on PS: Slow flashing yellow light



Flashing Yellow LED

- The System is stuck in Bootloader mode
- Symptoms:
 - Power Supply does not respond to any action
 - Impossible to established Wi-Fi connection
 - This happened during or just after the Power Supply
 Firmware Update
- Solution:
 - Power cycle the power supply for 10 secs
 - Go back to your app to complete the update process



Cleaning the pump and thrust sleeve

- Symptoms
 - Flashing Red on Power Supply
 - Cleaner not moving
 - AquaVac Connect App displays Pump error message (AV650 Only)
- Causes
 - 1. Debris is getting stuck in the shaft/bearings or impeller of the pump (Canister)
- Solution

38

- 1. Remove canister from cleaner
- 2. Manually, verify that the pump coupling is turning freely by spinning it (Fig. A)
- 3. With your finger, verify that the pump shaft is turning freely (Fig. B)
- 4. Try to start the cleaner (By Pressing the Start button on the PS) without the canister and see if the shaft coupling is turning (Will stop automatically when out of water)
- 5. Wash the shaft/bearings and impeller by plunging it up and down in the pool then turn the bottom coupling with your finger until the shaft spins freely (Fig. C)
- 6. Repeat if still not spinning easily



Α

В

С





Reset Wi-Fi connection on mobile device

- 1. Go on your mobile device Wi-Fi settings
 - Select AquaVac network
 - Forget the AquaVac network
- 2. Identify the corresponding Aquavac SSID as shown on label on power supply (AQUAVAC650_XX:XX)
 - Choose the AquaVac Wi-Fi network and enter password (Default: HaywardAVC650)
 - Wait for connection to be established
- 3. Go on your mobile device Wi-Fi settings
 - Turn on airplane mode
 - Turn on Wi-Fi
 - Select AquaVac network



Forgot/Wrong Wi-Fi Password

- You forgot or have entered the wrong 13 character password
- 1. Go on your mobile device Wi-Fi settings
 - Select AquaVac network
 - Forget the AquaVac network
- 2. Identify the corresponding AquaVac SSID as shown on label on power supply (AQUAVAC650_XX:XX)
 - Choose the AquaVac Wi-Fi network and enter password (Default: HaywardAVC650)
 - Wait for connection to be established





PS Wi-Fi not connected to mobile device

- Open the Wi-Fi settings on the mobile device
- Make sure Wi-Fi is enabled
- Identify the corresponding Aquavac SSID as shown on label on power supply (AQUAVAC650_XX:XX)
- Choose the AquaVac Wi-Fi network and enter password (Default: HaywardAVC650)
- Wait for connection to be established





Wi-Fi is off on mobile device

- 1. Go to your mobile device Wi-Fi settings
- 2. Turn Wi-Fi on
- 3. Reconnect to the AquaVac network if not connecting automatically (auto login enabled)





Re-initialize comm. with power supply

- 1. Go to your mobile device Wi-Fi settings
- 2. Turn Wi-Fi off
- 3. Turn Wi-Fi on
- 4. Reconnect to the AquaVac network if not connecting automatically (auto login enabled)



NOTE: For further assistance please contact our technical support center at (908) 355-7995.



Replacement Part Numbers

RCX361178234	POWER SUPPLY KICKSTAND, BLUE	RCX361331782237	SHELL FRONT HANDLE ASSEMBLY, GRAY
RCX361480W	POWER SUPPLY AV650, WIFI	RCX361134	PUMP MOTOR SHAFT COUPLING
RCX361470	POWER SUPPLY AV600, NO WIFI	RCX36111060X	MOTOR BOX ASSEMBLY
RCX361191	55 FT. FLOATING CABLE	RCX36111065X	MOTOR BOX ASSEMBLY, WIFI
RCX361182	CYCLONE CHECK VALVE ASSEMBLY	RCX36131649236	SHELL REAR COVER ASSEMBLY, BLACK
RCX361126234	CYCLONE COSMETIC TOP, 650, BLUE	RCX36131314D237	SHELL,SIDE PANEL A/B DEC 600, (Includes Side A & B)
NC/301120234		RCX361313141237	SHELL,SIDE PANEL A/B DEC 650, (Includes Side A & B)
RCX361126237	CYCLONE COSMETIC TOP, 600, GRAY	RCX361318236	SHELL FRONT COVER, BLACK
RCX361453	CANISTER TWIST LOCK	RCX361109WS239	VACUUM INLET BOTTOM
RCX361140KIT234	CYCLONE ASSEMBLY KIT	RCX36329222239	MIDDLE SHORT BRUSH ASSEMBLY, DK GRY (Set of 2)
RCX361300236	CYCLONE HANDLE ASSEMBLY, 650, BLACK	RCX36132337239	FRONT/ BACK LONG BRUSH ASSEMBLY, DK GRY (Set of 2)
RCX361300234	CYCLONE HANDLE ASSEMBLY, 600, BLUE	RCX361117218	GEAR BOX ASSEMBLY, GRAY
RCX36131519237	SHELL REAR HANDLE COVER ASSEMBLY, GRAY	RCX36140311234	WHEEL ASSEMBLY KIT, BLUE (Includes Tread) (Set of 2)
RCX361210236		RCX361404234PK6	WHEEL TREAD KIT, MET BLUE (6 Pack)
RCX301210230	210236 CORD HANDLE ASSEMBLY, BLACK		FOAM KIT ASSEMBLY
RCX361250U	POWER SUPPLY CORD, US	RCX361121PK4	SCREW PACK, TORX #8-16 X .50 (4 Pack)
RCX361251E	POWER SUPPLY CORD, EU	RCX361121PK8	SCREW PACK, TORX #8-16 X .50 (8 Pack)
RCX361252A	POWER SUPPLY CORD, AU	RCX36128586236	CADDY HANDLE, BLACK
RCX361103236	VACUUM INLET TOP ASSEMBLY, BLACK	RCX361294KIT	CADDY WHEEL KIT (Set of 2)

C HAYWARD