

# ONYX

TECHNOLOGY POWERING A CLEANER FUTURE

**RX34**  
RIDE-ON FLOOR SCRUBBER



## OPERATOR MANUAL

RX-34 RIDE-ON 34" DUAL HEAD / BATTERY SCRUBBER

This Guide provides necessary instructions on machine operation and maintenance. Before operation or use of this machine, please carefully read and understand this Guide.

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12703 Commerce Station Dr • Suite 200  
Huntersville, NC 28078  
704.827.9368

Website: <https://www.onyxolutions.com>

No further notice will be given for possible change of specification and parts.

### Machine Information:

Please fill in when installing for future reference.

Model number: \_\_\_\_\_  
Machine serial number: \_\_\_\_\_  
Sales representative: \_\_\_\_\_  
PO number: \_\_\_\_\_  
Date PO placed: \_\_\_\_\_  
Installation Date: \_\_\_\_\_



**RX34**  
RIDE-ON FLOOR SCRUBBER

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## PARTS ORDERING

When ordering the replacement parts, please refer to the ONYX website at [www.onyx solutions.com](http://www.onyx solutions.com). Use of the published Illustrated Parts Lists (IPL's) to identify the correct part number required is required to support accuracy of parts ordering.

Machine IPL's can be found at the top of the SHOP page of the ONYX website. Before matching parts or accessories, please firstly determine your machine model and serial number. You can order parts and accessories from any authorized service center or dealer by telephone at 704-827-9368, or email us at [sales@onyx solutions.com](mailto:sales@onyx solutions.com).

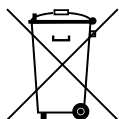
## WARRANTY CLAIMS

ONYX Warranty Statement (policy) and Warranty Claim form can be found on the SUPPORT page of the ONYX website, [www.onyx solutions.com/warranty-submission](http://www.onyx solutions.com/warranty-submission)

## TECHNICAL SUPPORT

Technical support is available by submitting a HELP TICKET on the CONTACT US page of the ONYX website, [www.onyx solutions.com/productsupport](http://www.onyx solutions.com/productsupport).

## PROTECT THE ENVIRONMENT



Please abandon the old machine components such as packaging material, battery, etc. and toxic liquid such as anti-freezing agent and oil according to your local regulations on waste disposal and on the premise of maintaining environmental safety. Please ensure to carry out the recycling well.



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## SAFETY PRECAUTIONS

The following notation is to arouse the reader / user note, to enable the machine used correct and safe. The specific explanation is as follows:  
Preliminary information

The following notation is to arouse the reader / user note, to enable the machine used correct and safe. The specific explanation is as follows:



**WARNING:** Special emphasis on the process to avoid damage to the machine and any generation of hazardous conditions.



**DANGER:** Stressed that this action will cause great danger, the operator must be especially careful to avoid personal injury.

### IMPORTANT!

Be sure to read this manual carefully. Need readily available. If it is damaged or missing, contact your dealer or contact the manufacturer asking for a copy. We reserve our right to modify products, but also haven't got obligation to update the old manual. Before open and use automatic scrubber-dryer, please read the specific manual Content, learning its outline, and then follow the instructions of the operation. To make use of the machine have the longest life and make it has more prominent effect, please operate fully in accordance with the table in the contents. We are very pleased that our machines you can choose, if problems please feel free to tell us, we will be your requirements to do the most satisfactory answer.

### WARNING:

- 1) This machine is designed to be used only for automatic washing and drying Machine. Therefore, we affirm that any excess above the level caused by the use of any consequences of any responsibility. All The risk borne by the user. Special needs to be emphasized is that this machine can not be used tractors and manned use.
- 2) The automatic washing machine to dry the carpet outside the level of inter(Or) 10% of the slope angle) caused by any question Problems, sabotage, accidents without liability. This affirms the same if used for any kind of accessories not authorized to make Used. And any changes without permission.
- 3) This machine does not apply to fill with toxic or flammable materials. Please check the category U.
- 4) The automatic scrubber-dryer used materials must be authorized.
- 5) When the machine still works, keep a safe distance.
- 6) When use of the machine, keep other people, especially children in a safe distance.
- 7) If you need to open the machine to check or replace parts, turn off the machine and check the following items:  
All the motors are in off status Ignition has been removed
- 9) Transportation of this scrubber-dryer must be safe.
- 10) The batteries must be checked inside the room with ventilation Environment.
- 11) The dirt collected in the machine must be disposed in a proper placed under the law.

## GENERAL INFORMATION

### ACCESSORIES

When you need replace parts, only use original accessories by manufacturers. To avoid more serious damage to the machine and make the machine perform better, please replace spare parts on time.

## TECHNICAL PERAMETERS

Performance	Unit	RX-34
Maximum cleaning area	m <sup>2</sup> /h	5800
Cleaning width	mm	860
Suction head width washing	mm	1100
Maximum transmission speed	km/h	5
Maximum reverse speed	km/h	4
Maximum operating speed	km/h	5
Maximum working gradient	%	15

Noise Levels (ISO 3744/95)	Unit	RX-34
Noise when working	db(A)	< 70

Vibration	Unit	RX-34
Frequency of vibration acceleration values	m/s <sup>2</sup>	< 0.5

Brush	Unit	RX-34
Brush	n <sup>o</sup> /type	2/disc(A)
Brush location		main
Brush speed	rpin	210
Brush downward pressure	Kg	30
Brush lifting system	type	electric
Brush diameter	mm	410

## GENERAL INFORMATION

Squeegee	Unit	RX-34
Squeegee	type	not fixed
Lift up and down	type	electrical

Water Tank	Unit	RX-34
Clean water tank capacity	it	150
Sewage tank capacity	it	165
Trash box	it	
Vacuum Operation	mm/H <sub>2</sub> O	1600

Operation	Unit	RX-34
Steering wheel		
Front wheel with the pinion and gear drives	type	mechanical
Minimum U-turn space	mm	1380

Driving Motor	Unit	RX-34
Constitution		Metal
Type	type	MR250
Power	n <sup>o</sup> /v/w	1-36-800

Brush Driving Motor	Unit	RX-34
Constitution		CIMA
Type	type	
Power	n <sup>o</sup> /v/w	

Vacuum Motor	Unit	RX-34
Constitution		EDTGTRS V36H38
Type	type	
Power	n <sup>o</sup> /v/w	1-36-600
Total Power	W	2400

## GENERAL INFORMATION

Battery	Unit	RX-34
Battery quantity & capacity	n <sup>o</sup> -V-Ah	1-36-320
Battery size (L x W x H)	mm	760X10X460
Water in the battery	type	Distilled Water
Continuous working time	h	4*

### DRIVING

Forward and backward.

### TYPE

Front wheel drive

Wheel	Unit	RX-34
Front wheel	mm	250
Back Wheel	mm	300

Brake	Unit	RX-34
Brake Pedal	type	Mechanical
Parking Brake	type	Mechanical

Machine Size	Unit	RX-34
Length	mm	1640
Width	mm	830
Height	mm	1400

Weight	Unit	RX-34
Mechanical weight (not including battery)	kg	310
Mechanical weight (including battery)	kg	721
Weight before working	kg	837
Battery Weight	kg	411

## GENERAL INFORMATION

Apparatus	RX-34
Water tank warning light	X
Low water tank warning light	X
Battery warning light	X
Battery warning light and alarm display	
Emergency stop switch	X
Speed switch	X
Brush Pressure gauge pressure	
Forward / Reverse switch	X
Vacuum motor switch	X
Brush Switch	X
Speaker	X

Standard Accessories	RX-34
Absorbing strip	X
Brush	

Options	RX-34
A. Round Brush	X
B. Rolling Brush	X



1. Brake Pedal / Parking Brake Lever
2. Throttle Step Board
3. Water Tank Cock Hand Lever Switch
4. Vacuum Motor / Absorb Head Control Switch
5. Emergency Stop Switch
6. Speakers
7. Speed Switch
8. Power Alarm and Display Alarm
9. Dirty Water Tank Full Warning Lights
10. Clean Water Tank Empty Warning Light
11. Brush Control Switch
12. Start Switch
13. Forward / Reverse Joystick
14. Tank Cover
15. Reverse Alarm

**1. The brake pedal / parking brake hands lever.**

Pedal 1 is the control of the machine's pedal travel or work Brake lever 2 lock pedal 1 and control the machine parking and Brake. (See the "brake" section)

**2. The accelerator pedal**

Control the front / back speed.

**3. Tank petcock switch hand lever**

On or off and adjust the flow to the brush.  
Off position 0.  
Open positions 1-4.

**4. Vacuum motor and suction switch**

Control vacuum motor and lower the suction head.  
Location. "Stop" vacuum motor off, water suction head lift  
Location. "Fan" vacuum motor on, water suction head down.

**5. The emergency stop knob**

At the same time cutting off all the control system.  
When an emergency occurs, press the switch. Restart operation, turn the knob counter clockwise 1 / 4.

**6. Speakers**

Control horn operation.

**7. Speed Switch**

Used to set the speed when moving or working.  
Transferred to the "Low" identifies the machine is set to low speed in order to thoroughly clean.  
Transferred to the "High" setting the machine to identify the high-speed, clean faster.

**8. Power alarm and display alarm**

Displays the machine's working time and status of battery, sends alarm signal when battery is low.

**9. Dirty water tank full warning light**

sends alarm signal when dirty water tank is full.





## 10. Clean water tank empty warning light

## 11. Brush control switch

Control the rotation of the brush motor and brush upgrade down.  
Location P. "stop": the motor off, brush upgrade.  
Location, rush ": motor on, brush down.

## 12. Key start switch

Activate all of the electrical control system components. Location. "0", the electric system off  
Location. "1" electrical system open

## 13. Forward and reverse selection lever

Provide washing machine forward and backward.  
Position "Forward": washing machine go forward.  
Position "Backward": Washing machine go back.

## 14. Water tank cap

To fill the clean solution tank.

## 15. Back and forward warning light (red)

This light indicates the wrong reverse activated and stop the machine. Continue, as 13 operation described.



In this manual, the machine described in line with EC standards and on the machine with a number 98/37/EEC (machinery standards). Person in charge of the machine must comply with EEC directives and local regulation of the working environment to ensure the operation of machinery healthy and safe. Usually start the machine before a preliminary examination.



**WARNING:** The machine can only be used by authorized operators. Prevent unauthorized use. Any modification, adaptation and application that may lower the safety performance of the machine are prohibited. It will not cause danger if you check the machine when the switch and motors are on off status. Any working behavior that may lower the stability of the machine is prohibited. Please wear gloves and sun-protected glasses while working outdoors.



**DANGER:** In addition to the rules need to be addressed, the person in charge of the machine must make the following clear to the machine operators: Fixed or mobile hoses must be placed on the correct position. If the rack is removed, or the security system is not connected or short circuit, regardless of any reason, the machine must be repaired immediately before the operation. The machine can only be used under the proper conditions according to proper purpose of use. Comply with the same request in accordance with the purpose of the use and maintenance instructions, and in accordance with professional inspection and maintenance conditions. It is prohibited to use the machine to vacuum flammable or toxic liquids and dust. It is dangerous to touch the moving parts of the machine, this kind of behavior is completely not allowed. If you have to touch these parts, please turn off the machine and remove the key from the dashboard first. The machine is not equipped with a hood, please do not operate in a toxic smoke area and hazardous area. Prohibit persons other than the operators to transport.

## MACHINE PACKING

Machine package deliver by flat tools. Machine weight and size are provided in the technical parameters. Forklifts must be placed so that the center of the machine has a half in the truck on the. Packaging must be very careful to avoid collision. need to raise the machine or lift too high.

## UNLOADING PACKING

Opening the machine must be careful and gentle. Machines must use metal or wooden ramp into the ground.

## TREATMENT AFTER UNLOADED PACKING

After unpacking, check the machine, install the battery if it isn't installed, if there is a short distance transport after use, disconnect battery cable, remove the brush and suction cutter head. Before the long-distance transport, the machine should be restored to the original packaging. The machine can be implemented within a short distance.

## USE OF SCRUBBER-DRYER

Necessary prevention

- 1, The machine must be used only by competent and reliable personnel.
- 2, when the machine is not in use, unplug the start key , and put hand brakes on
- 3, when the machine is not in use, lift up the brush in order to avoid distortion of brush 4, Do not park on the slope.



**WARNING:** Before using the machine, first check the battery's liquid volume.

## START THE SCRUBBER-DRYER

Steps to launch the machine;

1. Confirm the sewage tank 2.
2. Fill up the clean water tank 1.
3. Check the brush raised to above ground. (button 11 for a "stop" Figure .3) \*
4. Check the brake is released
5. Insert the key 5 to the total control panel (Fig.3) and clockwise (this will give total control system power supply).
6. Press the button 4 to turn on the suction motor (Fig.3).
7. Press the button 11 to turn on the brush motor (Fig.3).
8. Open solution tank by the pressing handle to lever 3. (Fig.3).
9. Move the joystick 14 on the location of A. (Figure .3)
10. Begin to travel and get a good speed, slow step on the power pedal 2 (Fig.3).

## RULES OF OPERATION

Don't allow other people close to the machine. Machines can only be used by an experienced operator authorized by the person in charge. The operator must be in proper physical and mental state, not in alcohol, drugs and under the influence of drugs.

Ensure the following:

There is no unrelated things on the machine. (Eg, tools, rags, equipment, etc..)

After turning on the machine, there is not a strange noise. If there is a strange noise, you must immediately stop the machine and check the cause of the noise. All security guards are turned off properly.

Do not lower or raise any doubt about the safety of the operation. Must not work in any way reduce the stability of the machine.

To keep a safe distance from the floor And sidewalks which is easy to make the machine fall over the edge or surface. Do not drive on slopes, and do not turn too fast, especially the local board does not flat, do not use the machine in a dark environment. Required special attention near the shelf.



**WARNING:** Do not use water suction system when the water used out. If this happens, it is treated as the improper use of the machine, and the loss of the machine warranty.

## PROCESS OF CLEANING

The process of using the scrubber machine is very simple. Experience can help you choose the most suitable cleaning brush and cleaning detergent, to make decision when to use cleaning and drying processes to improve the cleaning effect. If the ground is very dirty, we will use two-stage process. The first stage is to use the brush in tens of square meters of floor, and the suction head lifted. This will leave detergent on the floor in order to remove the dirt better. The second stage is to lower the squeegee head to vacuum sewage.



**WARNING:** This type of operation must implemented in the place where unauthorized officer must not enter the place; should put an appropriate sign near the cleaning spot. In order to complete the cleaning process, perform the following procedure: press the button labeled with brush mark 11( Figure .3) to start the brush motor. Turn on clean water tank switch mark 3(Fig.3) to release clean water. To set the speed of the water flow, set the clean water control lever 3 in the middle, so that the entire surface behind the brush will be immediately wet, and there will be no excess water spilling out of the squeegee. Press the button to start the vacuum motor, to lower the squeegee. Step on the accelerator pedal 2(Figure 3), the machine will move forward in the required speed and cleaning job begins. You can choose the speed of the machine by turn the "high low speed switch" to left to run the machine on high speed to get more cleaning efficiency and turn it to right to run on low speed to get better cleaning results. There are two speeds to choose from. Rotary switch 1 (Figure 2), Transferred to the "Low" identifies the machine is set to low speed in order to thoroughly clean. Transferred to the "High" setting the machine to identify the high-speed, clean faster.

When moving the machine backward, pull the joystick 14 (Figure 3) backwards, when vacuuming and cleaning operations are completed, perform the following process.

- Press down the clean water tank switch hand lever to last level to turn off flow.
- Lift the switches mark 11(Figure 3) upwards to stop the brush motor and lift up the brush.
- Lift the switches mark 4 (figure 3) upwards to vacuum motor and lift up the squeegee. Press the button 8(Figure 3) to the "STOP" position, water suction head lift automatically from the floor.

## WATER FILL AND DRAINAGE (TFigure 4)

Before each cleaning operation, open the lid 12 (Figure 3), fill in the right amount of water and detergent to the clean water tank. The clean water tank is made of polyethylene material, with anti-acid, and anti-solvent to most detergents. After wash, rotate the control lever 3, with the hose 2, the sewage water will be discharged from the sewage tank. Clean the sewage tank thoroughly at least once a week, open the lid 1, then lift the suction filter 4. Must wear protective gloves when performing the above mentioned operations.



## CHOOSING THE RIGHT DETERGENT

### Select detergent

To obtain good cleaning results, make sure to use the appropriate detergent. If necessary, ask the supplier for professional advice, and remember over using strong detergent may shorten the working life of the machine.

Be sure to use low foam detergent or anti-foaming agent, which can avoid damage to the water motor. If you can not get these products, you can use this alternative method, the use of 50cc ordinary wine vinegar before adding recycling bins. Use it clear water tank.

Must clean the sewage tank every eight hours, in accordance with the following program:

- Twist the handle 5, opened the lid 6.
- Using the sponge, or high-pressure water gun clean the sewage water tank
- After the completion of the above one by one close the lid 6 immediately



**DANGER:** Do not use corrosive products damage water tanks and your health. Necessary to use gloves and protective glasses.



## MACHINE MAINTENANCE



**WARNING:** Before replacing brush, pull start key on the panel to ensure that the motor will not accidentally start.

### BRUSH REPLACEMENT

According to the following procedure: remove the cotter pin A, open the Brushes protection of B; open the spring 2, as shown in the arrow

Then brush 2-3-4-5 set to leave the center of 1.

Spin out from the screw 3, remove the brush 5 from the bracket 4.

Install a new brush, please follow the following procedure: with screws 3, the mounting bracket 4 new brush 5; replace brush combination 2-3-4-5, it can be simply installed in the appropriate location.



### READY TO USE THE MACHINE

#### Adjustment of suction head

In order to meet packaging needs, suction head is individually packaged, it should be installed on the drive plate, the step is as follows:

1. Raise the pallet
2. Insert the screws 1 to number 2 and keep a slight tilt as shown in the photo.
3. Lift suction rake head to the left hand side so that the 3 can insert to 4.
4. load the R split-pin 4 will be released within at pin 3.
5. Install the suction tube in the mouth of suction head.

If you want the good floor Drying effect , water suction head must adjust well.

Good water rake head operation, it will come into contact with the floor regulate the angle is very important. A rubber brush behind at the strips must be slightly tilted. Shown: this solution will gather in front of the body. To achieve this process the following order: Loosen the nut 6 and 7 clockwise to tighten, Increase or counterclockwise to reduce the angle of perspective.

When established the right angle, re-tighten the nut 6.

## READY TO USE THE MACHINE

Suction head above the ground water height must be adjusted to the appropriate height of plywood and rubber band size too. This operation is accomplished by adjusting the nut 8 meters as follows:

Adjusting nut 8 clockwise to increase height between suction and the ground and reduce the pressure on the ground.

Adjusting nut counterclockwise to lower height between suction and the ground and increase the pressure on the ground. These nuts are also used adjusting the balance of the floor.

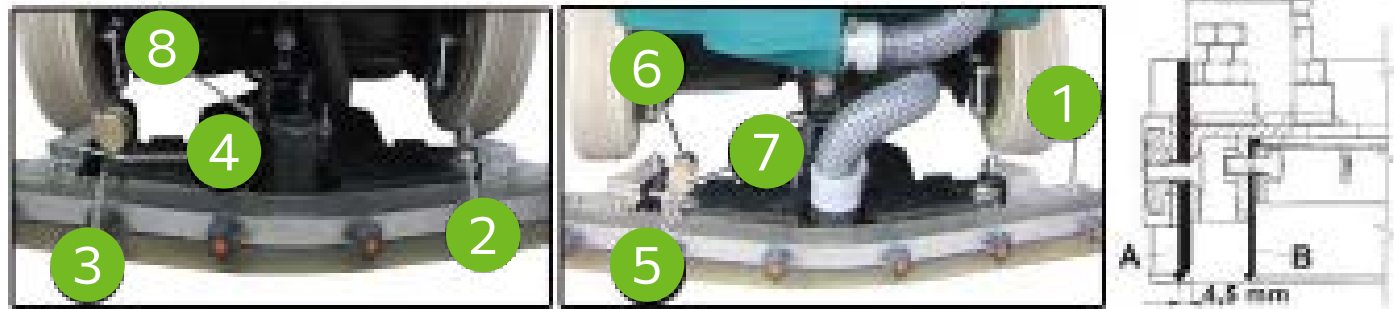
To make a rubber band long life, the pressure is as little as possible to achieve better drying results.

Note that if the drying effect is often not welcome, that is caused by vacuum system. In this case:

Thoroughly clean the tubes, the entrance, filters and water suction head itself

Check the case of vacuum cleaner motors

Check all the water tank's entrance is closed.



## SUCTION HEAD'S RUBBER BLADE

In order to achieve excellent water absorption effect, Rubber blade should maintain its normal operation and replacement work to prevent the destruction of ground loss.

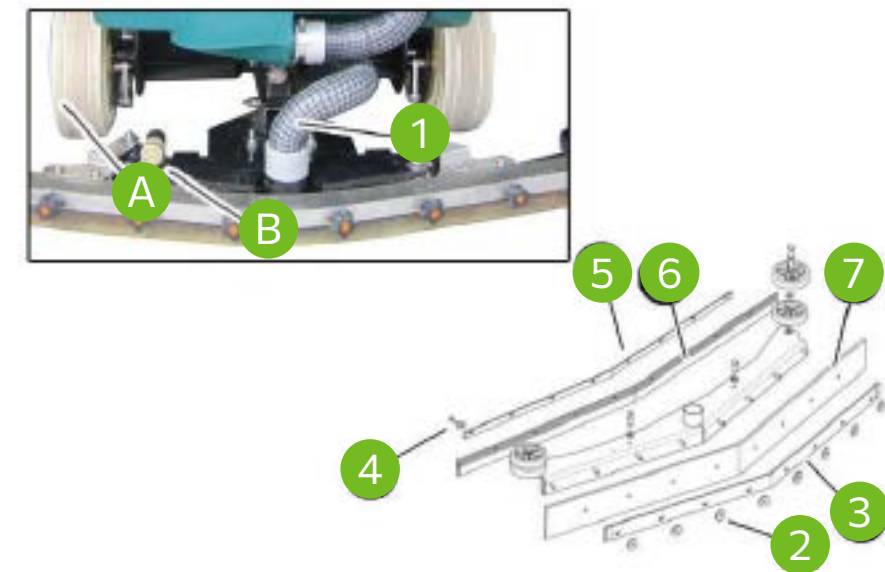
Replace blade

Attention

When the knife-edge contact with the floor surface by wear, the rubber suction head rake blade must be replaced.

Straight blade is the perfect machine to protect the basic elements of excellent water suction effect.

Blade replacement process is as follows: to raise the tray out of the machine head and suction tube 1. Lower suction head, release screw, pull out the R split-pin A and put it in pin B. Loosen the 8 knobs back of belt 3 of and 4 screws back of belt 5. Rotate rubber blade in order to use the new blade. Rubber blade has two sides, and four knife-edge can be used. If all of the flank have been damaged, it should be replaced with the new one. In contrast with the above procedures that a new blade can be installed. The installation process should fit suction head.



## TRANSMISSION

Scrubber-dryer is driven by the electrical system, electric power system consists of a front wheel and two electronic controlled driven wheels.

Joystick 14 (fig.3) make the machine moving forward or backward.

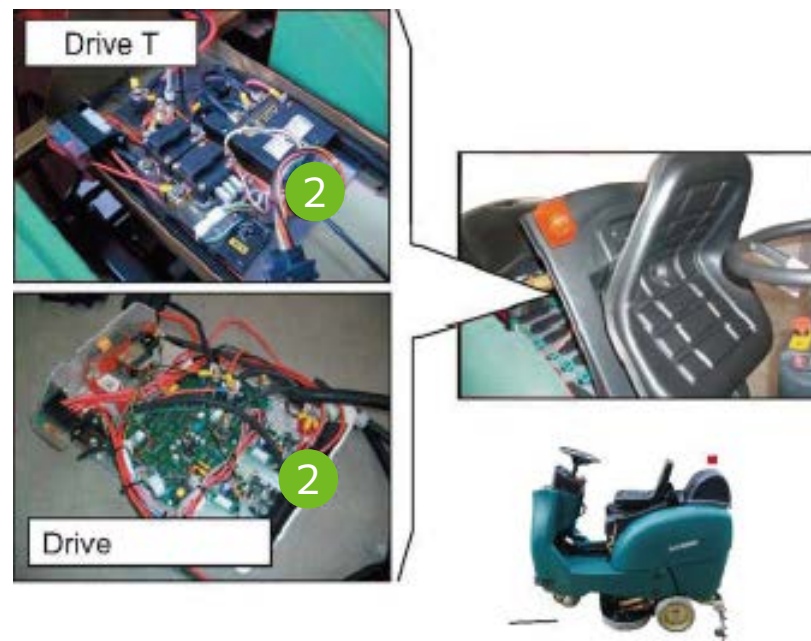
Pedal 2 (fig.3) can change the moving speed of the machine

Instrument panel has switch 14 of three gears, select switch 14 (fig.3), you can set the pace. Travel or work (please refer to control introduction of -10-point)

Warning!

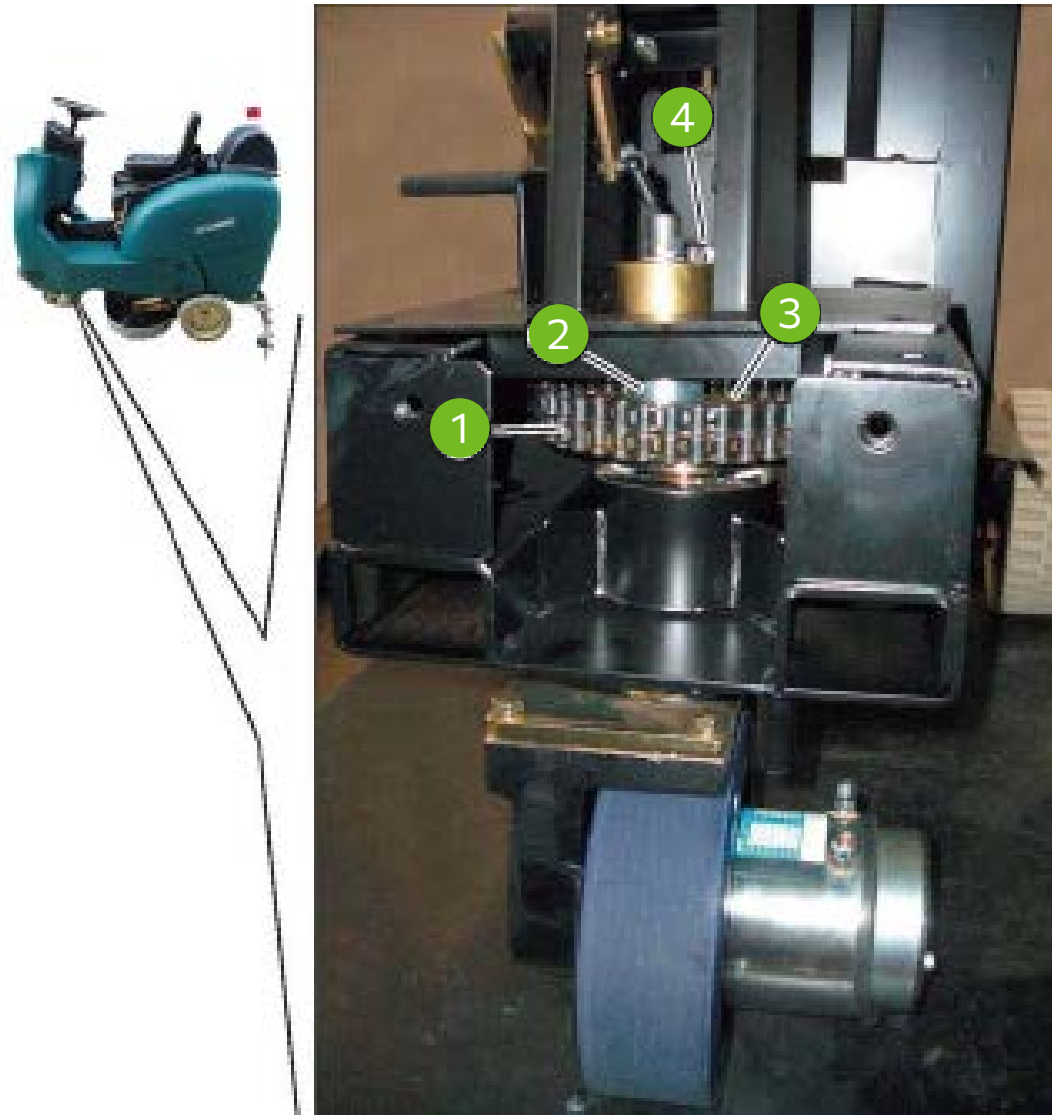
In the driver version S/2-RS/2 and "ZAPI" the third gear speed electric system can be used only for turning not for work.

In the driver version T and "ELEK DROS-ISTEM" the third gear speed can be used for turning around and work.



## DRIVING OPERATION SYSTEM

The main driving force generated by wheel 2 spread to wheel 3, and through the driving wheel 3 implementing the front-wheel drive. While driving, the driver control the resistance felt by the steering wheel size, the resistance can be adjusted through the regulation of the nut 4.



## BRAKING SYSTEM

Brake system allows washing cars stop in the movement and remain stationary, but also make the vehicle stable in the inclined plane.

1, The brake system works through the step on the foot brake 1 (see Figure 1) brake back wheels making brakes achieved.

2, Braking is achieved through the manipulation of mechanical devices (see Figure 11).

3, The parking brake system can be locked, follow these steps:

(A) step the foot brake pedal 1 (see Figure 3) in the end.

(B) push the joystick 2 (see Figure 3) to the parking stalls.

The step to unlock brake system was: push lever 2 after slam their feet on the foot brake (see Figure 3) to the appropriate gear. After that they can take the foot brake on the driving control. 4, In case of controlling the vehicle, foot brake does not work, you can adjust it through the regulator 3 to achieve correction.



**WARNING:** At least every three months to check and adjust the brakes once.





Absorbent motor sewage drain fluid achieved by roller touching the ground.

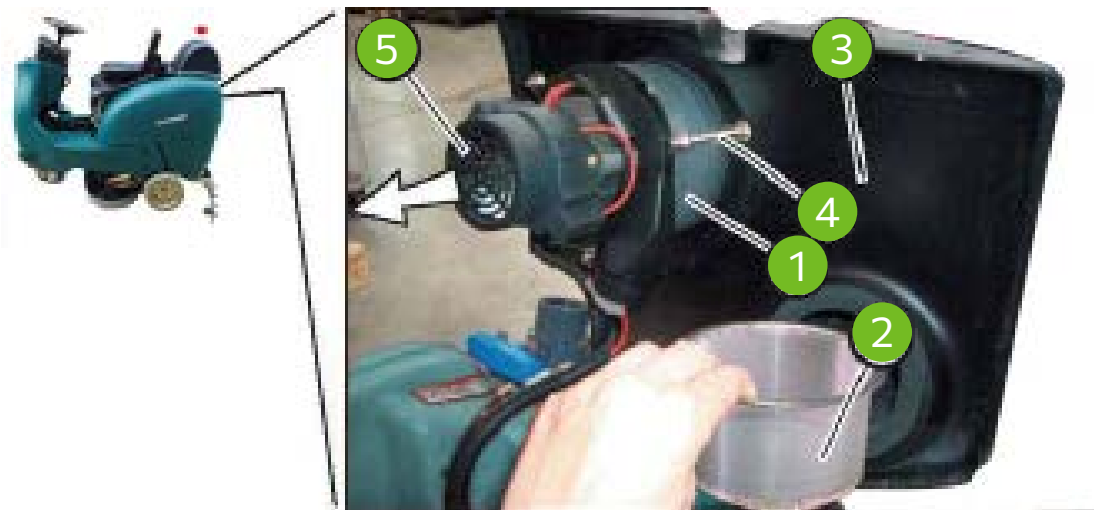
Button 4 (Figure 3) is water motor's control switch.

The motor and filter must be checked each day and clean the filter in time.

Check the motor and water filter, follow these steps: Remove the front panel touch switches and open motor cover 3, disconnect the power, exit 4 butterfly nut, remove the motor and check (see the arrow shown in Figure 13). Installation follow reverse above steps.



**WARNING:** The water motor's liner must be checked every six months once, in case of damage please change a new one. Liner replacement following these steps: Remove the plastic cup 5, release the nut, remove the liner base, carefully check the liner. Installation follow reverse above steps.



## BATTERY

### Check that battery performance

The density of the electrolyte is closely related to the battery performance, therefore, measuring the electrolyte density is crucial. Battery electrolyte in the normal state of charge density should be at about 1.260 (300B e). If the density is between 1.26 (300B e) and 1.2 to 240B e), and electrical storage pool only partially charged. If the density is less than 1.14 (180B e), it means that the electrical storage pond has expired.

### Measuring electrolyte density

The density of the electrolyte is closely related to the battery performance, therefore, the measurement must be very careful. Electrolyte density measured by density meter. Please note that the correct place density meter in the measure process. In the determination, such as needing to add distilled water, electrolyte, it must read the data after both mixing fully.

## BATTERY

### Distilled water filling

After charge, fill distilled water to the battery until it is higher than the top of the electrode plate 6mm, battery initial use, water must be added after each charge. Use for some time, Number may be reduced with water views, according to the actual situation, but must ensure that not less than 1 times per week.

### Charge limit

The battery after being used for some time, if the density is not lower than the value measured 1.24( 280B e), you do not need charging. If the battery is long-term over-charging, it will significantly reduce the battery life. Solutions liquid's suitable temperature when Charging should be less than 45°C or less. When charging if the electrolyte is higher than environment temperature 10-12°C, No matter how much the temperature of the electrolyte, over-charging of circumstances may occur. When the meter shows that only 5-10% of the electricity, the machine can only absorb dust and can't sweep the floor.

### Battery charging areas

Battery in the charging process will produce a certain fuel gas, where the charging process of charging areas must be maintained adequate ventilation and can't have any electricity, fire. Charging place not only to maintain adequate Ventilation but also to ensure that the room temperature maintained at 40-45°C below. Place in the charge of existing inadequate ventilation circumstances, the user can set up ventilation ducts (Can't share a emission Mouth with the original chimney), or install a fan to resolve the problem.

### Not continuous use or long-term idle

If the battery is not used continuously, even if the electrolysis liquid number is in the normal range, every month, users must give the battery discharge to keep cells alive again. If the battery needs a long period idle, it must be saved in a dry cool place. Users must recharge the battery completely at least a time monthly. At the thorough process of charging, the battery's every single cell should be seen bubbling, voltage and electrolyte density reading number must have a stable record of 3-4 hours. Under any circumstances, battery of a long idle time must be charged before use and electrolysis quality testing.

### Install the battery

The steps to install the battery components are as follows:

Remove the steering wheel, unscrew the nut 1 (see Figure 13)

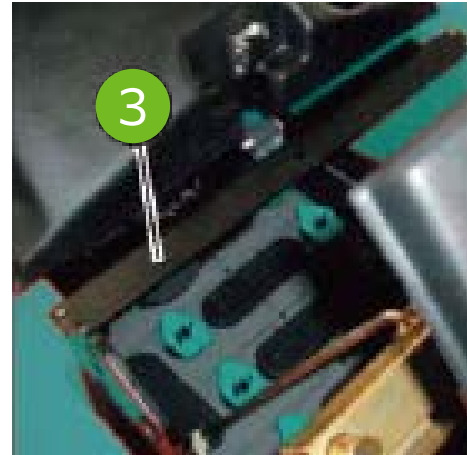
Move away Block, unscrew the nut 2 (see Figure 13)

Remove the battery strap, unscrew the nut 3 (see Figure book 13)

Before installing the battery, be sure to check all the components necessary to be intact. Battery has clean appearance. In connection access port of Vaseline or grease can be coated. if the battery electricity has been loss before installation, then wait until after full installation.

Steps to replace batteries is as follows:

1. Remove the steering wheel
2. Remove Seat
3. Remove the strap



## SECURITY CHECK ROUTINE CONTROL OF MAINTENANCE OPERATIONS

(1) sweeper must be checked its security, damage or failure by professional and technical personnel in accordance with the following steps: Check before you turn the engine off After that change parts or maintenance In a certain time interval, implement in accordance with the “routine maintenance and operational control” instruction sheet.

2) every 6 months in normal working status check safety devices, inspector must be the authority of the expert organization. To ensure the Safety devices in normal operation, the machine must be checked 5 years each school year by skilled personnel histology.

) The person responsible for the machine must be checked annually in accordance with the conditions required by the machine, check the machine during the period, the responsible person must judge whether sweeping machines are still in accordance with technical safety regulations. Then mark the drawing board to come up with what has been said checked.

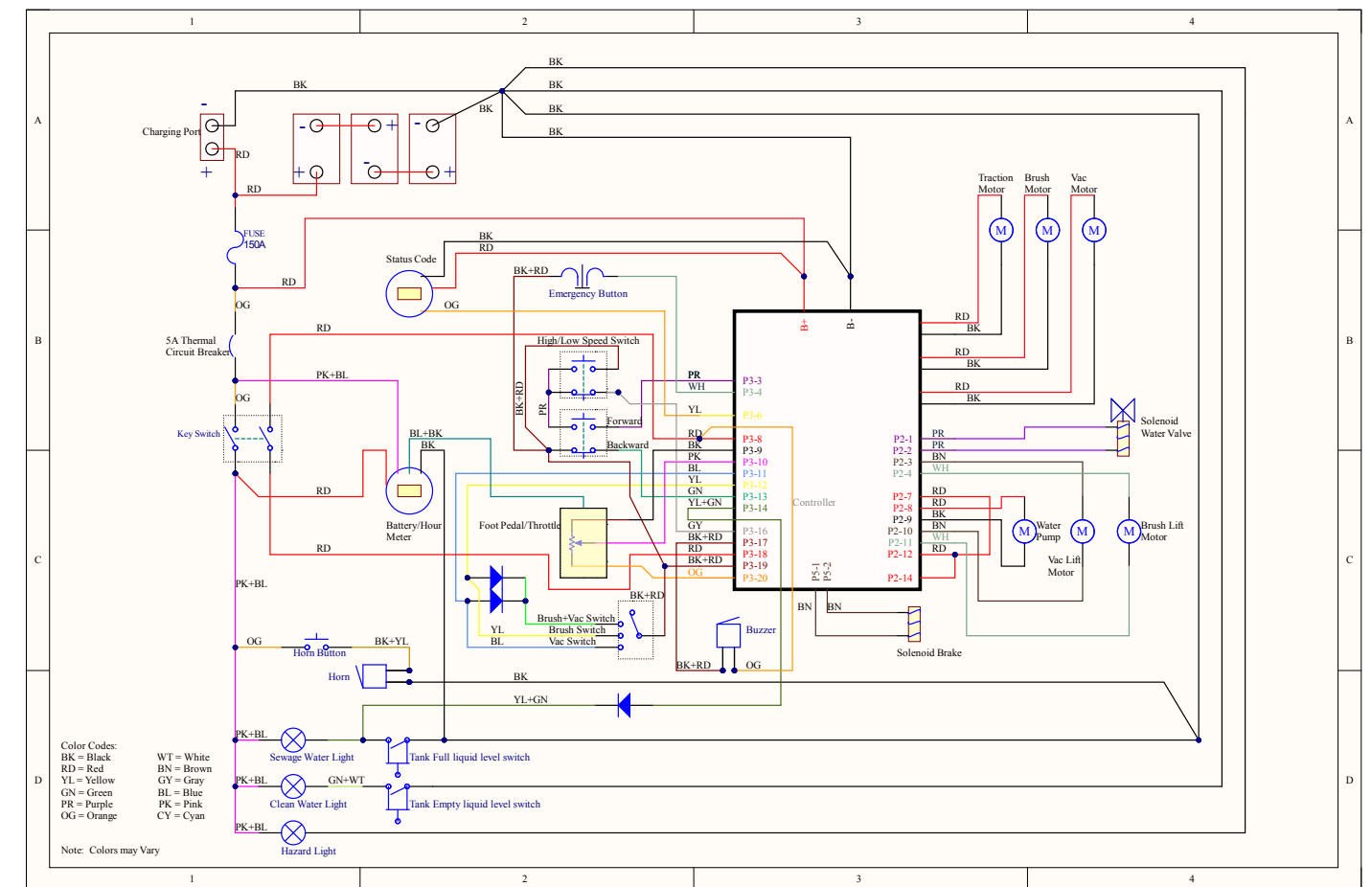
Perform regular maintenance procedures	Each Interval					
	8	40	125	200	500	1500
Clean repair water tank	X					
clean Vacuum cleaner motor filter	X					
Check the filter tank	X					
clean the water tank filters		X				
Check the vacuum pipe and suction head	X					
Check the brush status		X				
Check the edge of the suction head		X				
Gear chain oiling					X	
Check the motor brushes every six months					X	
Check safety devices (micro-switch, horn, emergency stop button, etc.)		X				

## TROUBLESHOOTING

Problem	Reason	Solution
Suction head inadequate drying	Old rubber adhesive	Replace Rubber
	Tube is free from obstruction	Clean Pipes
	Adjustment of brush is not suitable	Adjust brush
	Suction head blocked	Clean block at suction head
	Burning vacuum cleaner motor	Check and replace the motor
	Motor carbon brush old	Replacing carbon brushes
	Brush position is not low enough	Check the lower brush
Cleaning agent can't flow on the brush average	Brush water supply blocking	Washing pipe lines
	Cleaning agent valve closed or not open enough	Open the cleaning agent valve
	Water pipes by extrusion	Restoration or replace of piping
	No water in water tank	Add water to the tank

Problem	Reason	Solution
Machine wash result is not satisfactory	Old brush	Replace brush
	Dashboard errors led to the brush on ground pressure is not enough	Increase the brush pressure
Machine can not start	The main switch between 5 and 3 can not switch	Clockwise rotation switch
	Battery unit burn	When the red light on, check, if necessary, replace. Warning! Fuse is in the control unit, never use a high-level fuse, as it will cause harm. If the fuse repeatedly has error, please contact service center.
	Micro switch set incorrectly	Replace Micro Switch
	Pressed with a sudden emergency stop button	Release emergency stop and restart the machine(See washing machine start program)
The machine does not start or stop suddenly	Battery terminal relaxation	Connect the battery
	The operator touch micro switch cut off the power system	Release button and start the process repeatedly
	micro switch under the seat of power has error or not connected	Replace or connect Micro-switch
	The operator has started and the seat of micro fuse has been broken	Sit down, turn off the machine and then restart
Problem	Reason	Solution
After the machine is not moving the work forward	Drive pedal failure	Check the connection
	Control component failures	Check the control section
Vacuum cleaner motor shut down or start	Tank float switch cut off vacuum motor power supply (Drive S and Jumbo series, this will be displayed through the instrument panel 72 the alarm code)	Turn off vacuum cleaner motors, empty the water tank
Difficulty moving the machine	Brake is pressed	Release brake switch
Stop the machine has water leakage	Liquid valve open	Close the valve
	Damage to piping or seals	Replacement of pipes or seals

Problem	Reason	Solution
The system can not reduce the increase in brush	Fuse fault	Replacement
	Starter can't accept the current	Check
	Starter motor damage	Replacement
	Circuit board problem	Replace circuit board



Link to Wiring Schematic PDF file on ONYX Website Support Page:  
[www.onyx-solutions.com/productsupport](http://www.onyx-solutions.com/productsupport)



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