



TrackVac™  
Robotic Vacuum Cleaner

Model No. 500



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**USER MANUAL**

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## TrackVac™

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## Safety Precautions

## TrackVac™

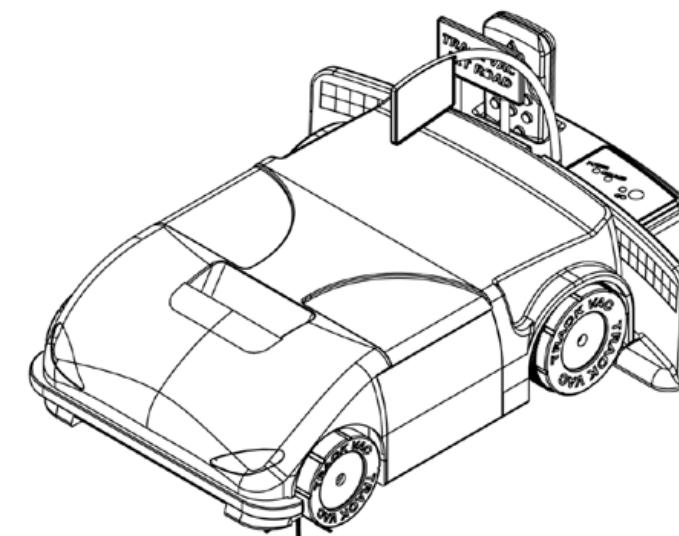
Before using this product, please read the following safety instructions and keep this operation manual for future reference.

Before using this product, please follow all normal safety precautions to avoid the occurrence of situations such as fire, short-circuit, and injury. Please make sure that you observe all the following safety precautions:

## Safety Instructions

## TrackVac™™

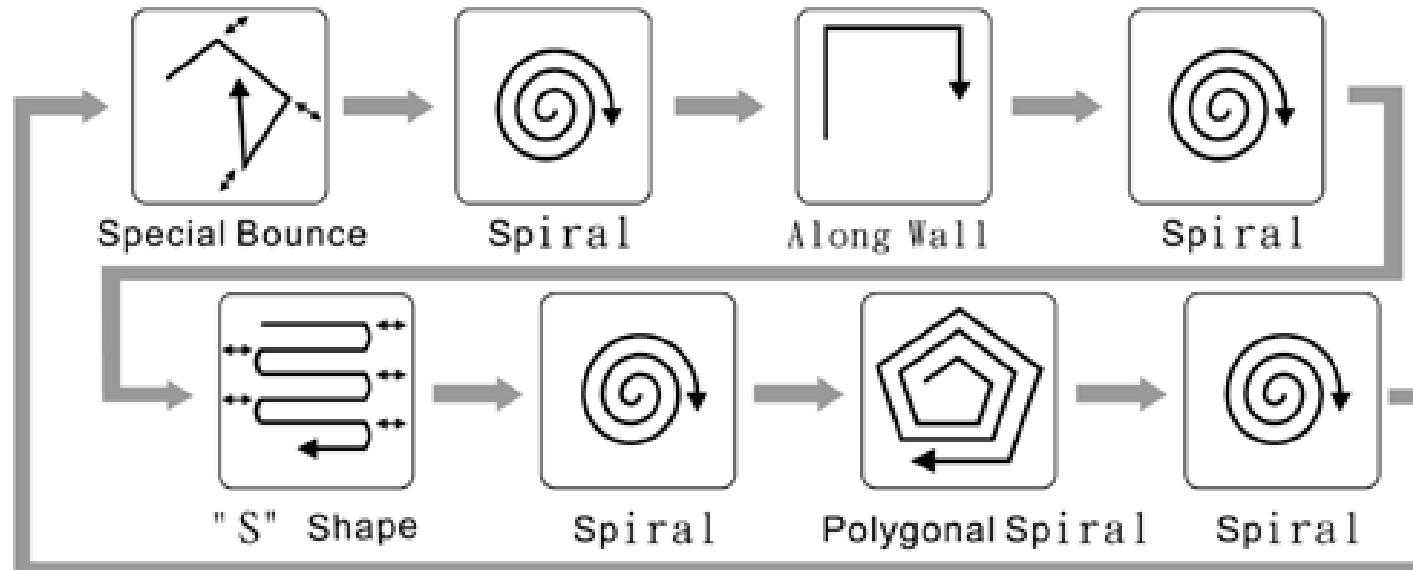
1. Read this user manual thoroughly before using this product.
2. This product IS NOT for outdoor use.
3. This product is an electronic device. Never get it wet or let it come in contact with water. Do not use it in a moist or wet environment. This is to prevent damage to the electronics inside the unit.
4. Before using this product, please tidy up things on the floor. You must remove all objects that could get caught in the rolling brush or in the air intake on the bottom of the unit. Examples include, clothing, power cords, cable, telephone cords, drapes or blinds, loose fringes of rugs. These items can get caught in the unit, and either prevent it from moving, or the unit could pull over a lamp, table, or chair (for example) and cause damage to the unit, floor, object, or person.
5. Please do not sit or stand on this product. Pay special attention to toddlers or pets in the house to prevent damage to the unit, child or pet.
6. Please do not use this product to clean a still-burning cigarette, a lit match or burning embers.
7. Please do not use this product to clean flammable or highly volatile liquids such as gasoline or other flammable liquids.
8. To prevent damage to the vacuum, make sure that nothing is obstructing the air vents on the bottom of the unit.
9. When not in use for long periods of time, the power switch must be turned off.



1. When using rechargeable batteries, please use the correct voltage and current listed on the product. If you are not sure about the standard voltage, please ask your distributor or your local electricity company.
2. Use the factory-provided batteries.
3. When the batteries need to be recharged, use the factory-provided charger.
4. Only use the battery charger indoors.
5. When your hands are moist, do not touch the battery charger, plug or power cord.
6. When you need to clean this product, stop charging, and remove the power plug.

## Special Features

1. This product is a groundbreaking, revolutionary automatic vacuum cleaner. It utilizes high vacuum suction, a rolling brush on the bottom, a side brush for cleaning along walls and other objects. All of these features make this unit perfect for cleaning a wide variety of floor types, including ceramic tile, hardwood, vinyl and most carpets. As long as you have the TrackVac™, you have a most helpful house cleaning mate at your disposal.
2. The compact shape enables this unit to clean under beds, tables and other furniture that standard upright vacuums cannot get to.
3. Once the TrackVac™ is turned on, it will follow a series of five repetitive movements: Special bounce, Spiral, Along Wall, "S" shape, and Polygonal Spiral in the following sequence. This wide variety of movements help to ensure that the unit completely cleans the room.

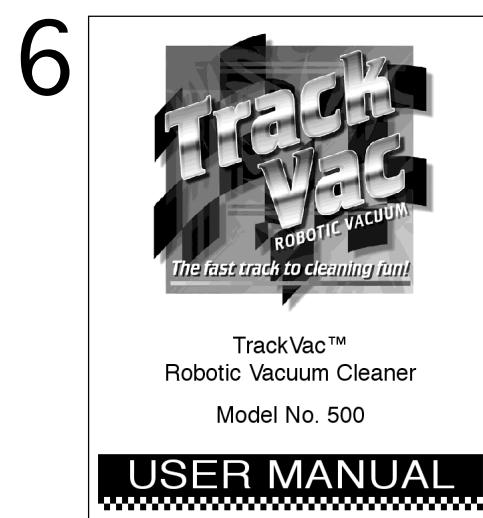
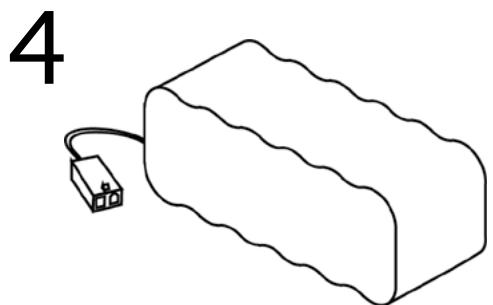
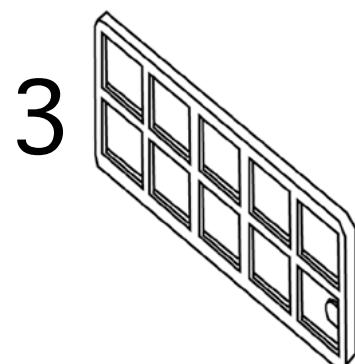
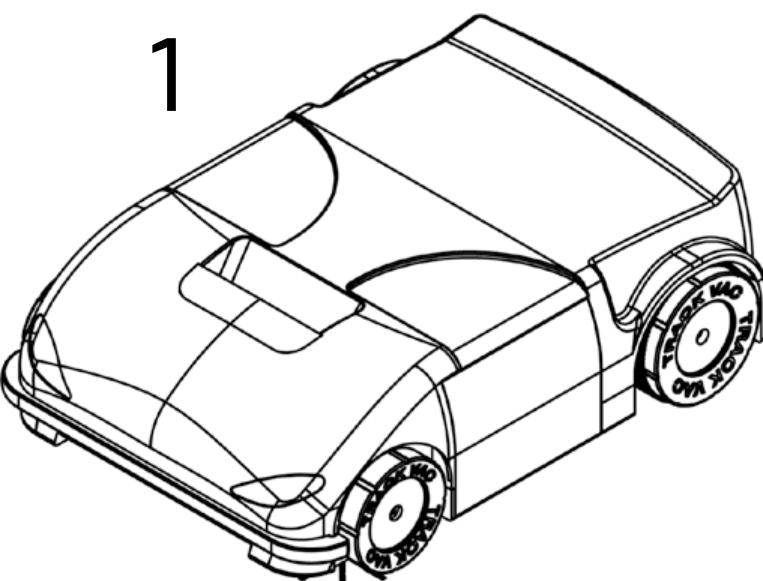


4. "MODE" button on the remote control allows you to select a specific cleaning pattern for the TrackVac™. By default the unit operate in Automatic Mode (switches between all 5 patterns), but by using the "MODE" button on the remote, you can select a specific pattern in the following sequence:
  1. Press "MODE" Button One Time = Spiral
  2. Press "MODE" Button 2 Times = Special Bounce
  3. Press "MODE" Button 3 Times = Along Wall
  4. Press "MODE" Button 4 Times = 'S' Shape
  5. Press "MODE" Button 5 Times = Polygonal Spiral and Press "MODE" Button 6 Times = Back to Automatic Pre-Programmed Cycles.
5. Sensors at the front of the unit tell the TrackVac™ when it comes in contact with a wall or other obstacle, to back up, turn and clean around the object.
6. The TrackVac™ is equipped with a RF remote control and can be operated in Vac and Race Mode. In Race Mode, you can control the TrackVac™ by the 4 steering keys to any place at the speed of 18.5 in/sec just like a racing toy car. In Vac Mode, you can also control the TrackVac™ by the 4 steering keys to any place at the speed of 10.25 in/sec and at the same time, clean the house. After you release any of the 4 steering keys, the TrackVac™ will resume the original movement that was in action before you began pressing the 4 steering keys.
7. Users can easily select a different frequency ID for their TrackVac™ by Remote control to avoid conflict with that of the other TrackVacs™ or other remote control devices on the same frequency.
8. Photo sensors on the underside of the front of the unit detect stairs, and other drop offs, to keep it from falling off the edge and damaging the unit or anything else. **Please be careful when using the TrackVac™ in "RACE" mode as the unit may move too quickly for the stair avoidance sensors to react when it is near a drop-off.**
9. A handle is built-in to the unit to make it easy to pick up and move to another location.

## Main Unit and Accessories

## TrackVac™

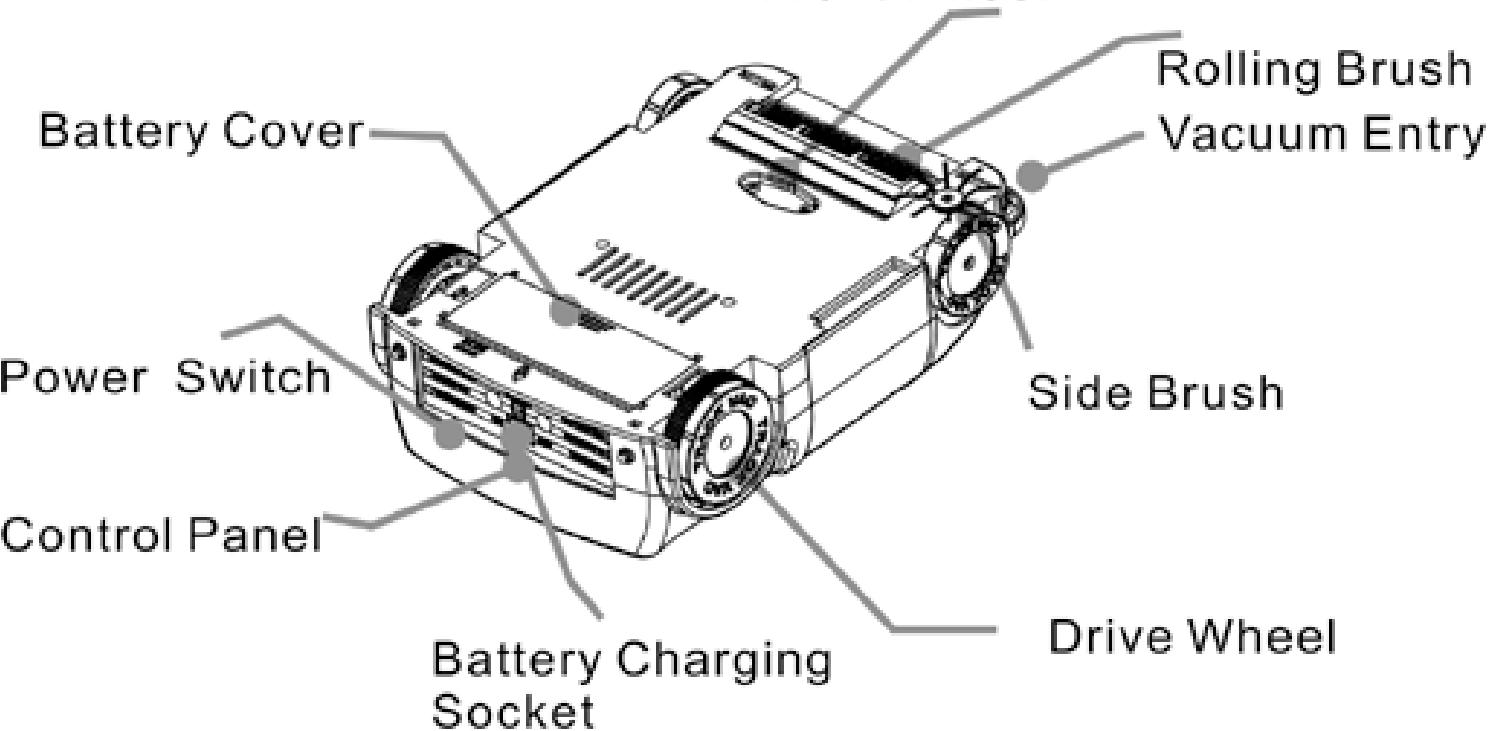
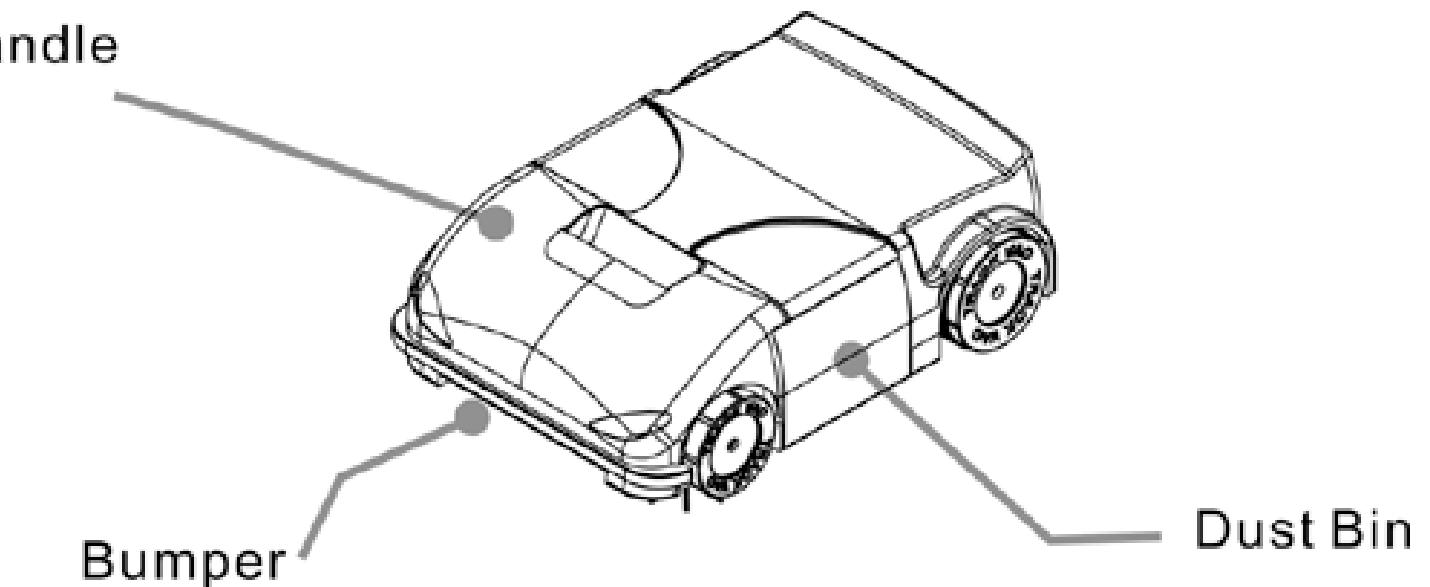
No.	Description	QTY
1	TrackVac™ Main Unit	1
2	RF Remote Control	1
3	Filter	2
4	Rechargeable Battery	1
5	Pit Road Charger	1
6	User Manual	1



## Parts of the Main Unit

## TrackVac™

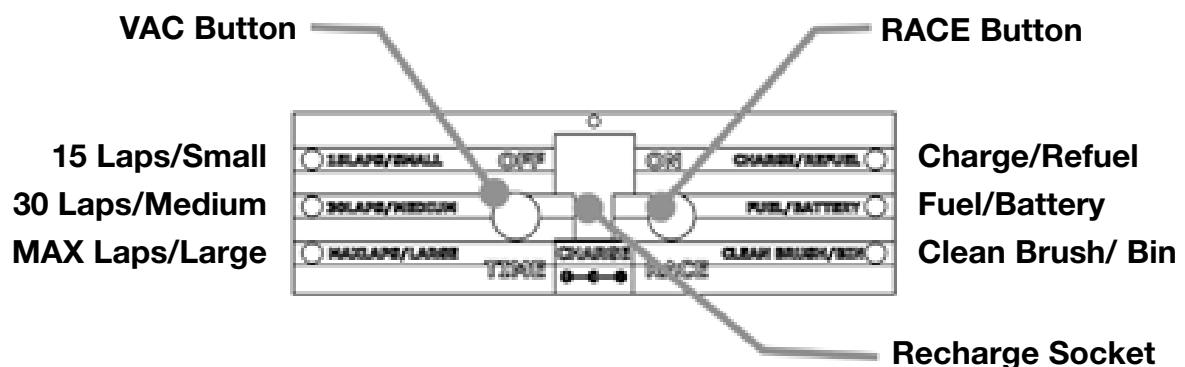
Handle



## Control Panel

## TrackVac™

1. Turn on the power switch, and the power light will light up green and make "Gentlemen, start your engine" sound. In order to protect battery, the TrackVac™ will make 5 audible beeps every 30 minutes to alert the users to Turn off the power switch when not in use.
2. Press the Vac button to select the length of operation time. When power is first turned on, the default setting is 30 Laps/Medium. Users can also select 15 Laps/Small and Max Laps/Large cyclically by continuously pressing this button.
3. Three seconds after users select the operation time and are no longer scrolling through the three different options, the TrackVac™ will emit a squealing tire sound and will start to clean the room in "Automatic" Mode.
4. When the battery is low, the Fuel/Battery light will blink red and the unit will emit a sound of "Hey guys, we need to pit". In the following situations, the Fuel/Battery light will light up: High battery temperature, overloaded motor, and no traction for more than three consecutive seconds.
6. When the dust bin is full, the Clean Brush/Bin light will blink yellow.



### Charge/Refuel Indicating Light

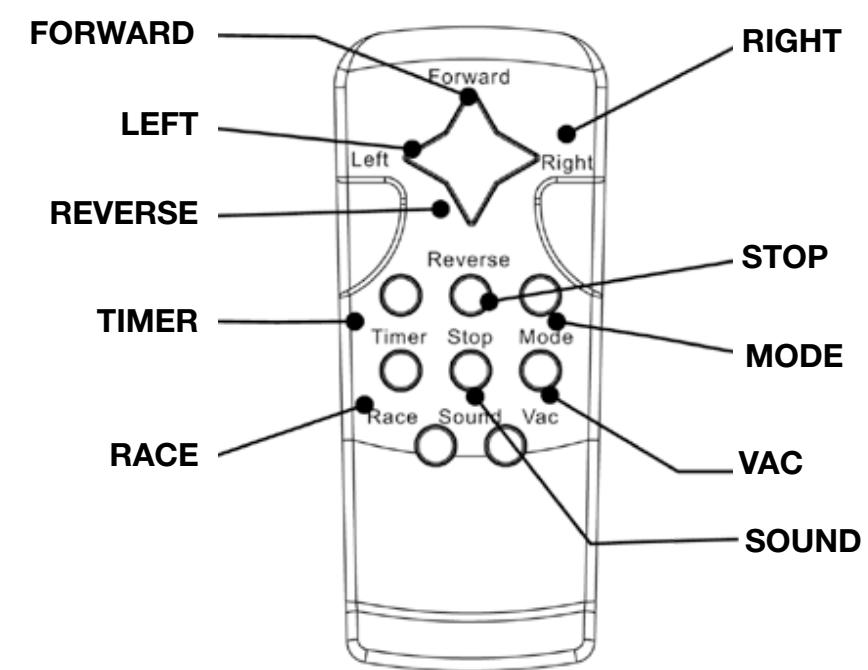
1. When the power is turned on, the light will be green. When not in use, please remember to turn off the power.
2. When recharging, power must be turned off.
3. Please see the chart below for the meaning of Charge/Refuel lights.

#### Meaning of Indicator Lights:

Color of Charge/Refuel Light	Meaning
Solid Green Light	Battery has power
Blinking Green Light	Recharging

## Remote Control Functions

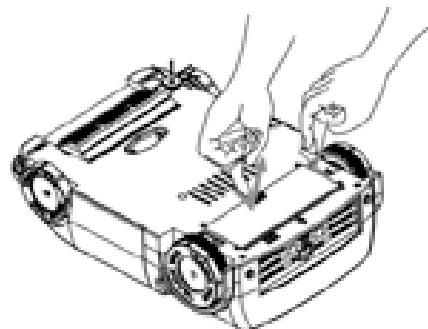
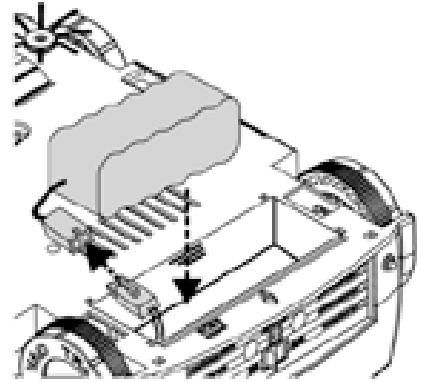
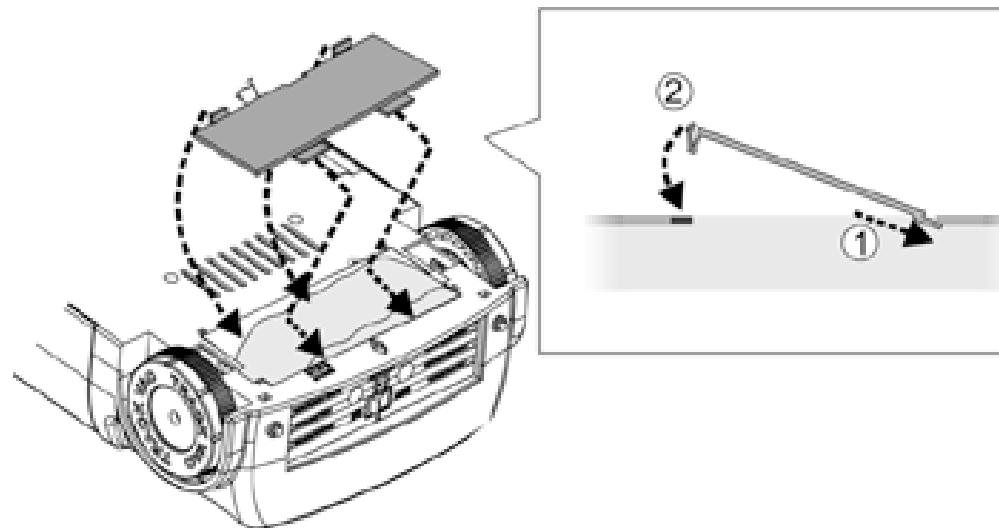
## TrackVac™



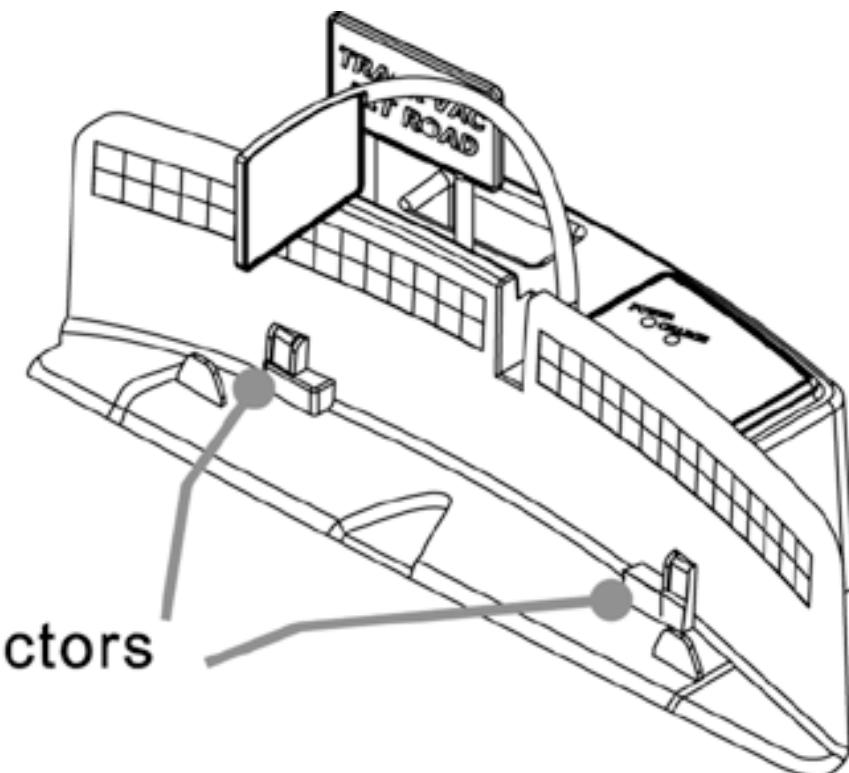
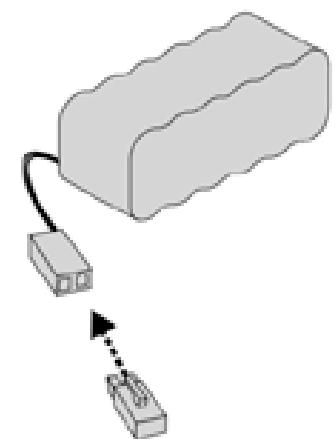
#### Function of each Button:

1. Race Button: Press this button to begin the Race Mode. Users can control the TrackVac™ by 4 steering keys to any place at the speed of 47cm/sec and the vacuuming action is NOT on.
2. Vac Button: Press this key to begin the Vac Mode. After pressing this key, users can choose between the three cleaning times by pressing the Timer Button.
3. Stop Button: Press the Stop Button to stop the activity of the unit.
4. Timer button: Use this button to select the cleaning time of the TrackVac™ from the following settings: 15min (small room), 30min (medium room) and MAX (large room).
5. 4 steering keys: When in Race or Vac Mode, you can use these keys to manually drive the unit around the room to clean specific areas. In Vac Mode, when the user no longer wishes to manually drive the unit and is no longer pressing any of the 4 directional keys, the TrackVac™ will resume vacuuming in its previous chosen "Automatic" pattern(s).
6. Mode Button: Press this button to pick a specific cleaning pattern for the TrackVac™. By default the unit cleans in "Automatic" Mode (All 5 cleaning movements in a pre-determined sequence-one after the other).
  - Press the "Mode" button once to make the unit clean in "Spiral" mode only. When the TrackVac™ comes in contact with any object while running in this mode, it will automatically stop, back up, and try to resume its previous motion.
  - Press the "Mode" button again (Twice) to make the TrackVac™ clean in "Special Bounce" mode only.
  - Press the "Mode" button again (Three times) to make the unit run in "Along Wall" mode only.
  - Press the "Mode" button again (Four times) to make the unit run in "S Shape" mode only.
  - Press the "Mode" button again (5 times) to make the unit run in "Polygonal Spiral" mode only.
  - Press the "Mode" button again (6 times) to return to "Automatic" mode (all 5 cleaning patterns).
7. Sound button: Press this key will cancel the 3 sounds of TrackVac™.
8. Uses two AAA 1.5v batteries. Please install the two batteries according to the alignment indicated on the inside of the compartment.

1. Make sure that the power of the unit is turned 'OFF'.
2. Use your fingers to depress the two tabs on the battery cover. Lift the battery cover by these tabs as shown in Illustration 1.
3. Make sure the battery is inserted in the correct orientation by referring to the label inside the cover. (Illustration 2)
4. Replace the battery cover by first inserting the tabs into the slots on the TrackVac, and then press downward on the front side of the battery cover until the plastic tabs click in place. (Illustration 3)

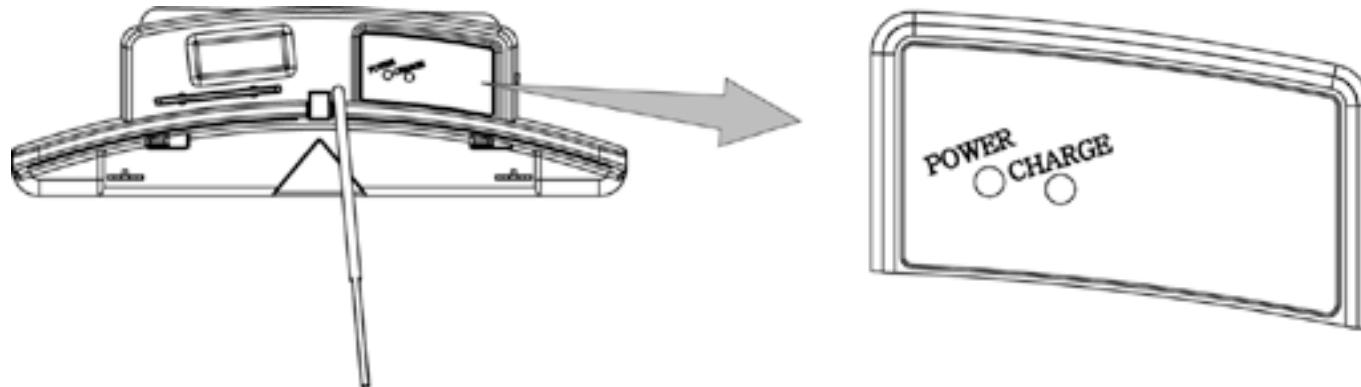
**Illustration One****Illustration Two****Illustration Three****CAUTION:**

**Please make sure the indication and the two connectors are in correct alignment!**

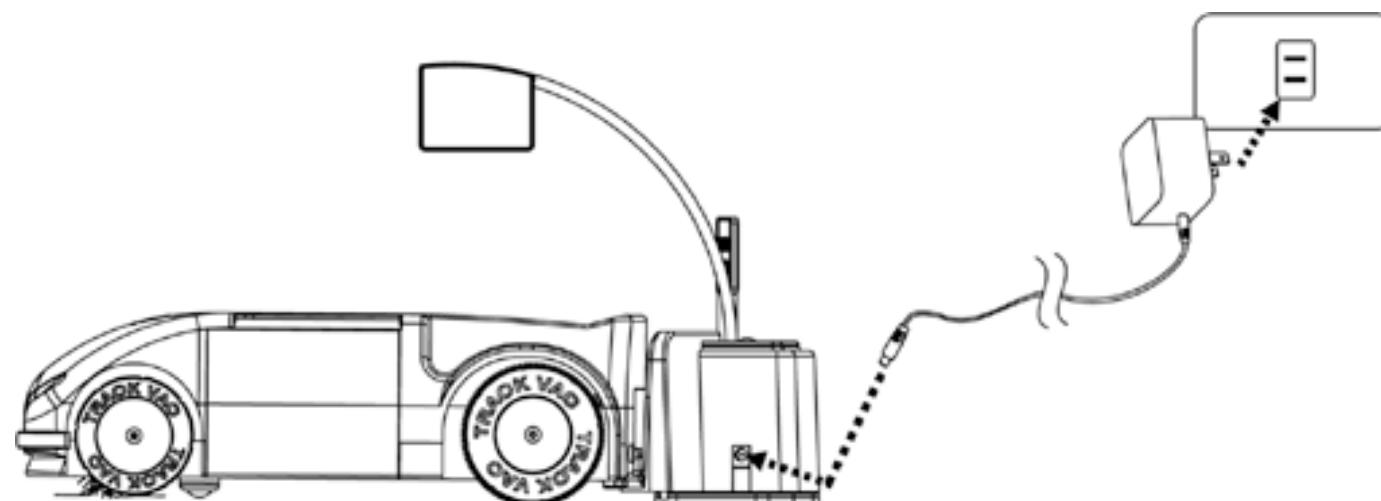


## Recharging the Battery

TrackVac™



1. Plug the adapter into the charging station first, and then plug the other end into the wall. Make sure the POWER light is on.
2. Place the vacuum unit on the charging station being careful to align the connections on the back of the unit with the corresponding connections on the charger. Make sure the Charger light is blinking on the control panel to confirm unit is charging.



## Recharging the Battery

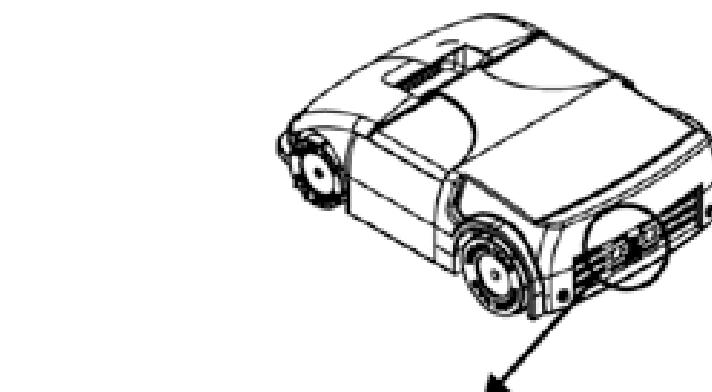
TrackVac™

### NOTES:

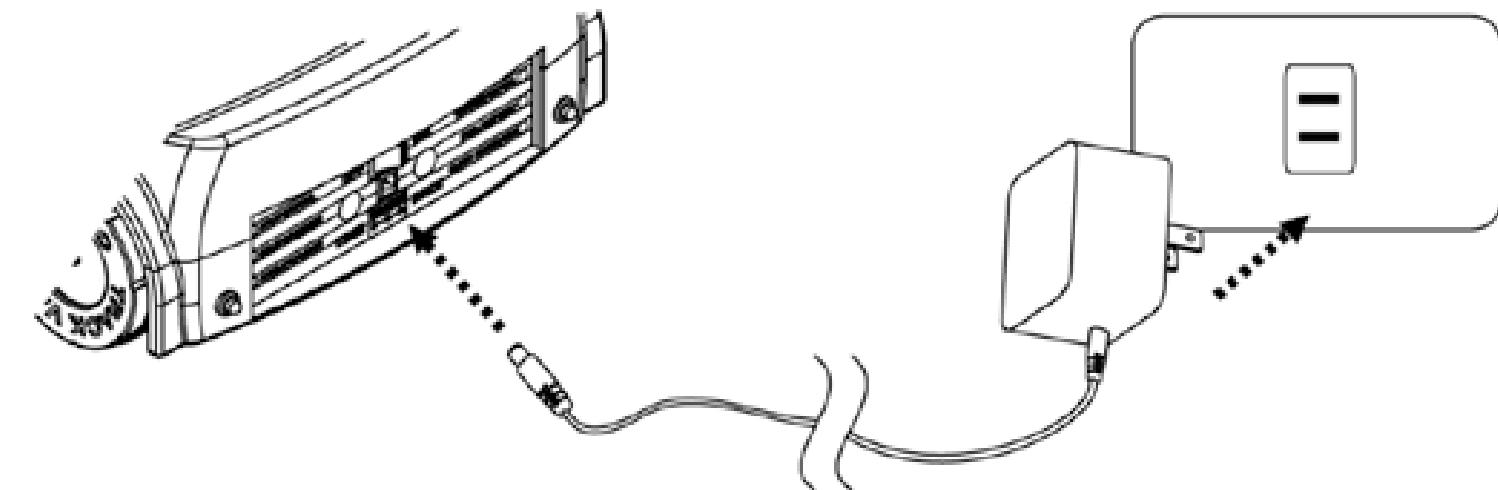
The battery needs **2.5 hours** to recharge before use.

- If the Fuel/Battery light on the control panel blinks red, the battery must be immediately charged.

1. First, make sure that the power switch on the unit is set to 'Off', and make sure the battery is properly installed.
2. Place one end of the charger into the battery recharge socket on the side of the unit, then plug the other end into a conventional wall socket (See Illustration 1). The Charge/Refuel Light on the control panel of the unit will begin flashing green, indicating that the unit is charging.
3. Once the battery has been fully charged, the unit will emit two audible beeps, and the Charge/Refuel indicating light will stop flashing and will be replaced by a steady green light.



When the power of the unit is off, plug the adapter into the battery recharge socket of the TrackVac™ first, and then plug the other end into a wall

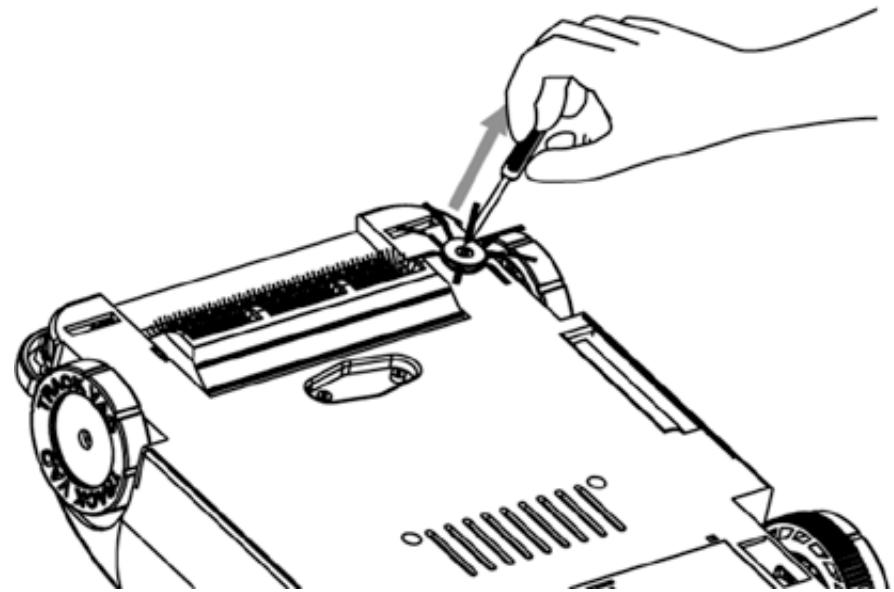


### WALL SOCKET

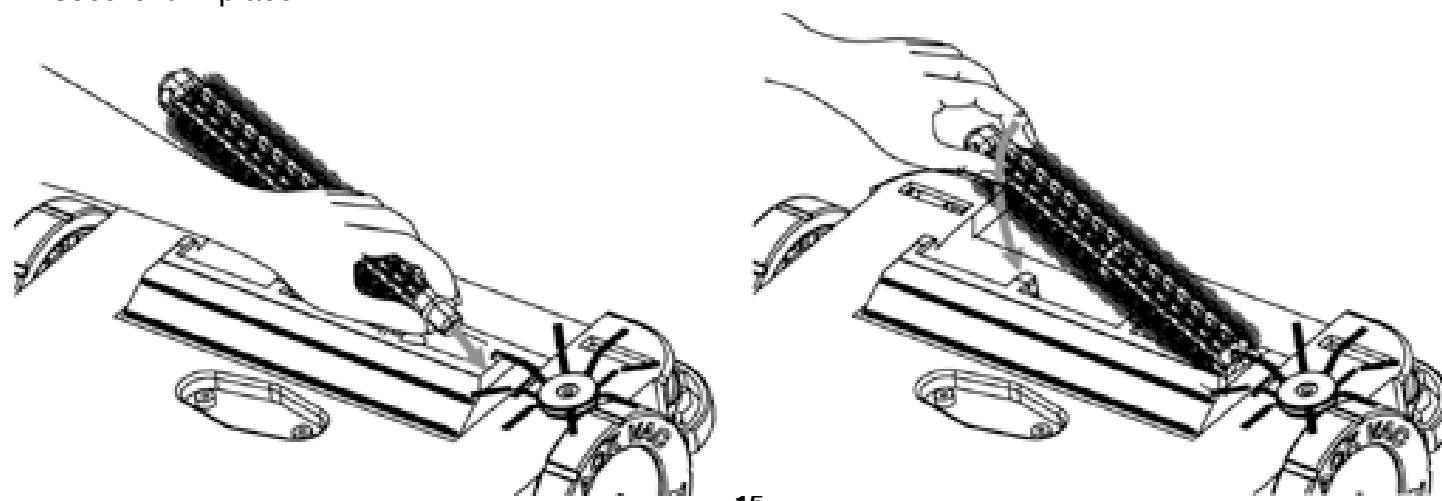
**CAUTION! Make sure the power switch of the unit is turned to OFF before recharging the battery!**

**Side Brush Installation and Removal**

- To install the Side Brush, place the Phillips head screw through the center hole of the Side Brush assembly, and align the screw with the hole in the slot for the Side Brush. Attach the screw by turning it in a clockwise direction, until the screw is firmly in place.
- To remove the Side Brush, use a Phillips head screwdriver to remove the screw in the center of the Side Brush Assembly by turning it counter-clockwise.

**Rolling Brush Installation** (see P19 for Removal)

- Ensure that the power switch of the unit is set to the 'Off' position, and turn the unit over on its top with the back of the unit facing you.
- Align the slotted end of the rolling brush with the slot in the flexible insert in the right side of the rolling brush compartment (near the side brush) and press it into place.
- Press the free end of the rolling brush down into the rolling brush compartment, and align the free end with the plastic insert on the left side of the compartment. Slide the rolling brush to the left to secure it in place.

**Preparing for use**

1. Make sure you have completely charged the unit for 2.5 hours before using it.
2. Room preparation:
  - A. Pick up all large items off of the floor that could become lodged in the brushes or the intake.
  - B. Pick up/hide all cords that could get tangled in the unit.
  - C. Move all items that could be easily knocked over.
  - D. Roll under loose edges of rugs with any type of stringy fringe.
3. **DO NOT** use the TrackVac™ on plush or long pile carpet or rugs.
4. When using the TrackVac™ in a room for the first time, watch how it operates in the room. Watch for areas that the unit has troubles operating in, and either block these areas of the room or move objects around so that the unit can clean effectively and not get stuck or hung up before it has had an opportunity to clean the entire room.

**Starting Operation**

1. First, select a frequency ID for your TrackVac™:
  - A. Turn off the power of Main Unit.
  - B. Keep the battery compartment of the Remote empty. Press any key on the Remote for at least 10 seconds.
  - C. On the TrackVac Unit, press the RACE key and turn on the power of Main Unit to enter the mode of selecting frequency ID. **This must be done within 20 seconds.**
  - D. Press any key in the Remote and don't press more than one key simultaneously. Each key on the remote represents a different frequency ID for the TrackVac.
  - E. Put the two batteries into the battery compartment of the Remote.
  - F. Wait until the TrackVac Unit emits one short audible beep. This indicates that you have succeeded in selecting a frequency ID for your TrackVac™.
  - G. You may now release the key you were pressing on the remote and begin using the TrackVac.
  - H. If the Main Unit emits only one long audible beep, please go back to A to restart the procedure.
2. Place the TrackVac™ on the floor in a relatively open space near the middle of the room to be cleaned.
3. Flip the power switch on the back of the vacuum unit to the 'On' position.
4. Set the timer of the unit to the desired cleaning time by pressing the Vac button on the control panel of the unit or on the remote control.
  - Cleaning time may vary depending on the type of floor being cleaned.
5. After 3 seconds delay, the TrackVac™ will begin to automatically clean the floor.
6. At the end of the cleaning cycle, the TrackVac™ will emit a long beep and will stop moving.
  - If the Charge/Refuel light on the unit is still green, then the unit still has battery power and can be used again.
  - If the Fuel/Battery light on the unit is flashing red, then the battery is low and needs to be recharged before the unit can be used again.
  - The unit will also emit 2 audible beeps every 10 minutes to help you to find it, and to remind you to charge it before using it again.

### **Stopping Operation**

1. Press the Stop button on the remote control.
2. Pick the unit up off the ground with the built in handle located on the top of the unit. The unit will continue to run for several seconds, and then it will stop and emit a long audible beep.
3. To resume cleaning, place the unit on the ground and press the Vac button on the remote or on the control panel of the unit.

## Cleaning and Maintenance

The maintenance of the TrackVac™ is very simple, but to maintain proper performance of the unit, please follow a routine cleaning and maintenance schedule.

1. Make sure to clean out the Dust Bin and to brush off the Air Filter when the yellow light is blinking.
2. Make sure that the vacuum intake is free of any obstructions.
3. Check to make sure that the bristles of the Side Brush are free and not tangled.
4. Make sure that there is not a lot of hair, strings, etc. caught up in the Rolling Bristle Brush.
5. Remove and clean out the Rolling Bristle Brush often for better results.
6. Make sure that there is nothing obstructing the air ventilation slots on the bottom of the unit.

1. Make sure the power to the unit is 'Off'.
2. Remove the Dust Bin from its compartment by grasping the bottom side of the Dust Bin and pulling it out. (see Illustration 1, 2- next page)
3. Remove the Air Filter from the Dust Bin by firmly holding the Dust Bin in one hand, and pulling the Air Filter straight out by the tabs on the Air Filter. (see Illustration 3, 4- next page)
4. Empty the contents of the Dust Bin into a trash can. (see Illustration 5- next page)
  - You may rinse out the4 Dust Bin with water if you need to. (see Illustration 6- next page)
  - Allow the Dust Bin to completely dry before using it again.
  - The Air Filter can be rinsed out with water.
  - Make sure the Air Filter is completely dry before using it again.
5. **DO NOT** clean the Dust Bin or the Air Filter in a Clothes Washing Machine or a Dish Washing Machine.
6. While the Dust Bin is removed from its compartment, turn the unit over, and brush away any excess dust that might have accumulated in the compartment into a trash can. (Illustration 7-next page)
7. Once the Dust Bin and Air filter are completely dry, put the Air Filter back in place on the Dust Bin. (Illustration 8- next page) Then put the assembled Dust Bin and Air Filter back into its compartment.
8. Put the assembled Dust Bin and Air Filter back in place by first inserting it into its compartment, and then push inward until it reaches its proper location. (Illustration 9- next page) Make sure the Dust Bin Cover is securely in place before operating the unit to ensure proper operation.

## Cleaning Dust Bin and Air Filter

TrackVac™

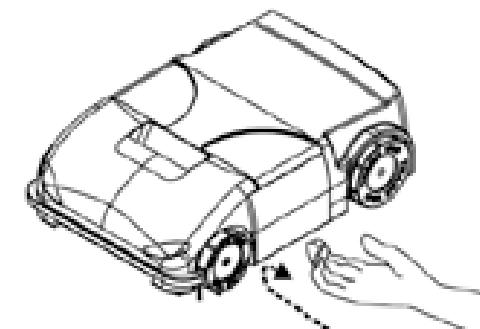


Illustration 1

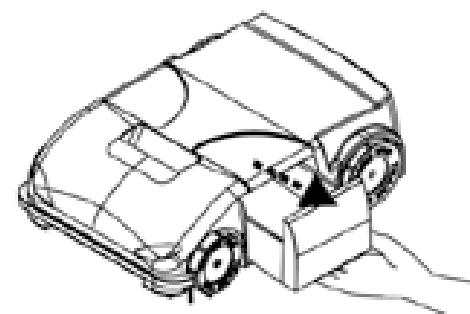


Illustration 2

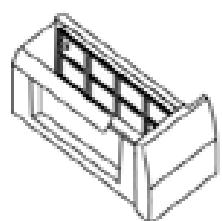


Illustration 3

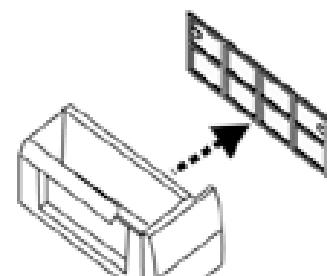


Illustration 4

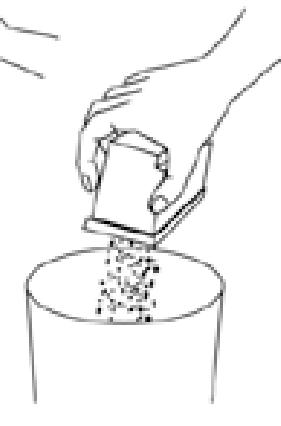


Illustration 5

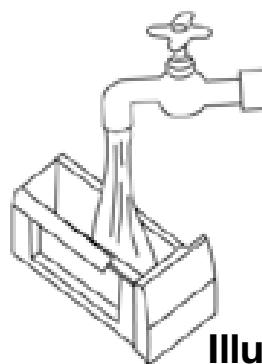


Illustration 6



Illustration 7

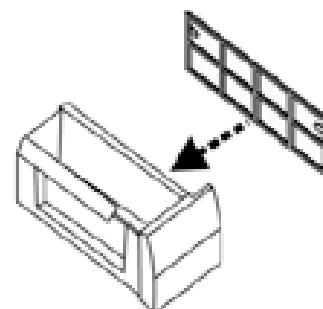


Illustration 8

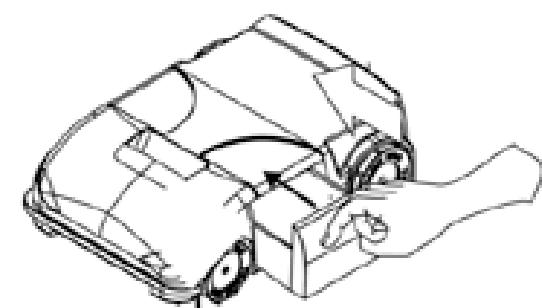


Illustration 9

### Cleaning the TrackVac™

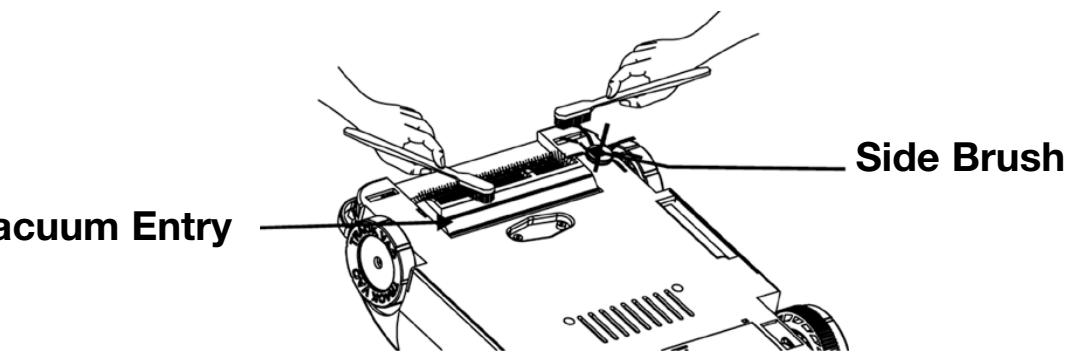
Over time dust and dirt can accumulate in different areas of the unit, DO NOT use Water to clean the unit itself! This is an electrical unit, and if any of the electric components get wet, the unit will no longer work, and could cause a short circuit and potentially harm someone. Use Canned Air, a brush or a dry cloth to wipe away accumulated dust and dirt.

## Cleaning the Vacuum Entry

TrackVac™

After operating the machine for a period of time, dust and dirt will accumulate on the vacuum entry on the bottom of the TrackVac™. Cleaning this area regularly will help ensure that the unit performs properly.

1. Make sure the power switch on the TrackVac™ is in the "OFF" position.
2. Turn the unit upside-down and brush away any dust that has accumulated inside the vacuum entry area as shown below. Dirt will accumulate on the vacuum entry on the bottom of the TrackVac™. Cleaning this area regularly will help ensure that the unit performs properly.



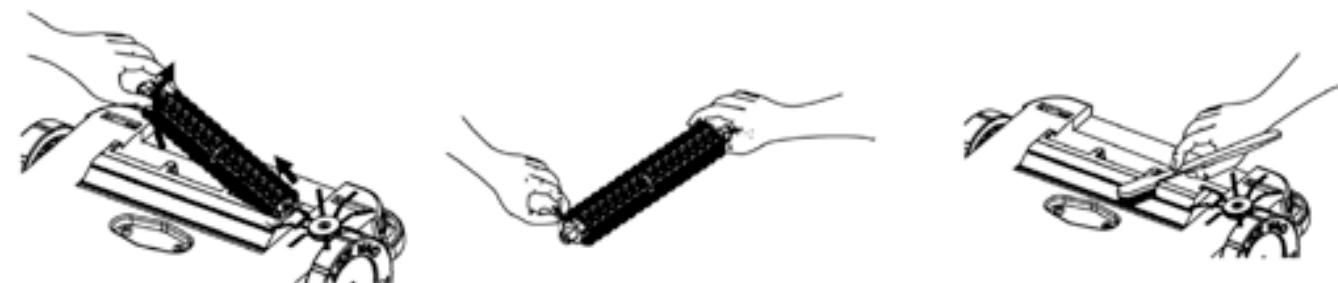
Vacuum Entry

Side Brush

## Cleaning the Rolling Brush

Hair and other stringy items can get caught in the rolling brush over time.

1. Make sure the power switch of the unit is turned to the "OFF" position.
2. Turn the TrackVac™ upside-down and place it on a flat surface with the back of the unit facing you.
3. Remove the Rolling Brush from its compartment by grasping the left side of the Rolling Brush, and sliding it toward the right.
4. Lift the free end of the Rolling Brush out of the compartment, then slide the Rolling Brush to the left, freeing it from the flexible insert.
5. Manually remove any hair, string or other objects from the rolling brush to ensure proper performance of the unit.
6. With the Rolling Brush removed, loosen any dirt that has accumulated in the Rolling Brush compartment with a brush, then dump the dirt into a trash can.
7. Re-install the rolling brush following the steps outlined in Rolling Brush Installation and Removal (P.14)



No.	Item	Description
1	Power Consumption	Around 24 Watts when fully open
2	Input Power	.300 Watts
3	Suction	1 brush sweep and vacuum
4	Better Cleaning Ability	.70% sweep 30% vacuum
5	Noise	<80 dB
6	Voice Chip with Clear Speaker	Sound of race car and person saying, "Gentlemen, Start Your Engines!" when you push Start. "Squealing tire sound" 3 seconds after selecting the run time. "Hey Guys, We need to pit!" sound battery needs to be recharged.
7	Net Weight	.6 lbs with battery pack of 1.3 lbs
8	Capacity of Dust Bin	around 0.2 Gallon
9	Types of Repetitive Motion	.5 Types: spiral, special bounce, along wall, S-shape, polygonal spiral
10	Carpet Type can be used	Short pile, hardwood floors
11	Cleaning Capability	.20 minutes at area of 16 ft x 10 ft
12	Running time with fully charged battery	.70 minutes
13	Spare Parts	Air filter, dust bin, rolling brush, battery pack, charger, remote control
14	Body Style Design	Nascar Driver Look, Exact replica with all driver sponsors
15	RACE Mode	.18.5 in/sec
16	Battery	.14.4V 2500mAh, Ni-Cd or 14.4V 2500mAh Ni-MH
17	Dimensions	.Length 12", Width 11.25", Height 4.5"
18	Look	.Automobile Race Car Look
19	Moving Speed of Machine	.Vac mode 10.25 in/sec
20	Remote Control	.RF remote control at 315 MHz, around 50 ft. controlling range
21	Fast adapter/charger	.22Vdc 1000mA switching, 2.5 hours charging time
22	Air Filter	.HEPA type

**Replacement Parts for your TrackVac™**

Over time, after hours of use, you will need to replace some of the parts on your TrackVac™ to ensure proper functionality. You can order additional brushes, filters, batteries, etc. from our website at [www.vesture.com](http://www.vesture.com) or you may call us at 336-629-3000 to get these items.

Should your TrackVac become scratched and unattractive after hours of use, you can order a new body cover to make it look like new again. This change is simple and can be done easily. You may even have a change of heart and decide to pull for a new "favorite" driver. If so, simply contact us and see if we are offering your new drivers body style at that time.

**TrackVac™ and the family**

We do not recommend letting children control the TracVac™ unsupervised, however, we do encourage you to get the entire family involved in the cleaning process by using the TrackVac™ as a way of making housework fun!

Better yet, get 2 or 3 units and get everyone in on the fun. Cleaning can be fun and quick with several people joining in to get the job done. The family can time one another to see who can clean the room fastest and with the most precision. Should you decide to get several TrackVacs™, each unit can be programmed to a different frequency to ensure that someone else does not steer your vacuum into harms way.

**TrackVacing™ while doing other chores**

You can also turn the units on when leaving the house to let them do the cleaning for you while you finish other important chores. If so, be sure to prep the area to ensure that the unit will not get entangled in any power cords or other items which could be damaged or cause damage to the vacuum.

NOTE: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.