

iRobot® Verro™

OWNER'S MANUAL

Model 300



iRobot®
www.irobot.com

Safety Notes

WARNING: Your cleaner should not be used while people are swimming in the pool.

A Ground Fault Current Interrupter (GFCI) must be installed to protect your electric outlet and prevent any possible electric shock. The unit must be supplied through a Ground Fault Current Interrupter outlet.

The connection to the branch circuit should be consistent with the local and national wiring rules (electrical code).

If the supply cord is damaged, it must be replaced by the manufacturer's service agent or a qualified and trained person in order to avoid hazards.

Always remember to turn the Power Supply OFF and unplug it from the power outlet before removing the cleaner from the pool.

Shut off and unplug the Power Supply every time you remove the cleaner from the water.

Do not plug the Power Supply in within 12 feet of the pool.

Do not leave the cleaner in the pool all the time.

Mishandling the unit can result in leakage of lubricants.

Please keep the plug away from contact with water.

Cautions

Please read this manual completely before operating your pool cleaner. Retain the safety and operating instructions for future reference.

Do not switch the pool cleaner ON if it is not fully immersed in water. Operating the cleaner out of water will cause severe damage immediately and will result in loss of warranty.

Allow the cleaner to remain in the pool for 15 to 20 minutes following the end of its cleaning cycle. This will allow the motors to cool adequately.

Do not use Verro in a pool warmer than 100 degrees Fahrenheit.

Do not use the floating power cord to lift Verro from the pool. Use the handle.

Do not force the floating power cord plug. It will fit into the socket only one way.

Do not leave your cleaner in direct sunlight when not in use.

Never leave the Power Supply in direct sunlight and avoid leaving it in the rain.

Tips

Tip

Clean the filter bag regularly. Verro uses the force of the water pumped through its filter bag to move properly. If the filter bag is not kept clean, Verro will not move or clean properly.

Tip

Store Verro in a dry place out of direct sunlight at a temperature between 50 and 104 degrees Fahrenheit. The Power Supply is water resistant, but not waterproof and may be damaged by rain. Important: Failure to properly store Verro will result in loss of warranty.

Tip

iRobot recommends using the mesh filter bag (included) when the pool contains a significant quantity of large debris (leaves, etc.), such as when the pool is opened for the season. The fine filter bag is ideal for filtering small debris (algae, sand, etc.) and for regular maintenance.

Tip

Periodically straighten the floating power cord with the Detangler.

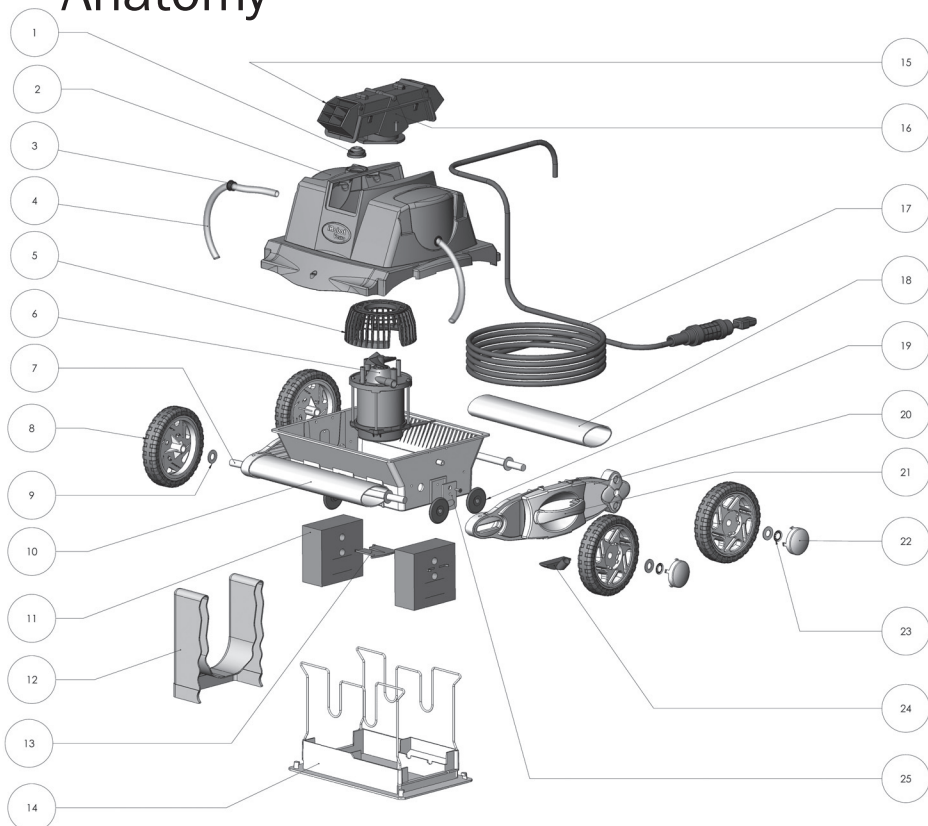
Tip

Verro's Power Supply has an automatic timer that shuts Verro OFF after approximately two hours of operation. When this happens, the power switch will remain ON. To start another cleaning cycle, switch the Power Supply OFF and then back ON and then press the reset button.

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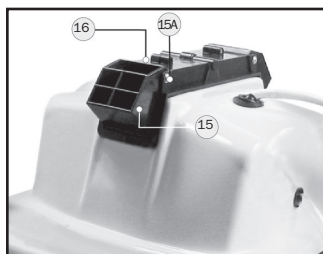
Anatomy



Parts List

- | | |
|---------------------------|-------------------------|
| 1. Cable Grommet | 14. Bottom Lid Assembly |
| 2. Body Assembly | 15. Jet Valve Port |
| 3. Jet Tube Bushing | 16. Jet Valve Housing |
| 4. Jet Tube | 17. Floating Power Cord |
| 5. Filter Screen | 18. Fixed Axle Housing |
| 6. Pump Motor | 19. 2" Wheel |
| 7. Axle | 20. Side Plate |
| 8. 6" Wheel | 21. Handle |
| 9. Washer | 22. Wheel Hubcap |
| 10. Steering Axle Housing | 23. Star Washer |
| 11. Square Foam Float | 24. Jet Nozzle |
| 12. Filter Bag | 25. Locking Tab |
| 13. Foam Float Clip | |

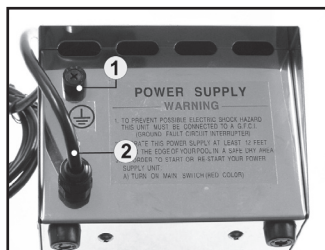
Jet Valve Housing Assembly



- 15. Jet Valve Port
- 15A. Jet Valve Port Screw
- 16. Jet Valve Housing

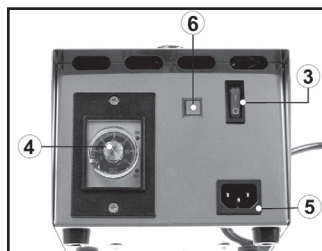
Time Control Dial

Rear View



- 1. Fuse Holder
- 2. Power Supply cord

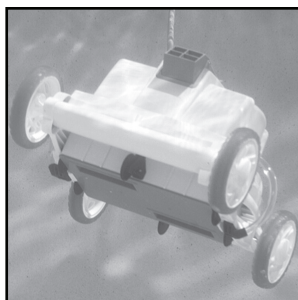
Front View



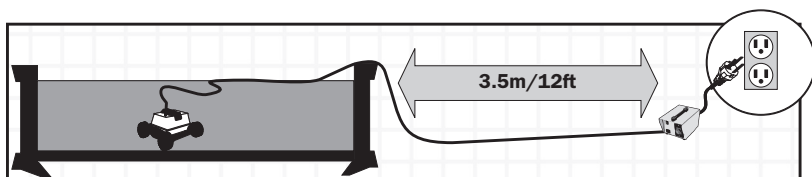
- 3. Power (ON/OFF) Switch
- 4. Time Control Dial
- 5. Socket (For Floating Power Cord)
- 6. Reset Button

Using Verro

- 1 Uncoil the floating power cord and spread it over the surface of the water, ensuring that it is not tangled or kinked.
- 2 Place Verro upside down in the pool and rock it from side to side to allow air to escape. Turn Verro over and allow it to sink to the bottom of the pool so that the wheels rest on the bottom of the pool.



- 3 Place the Power Supply in a dry area at least 3.5 meters/12 feet from the pool.

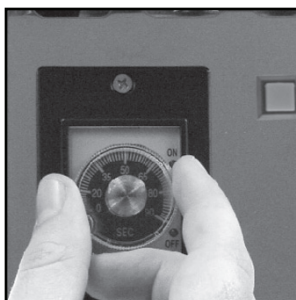


- 4 Plug the floating power cord into the Power Supply. Be sure not to force the plug as it will only go in one way.
- 5 Ensure that the Power Supply is at least 12 feet from the pool and that the power switch is OFF. Plug the Power Supply into a GFCI outlet. Ensure the electric outlet has been properly grounded. Never leave the Power Supply plugged in when Verro is not in use.

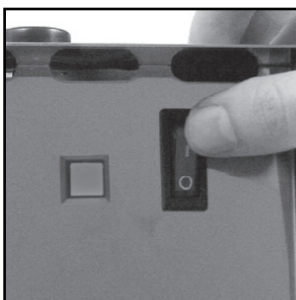
Warning: A Ground Fault Current Interrupter (GFCI) must be installed to protect your electric outlet and prevent any possible electric shock.

Using Verro (cont...)

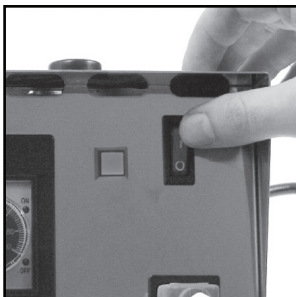
- 6** Set the time control dial to 30 seconds. See Adjusting the Time Control Dial, below.



- 7** Turn the Power Supply switch ON then press the reset button. The light on the Power Supply will illuminate and Verro will start to clean your pool.



- 8** After approximately two hours, Verro will stop and the Power Supply light will turn off. To stop Verro before the end of the cleaning cycle, switch the Power Supply OFF.



Using Verro (cont...)

- 9** Wait 20 minutes before removing Verro from the pool to allow the pump motor to cool. Shut off and unplug the Power Supply every time you remove the cleaner from the water. Always remember to turn the Power Supply OFF and unplug it from the power outlet before removing the cleaner from the pool.
- 10** Unplug the Power Supply from the GFCI outlet. Never leave the Power Supply plugged in when Verro is not in use.
- 11** Unplug the floating power cord from the Power Supply.
- 12** Use the floating power cord to pull Verro to the edge of the pool, then use the handle to lift it out of the water. Water will drain from Verro as it is lifted. **CAUTION:** Removing Verro by its floating power cord may cause severe damage to the cord requiring costly repairs.



- 13** Store Verro and its Power Supply in a dry area out of direct sunlight. The Power Supply is water resistant, but not waterproof, and may be damaged by rain.

How Verro Works

iRobot Verro uses a powerful motor to draw 80 gallons of water per minute through the filter bag. This creates strong suction at two inlet ports under the robot that draws dirt and debris, such as bacteria, algae, leaves, and even coins into the filter bag where they are trapped.

The pump motor also drives two high-pressure jets under the robot that loosen dirt and attached particles, which are then vacuumed up.

Verro uses the force of the water being pumped through the robot to hold itself against the surface it is cleaning and to move along it.

Each time it changes direction, Verro automatically alters its course slightly so that it covers the entire bottom and sides of the pool efficiently.

Adjusting the Time Control Dial

The time control dial determines how long iRobot Verro travels in one direction before stopping and reversing direction. Adjust it so that Verro goes from the waterline on one side of the pool to the waterline on the other side at the widest point, waiting approximately two seconds on each side.



Turning the time control dial clockwise lengthens the time between Verro reversing direction; turning the time control dial counter-clockwise shortens the time.

Once the time control dial has been set to your satisfaction, it will not need to be adjusted unless you use a different type of filter bag. If Verro starts to consistently not reach the waterline, or starts moving more slowly, try cleaning the filter bag.

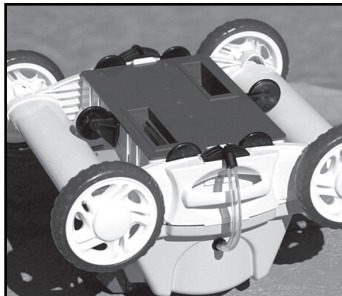
Cleaning the Filter Bag

It is very important to clean Verro's filter regularly in order to keep it running at peak efficiency.

The fine filter bag can trap particles as small as two microns across. (For comparison, the period at the end of this sentence is more than 500 microns across.) These small particles can clog the filter bag, reducing the amount of water that Verro can pump. Since Verro uses the water it pumps both to clean and to move around, a clogged filter can significantly reduce Verro's effectiveness.

The mesh filter bag is less susceptible to clogging from small particles, but it will also eventually become clogged by larger particles such as leaves, acorns, etc.

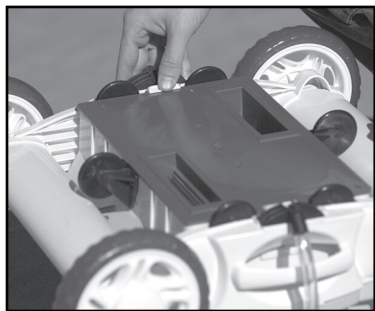
- 1** Turn the Power Supply OFF, unplug the floating power cord from the Power Supply, and remove Verro from the pool. Please keep the plug away from water.
- 2** Place Verro upside down on a towel (to prevent scratches).



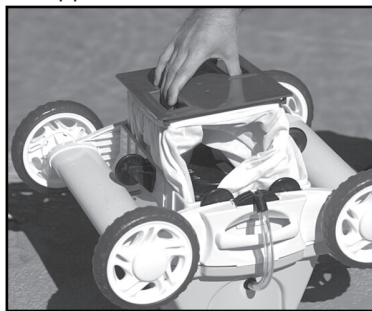
- 3** Unlock and remove the bottom panel by pushing the two locking tabs toward the sides of the robot.

Cleaning the Filter Bag (cont...)

- 4** Remove the filter bag assembly.



- 5** Remove the filter bag from the support bars.



- 6** Turn the filter bag inside out and rinse away any accumulated debris with a hose. Gently agitate and squeeze the bag while rinsing it until the water is clear. If this does not remove all visible dirt, machine wash the bag using cold water on the gentle cycle. Do not use detergents, fabric softeners, bleach or other additives and do not machine dry.

- 7** Turn the filter bag so that the felt surface is on the inside and the smooth, shiny surface is on the outside and place it back on the support bars.



- 8** Replace filter bag assembly in the robot.

- 9** Replace the bottom cover. Make sure the tabs click into place.

Maintenance and Adjustment

Rinsing Vero

iRobot recommends that you rinse Vero with a garden hose after using it. This will extend the life of the plastic and keep your robot looking good for years to come.

Storage

Store Vero in a dry place out of direct sunlight at a temperature between 50 and 104 degrees Fahrenheit. The Power Supply is water resistant, but not waterproof and may be damaged by rain. Important: Failure to properly store Vero will result in loss of warranty.

Maintenance and Adjustment (cont...)

Untwisting the Floating Power Cord

Check the floating power cord periodically for external damage.

Verro is designed to travel around your pool in a way that reduces any tendency for the cord to become twisted. However, if the cord tangles or kinks, and will not lie properly on the surface of the water, it may be necessary to untwist it using the Detangler.

- 1** Unplug the Power Supply. (Please keep the plug away from contact with water.) Unplug the floating power cord from the Power Supply.
- 2** Place the robot so that you can walk away from it for 50 feet.



- 3** Holding the Detangler in your hand, walk away from Verro. The Detangler allows the floating power cord to rotate in the handgrip so that it untwists as you walk.



- 4** If the cord is not fully untwisted by the time it is straight, simply give it a few more turns by hand.

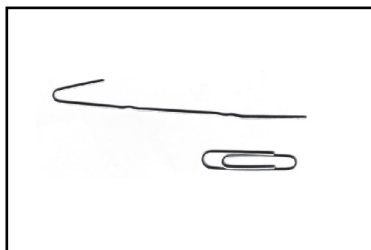
Maintenance and Adjustment (cont...)

Cleaning the Impeller

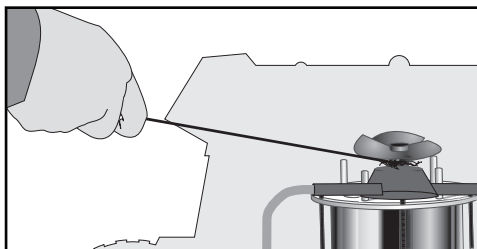
Verro uses an impeller to pump water up through the vacuum intakes at the bottom of the robot and out the jet valve housing at the top. If this impeller becomes fouled by hair, string, etc. it will reduce the amount of water Verro can pump and may reduce the life of the motor.

If you notice that Verro is not cleaning well or that it is having difficulty moving around the pool, and other measures (cleaning the filter bag, checking the vacuum intakes, etc.) have not corrected the problem, check the impeller.

- 1 Unplug the Power Supply. (Please keep the plug away from contact with water.) Unplug the floating power cord from the Power Supply.
- 2 Remove the screws that attach the jet valve ports. (See Jet Valve Housing Assembly illustration on page 7.)
- 3 Remove the jet valve port.
- 4 Inspect the impeller, especially at the bottom, for hair, string, etc.
- 5 If the impeller is fouled, bend a large paper clip as shown.



- 6** Using the bent paper clip, hook the material fouling the impeller. It may be helpful to use a small flashlight to see better.



- 7** Replace the jet valve port.

- 8** Replace the screws.

Maintenance and Adjustment (cont...)

Cleaning the Jet Tubes

Verro uses two powerful jets of water like power washers to loosen attached dirt and debris as it moves around the pool. If the tubes that carry these jets from the impeller to the nozzles under the robot become blocked, Verro will not be able to clean as well. If Verro is not doing a good job of loosening attached dirt, and other measures (cleaning the filter, inspecting the vacuum intakes, etc.) have not worked, check the tubes.

- 1** Unplug the Power Supply. (Please keep the plug away from contact with water.) Unplug the floating power cord from the Power Supply.
- 2** Examine the clear tubes for obstructions.
- 3** Remove the tube by pulling it from the holders at each end. The tubes are not glued in place.
- 4** Clear any blockage by flushing the tube with cold water.
- 5** Reinsert the tube into the holders at each end (do not use any form of lubricant other than water).

Checking the Flaps in the Vacuum Intakes

There is a flap just inside each vacuum intake at the bottom of the robot. These flaps must freely open and close. If they do not, remove any dirt or debris that is interfering with their operation.

Cleaning the Direction Baffle

Verro uses a baffle to redirect the flow of water so that it can move forward and backward. If this baffle becomes fouled or clogged, Verro will not be able to change direction.

To clean the direction baffle, direct a high-pressure jet of water from a hose into the jet valve port. It may be helpful to remove the jet valve port (see Cleaning the impeller, above) in order to see the direction baffle. Check to make sure that it swings freely in both directions.

Troubleshooting

Most problems with Verro are caused by a dirty or clogged filter bag. Verro depends on water flowing freely through the filter bag to operate at peak efficiency. If the filter bag gets clogged, Verro will not be able to clean as effectively and may not move as well. The fine filter bag can trap particles as small as two microns across and can be clogged by particles too small to see. If rinsing the filter bag by hand with a hose doesn't solve the problem, try machine-washing it in cold water. Don't use detergent, fabric softener, bleach, or any other additive. Do not machine dry the filter bag.

If you find the fine filter bag gets clogged too quickly, consider using the mesh bag instead.

Always turn off Verro's Power Supply and unplug it before troubleshooting any problem.

Problem	likely Cause	What to Do
Verro moves slowly	The filter bag needs to be cleaned	Clean the filter bag. (p. 13)
	Flaps in the vacuum intakes at bottom of robot are blocked	Check the flaps in the vacuum intakes. (p. 20)
	Wheels or axles are not turning freely	Check wheels and axles for dirt and debris.
	The pump impeller is fouled by dirt or debris	Clean the pump impeller. (p. 17)
Verro does not cover entire pool	The filter bag needs to be cleaned	Clean the filter bag. (p. 13)
	Time control dial is not set properly	Set the time control dial. (p. 12)
	Floating power cord is not positioned to allow Verro to reach all of pool	Move Power Supply so that it is near the middle of a long side of the pool.
	Flaps in the vacuum intakes at bottom of robot are blocked	Check the flaps in the vacuum intakes. (p. 20)
	Wheels or axles are not turning freely	Check wheels and axles for dirt and debris.
	The pump impeller is fouled by dirt and debris	Clean the pump impeller. (p. 17)

Troubleshooting (cont...)

Problem	Likely Cause	What to Do
Verro reverses direction before reaching end of pool	The filter bag needs to be cleaned	Clean the filter bag. (p. 13)
	Time control dial is not set properly	Set the time control dial. (p. 12)
	Flaps in the vacuum intakes at bottom of robot are blocked	Check the flaps in the vacuum intakes. (p. 20)
	Wheels or axles are not turning freely	Check wheels and axles for dirt and debris.
	The pump impeller is fouled by dirt or debris	Clean the pump impeller. (p. 17)
Verro waits too long at side of pool before changing direction	The filter bag needs to be cleaned	Clean the filter bag. (p. 13)
	Time control dial is not set properly	Set the time control dial. (p. 12)
	Flaps in the vacuum intakes at bottom of robot are blocked	Check the flaps in the vacuum intakes. (p. 20)
	Wheels or axles are not turning freely	Check wheels and axles for dirt and debris.
	The pump impeller is fouled by dirt or debris	Clean the pump impeller. (p. 17)
Verro does not reverse direction	The direction baffle is impeded	Check the direction baffle. (p. 20)
Verro is not vacuuming well	The filter bag needs to be cleaned	Clean the filter bag. (p. 13)
	Flaps in the vacuum intakes at bottom of robot are blocked	Check the flaps in the vacuum intakes. (p. 20)
	The pump impeller is fouled by dirt or debris	Clean the pump impeller. (p. 17)

Troubleshooting (cont...)

Problem	Likely Cause	What to Do
Verro is not removing attached dirt and debris	The filter bag needs to be cleaned	Clean the filter bag. (p. 13)
	Flaps in the vacuum intakes at bottom of robot are blocked	Check the flaps in the vacuum intakes. (p. 20)
	The pump impeller is fouled by dirt or debris	Clean the pump impeller. (p. 17)
	Jet tube is blocked	Clean jet tube. (p. 19)
The floating power cord is tangled or kinked	The floating power cord is twisted	Use Detangler to untwist the cord. (p. 16)
Verro gets stuck on its floating power cord	The floating power cord is twisted	Use Detangler to untwist the cord. (p. 16)
Verro will not start a cleaning cycle	Reset required	Turn Power Supply OFF and then back ON. Press reset button.
	Verro is not plugged into the Power Supply	Plug Verro into the Power Supply.
	The Power Supply is not plugged in	Plug the Power Supply into GFCI outlet only.

iRobot Customer Care

Please visit our web site at **www.irobot.com** for support tips, frequently asked questions or information about accessories and other iRobot products. We would like to hear from you.

Should you still need assistance, call our customer care representative at **877.855.8593**

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Fine Filter Bag

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