



## Operation Guide for RT-50 Hand Push Automatic Washing Machine



# Content

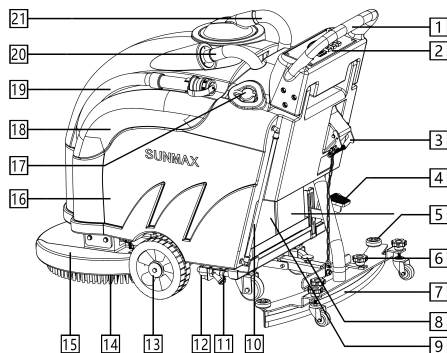
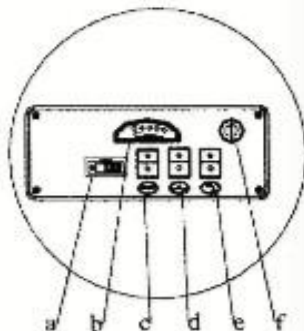
Safety Instruction.....	1
Machine Assembly Diagram.....	2
Machine Parameters.....	2
Daily Operation and Maintenance of the Washing achine.....	3
Battery Installment.....	3
Battery Charging.....	3
Squeegee Installment.....	3
Needle Holder and Brush Tray Installment.....	3
Water Injection in Clear Water Tank.....	3
Machine Operating Instructions.....	4
Operation of the Washing Machine.....	5
Maintenance.....	5
Frame Components.....	6
Control Panel Components.....	6
Water Suction Motor Components.....	7
Floating Head Components.....	7
Lifting Components.....	8
Squeegee components.....	8
Replacement of the Squeegee Rubber Strips.....	8
Squeegee Lifting Components.....	9
Vacuum Hose Components.....	10
Sewage Drainage Pipe Components.....	10
Clear Water Tank components.....	10

# Safety Instructions

Please read all instructions when using this machine for business

- Used only indoors. Do not place this machine in rain.
- Do not use this machine as a toy. Be careful when operating this machine near the children.
- Use this machine only by following the instructions listed on this handbook.
- Only the accessories recommended by manufacturers can be used.
- Charge the battery in a ventilated environment. Gas released during charging may be ignited in a confined space. The header of this machine shall be opened and the batteries shall be installed well when charging to avoid an explosion.
- Disconnect all positive and negative battery terminals before trying to make any adjustments or maintenance to the machine.
  - Unintentional start- up of traction electric machine, water suction electric machine and machine components may cause human injury.
- Battery acid can cause damage to the eyes or skin. Please wear goggles, gloves and protection suit before installing the battery or charging.
- Please send the charging back to the after- sales service center when it dose not work normally (because it has been dropped, damaged, placed outdoors or immersed in water).
- Do not pull out the plug or touch the machine with a wet hand.
- Do not place any objects in the mouth of the machine for the mouth of the machine shall be kept unimpeded.
- This machine shall be kept away from dust, thread residue, hair and any objects that may cut the air currents.
- Hair, loose clothing, fingers and any body parts shall be kept away from the openings and operating parts of the washing machine,
- Do make sure the main power switch be disconnected before removing or installing the needle holder or brush tray.
- Do not operate the washing machine when you are tired, drinking or taking medicine.
- Always keep yourself behind the machine when running the machine.
- Be careful when you are using the electric terminals for short circuit may cause burns.◦
- Do not place the washing machine on a slope.

# Machine Assembly Diagram



1. Handle
2. Control Panel
  - a.....Stopwatch
  - b.....Battery Status Indicator
  - c.....Water Suction Motor Switch
  - d.....Brush Tray Motor Switch
  - e.....Clear Water Tank Outlet Switch
  - f.....Lock Switch
3. Loosening handle of the Squeegee
4. Brush Tray Lifting Pedal
5. Collision Proof Wheel
6. Installment Handle of the Squeegee
7. Squeegee
8. Flip Handle of the Squeegee
9. Battery
10. Water Level Pipe of Clear Water Tank
11. Filter
12. Valve Control and Water Quantity Control of Clear Water Tank
13. Filter Net
14. Wheel
15. Brush Tray
16. Shield and Splash Guard
17. Clear Water Tank
18. Sewage Tank Drains
19. Water Injection Hole of Clear Water Tank
20. Water Wiper Hose
21. Sewage Tank
22. Vacuum Hose

## Machine Parameters

RT-50 Hand Push Automatic Washing Machine	
Width of Brush Tray	560mm
Width of Squeegee	800mm
Volume of Clear Water Tank	50L
Volume of Sewage Tank	55L
Brush Tray Speed	200rpm
Work Efficiency	2000m <sup>2</sup> / 小时
Voltage	2*12V
Power of Water Suction Motor	550W
Power of Brush Tray Motor	500W
Machine Weight	143KG
Packaging Size Length x Width x Height	1340*640*1150mm



# Daily Operation and Maintenance of the Washing achine

## Battery



**Attention: The battery is very heavy.**

Install **two** 12 volt maintenance- free batteries. The new batteries shall be fully charged before being firstly used. The new batteries can be fully charged and used for five times.

- 1.Pluck the hose(20,21) out from the sewage tank. (19)
- 2.Make sure sewage tank is empty before lifting it up.
- 3.Place the batteries on the tray and adjust its position.
- 4.Connect all cable connectors well.



**Attention: Be sure to connect the red (+) terminal to the positive (+) terminal and the black (-) terminal to the negative (-) terminal. If the connection is not correct, the machine will not run.**

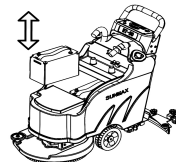
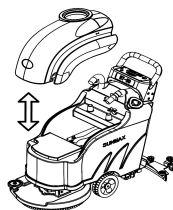
Failure to operate following the above rules shall cause damage to the batteries and even have the risk of explosion. Apply some protective lubricating agent to the battery pile and place the electric wire terminal protection device on all the electric piles.

## Battery Charging



**Attention: Use only the native battery charger designed with this machine, otherwise the batteries shall be damaged.**

Remove the sewage tank from the washing machine and cut off the power source on the control panel. After that, connect the charging plug to the battery socket of the battery terminal. Then plug the other end of the charger into a wall socket and the charger will automatically start charging the batteries.



## Squeegee Installment

- 1.Place the loosening handle of the squeegee (3) in the upward and locking position.
- 2.Place the squeegee components on the swing arm to make sure that the guide roller faces towards the trailing end of the squeegee.
- 3.Tighten up two plum bakelite hand wheels) (6) .
- 4.Plug the hose of clear water tank and sewage water tank (20)into the middle water outlet of the squeegee and make sure they are connected tightly.

## Needle Holder and Brush Tray Installment

- 1.Tread the lifting pedal of the brush tray at the back of the washing machine to lift up the pad (4) .
- 2.Plug the needle holder/ brush tray into the plate metals downward when it is in the rising state and rotate the needle holder/brush tray counterclockwise until it is locked.

## Water Injection of Clear Water Tank



**Attention: You shall use a detergent producing low foam. To avoid producing large quantity of foam, you can inject a bit of defoaming solvent before using this machine to do cleaning. Do not use pure acids.**

Too much foam may do damage to the air suction motor, so you shall add the detergent according to the minimum amount required by the detergent.

- 1.Open the water injection cover of the clean water tank 17) .
- 2.Add required capacity of clear water to the tank box (16) and the temperature of the water added shall not exceed 50 degrees. The maximum capacity of the clear water tank is 50 liters.
- 3.Chemical cleaning products, acidic or alkaline cleaners can be added. Oxidizing agent, chlorine, bromine, methyl aldehyde or mineral flux shall not be added.

Warning: Please determine whether the detergent can be used in this washing machine based on following the instructions on the manufacturer's production tags. Do not choose any products or solvents with no acid or alkaline markings. This machine can only use the detergent whose PH value is between 4 and 10.

# Machine Operating Instructions

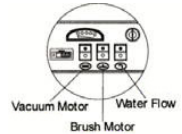
1. Turn the key switch to turn on the power (f) . The power source / battery indicator light (b) will be illuminated when the power is turned on.
2. Examine whether the battery capacity is in full condition. All indicator lights will light up when the battery is fully charged.
3. To start the brush tray motor, water suction motor and water tank flow, press the switch (c, d, e) .



Turn off the brush tray motor when the brush plate is in the upward position.

## How to Turn On and Turn Off the Water Suction Motor

1. The water suction motor will be started by pressing down the (I) of the left switch (C).
2. The water suction motor will be turned off by pressing down left switch (O) .

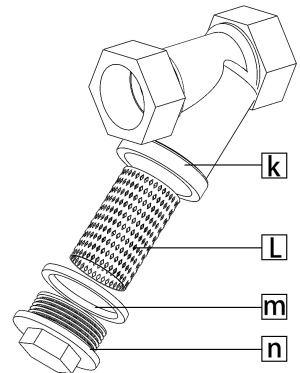
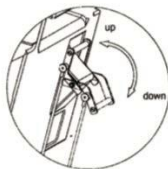
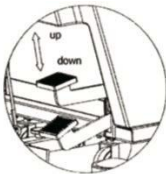


## Brush Tray Lifting

1. Tread the lifting pedal of the brush tray (4) downward until it is locked in the right position.
2. Tread the lifting pedal of the brush tray (4) lightly to unlock it and then slowly lift it up to lower the pedal.

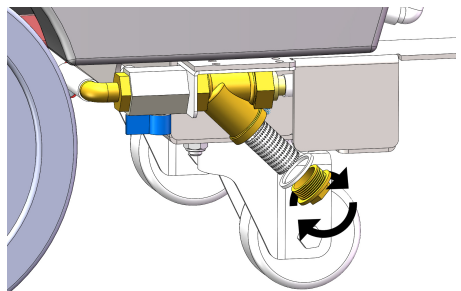
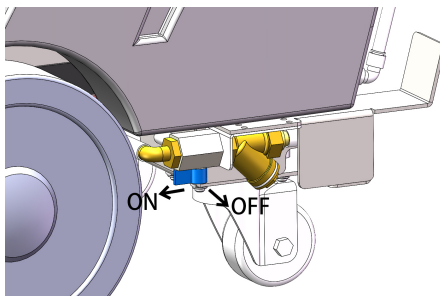
## Squeegee Lifting

1. Pull the handle down to lower the water wiper. (3)
2. Pull the handle up to lift up the water wiper. (3)



## Setting of the Clear Water Tank Flow/ Cleaning and Replacement of Clear Water Filter

Adjust the water- carrying capacity in accordance with the dirty degree of the floor. Rotate the adjusting knob (11) to control the water- carrying capacity. The position 1 indicates where to turn off while the position 2 indicates the maximum water level. Regularly clean the dirt in the clear water filter (12) based on the frequency of use (recommended to clean once in 1-3 days.) , and rotate to disassemble according to the direction of the arrow. Filter body (k), filter (L), sealing ring (m), plug (n)



## Operation of the Washing Machine

### Water Suction Operation

1. Make certain the squeegee is in the downward position.  
2. The squeegee will draw the detergent into the sewage tank when the washing machine is moving forward to brush the floor.

3. If necessary, rotate the knob (8) to adjust the voltage of the squeegee. **(Do not make the angle of the red rubber sheet of the squeegee too big. Otherwise the red rubber sheet will be worn more quickly, which shall affect the cleaning situation. The greater the angle is bending, the greater the resistance will be.)**

If areas need cleaning are missed, please decrease the use quantity of the cleaning solution and lift up the squeegee to pull the washing machine back to the missing areas. Lower the squeegee and move it forward to draw the remaining cleaning solution on the floor.

### What Should We Do When There Are Too Much Foam in the Sewage Tank

Stop operating the washing machine if there are too much foam when you are observing the the situation of waste water accumulation in the sewage tank. Add the recommended amount of chemical defoamer (19) to the sewage tank.

### Sewage Tank Emptying


Open the sewage tank pipe weep (18) to empty the sewage tank (19) .

## Maintenance

### Daily Maintenance

1. Wash the sewage tank with clear water and empty it. Open the tank lid (21) to dry it.
2. Remove the water wiper components and wash and wipe it clean. Examine whether there have blockages or chippings in the mouth of the water wiper.
3. Clean and wipe the top of the battery with ammoniated glass cleaner.
4. Fill each battery with distilled water as needed. Do not use tap water to fill the batteries. Maintenance- free storage batteries has no need to add more liquids.
5. Charge the batteries according to the instructions listed on this handbook.

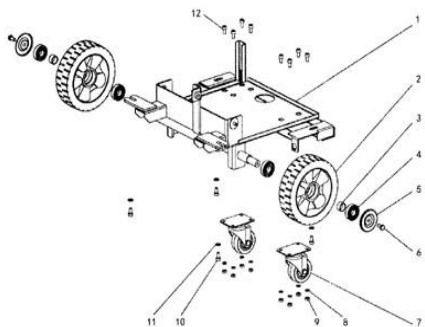
### Weekly Maintenance

 Do not test the strength of the batteries unless they are fully charged and fully cooled. Test the batteries with a hydrometer.

### Monthly Maintenance

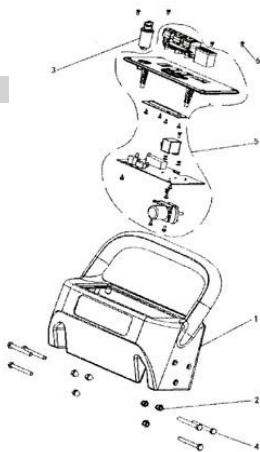
1. Lubricate the brush tray and water wiper lifting device with low viscosity oils.
2. Check whether the clutch plate, brush tray and water wiper blade is worn or damaged
3. Clean all wire terminals.
4. Check all electrical connections to make sure they are connected. Tighten them up if they loosen.
5. Clean the whole washing machine with an universal cleaner.

## Frame Components



Serial Number	Description	Quantity
1	Base Plate	1
2	Wheels	2
3	Spacer	2
4	Bearing	4
5	Shaft Cover	2
6	Bolt	2
7	Casters	2
8	Washer	4
9	Nut	8
10	Screw	4
11	Spring	8
12		8

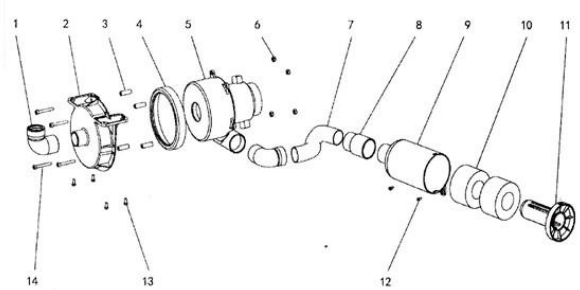
## Control Panel Components



Serial Number	Description	Quantity
1	Control Cabinet	1
2	Bolt	6
3	Key Switch Assembly	1

Serial Number	Description	Quantity
4	Bolt	6
5	Control Panel	1
6	Screw	4

# Water Suction Motor Components

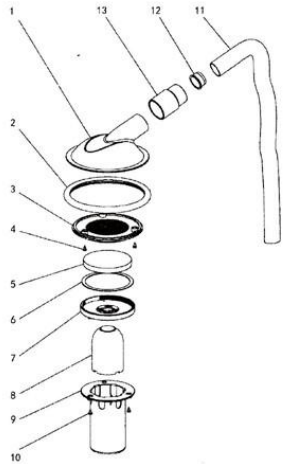


Serial Number	Description	Quantity
1	Elbow	2
2	Connecting Bracket	1
3	Connectors	4
4	Gasket	1
5	Water Suction Motor	1
6	Nut	4
7	Hose	1
8	Casing	1

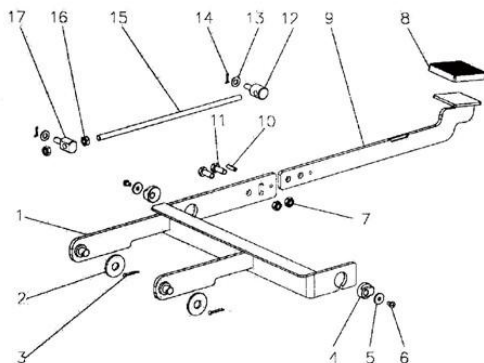
Serial	Description	Quantity
9	Silencer	1
10	Sponge	2
11	Core	1
12	Screw	2
13	Bolt	4
14	Bolt	4

## Floating Head Components

Serial Number	Description	Quantity
1	Top Cover	1
2	Seal Ring	1
3	Matching Grid	1
4	Screw	3
5	Filter	1
6	Gasket	1
7	Cover	1
8	Floating Head	1
9	Bucket	1
10	Screw	1
11	Hose	1
12	Hose Sleeve	1
13	Casing	1



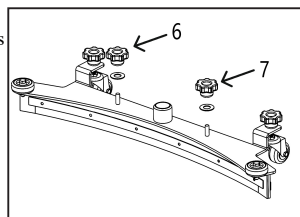
## Lifting Components



Numbe	Description	Quant
1	Lifting Rod	1
2	Washer	2
3	Pin	2
4	Eccentric	2
5	Washer	2
6	Screw	2
7	Nut	2
8	Pedal Cover	1
9	Pedal	1
10	Spring Pin	1
11	Bolt	2
12	Pin	1
13	Washer	1
14	Cotter Pin	1
15	Rod	1
16	Nut	2
17	Pin	1

## Squeegee Components

- Make sure the main power switch is in the "0" position. **Warning:** disconnect the power source and pull the key out when the machine is in maintenance.
- Remove the rubber fastener and link the nuts. (6,7)
- Select the butterfly nut in the horizontal position.
- Take down the rubber and replace it.
- Dismantle the rubber (4) and replace it with a new one.



**Warning:** do this operation when you wear gloves to avoid direct touch on the dangerous liquids.

## Replacement of the Squeegee Rubber Strips

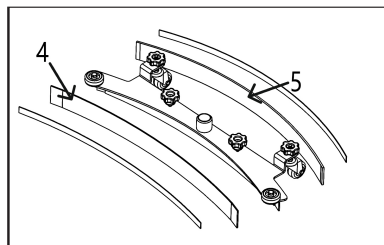
When the rear wheel of the squeegee is worn, it will not dry the floor well. If such situation emerges, you can remove the squeegee and replace it. If you want to replace the squeegee, please follow these steps:

- loosen the screw (6) and turn off the water suction motor.



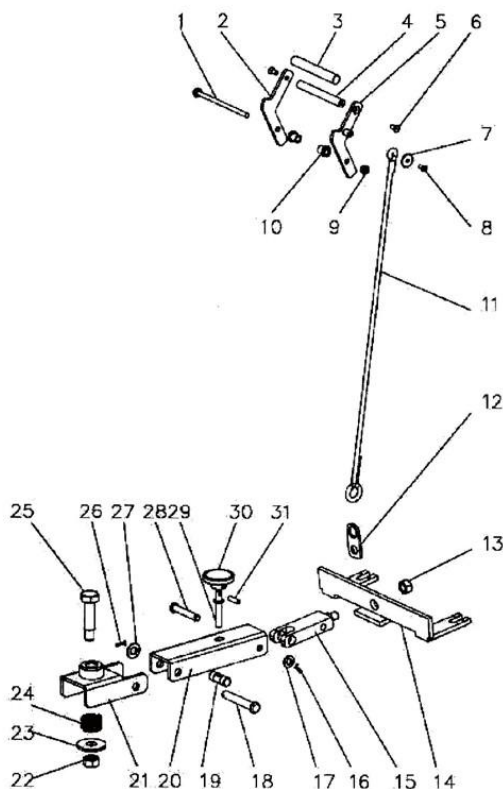
**Warning:** disconnect the power source and pull out the key when repairing it.

- The height of squeegee shall be adjusted by the rubber situation (see "adjusting the height of squeegee support parts").
- Select butterfly screws in the horizontal position.
- Dismantle the rear rubber (5) to make replacement.



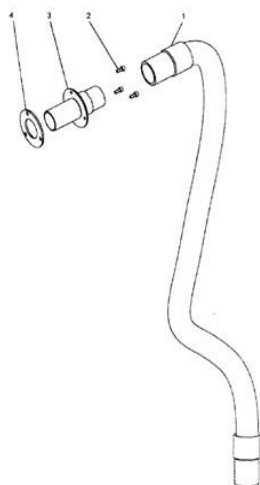
**Warning:** Do this operation when you wear gloves to avoid direct touch on the dangerous liquids.

## Squeegee Lifting Components

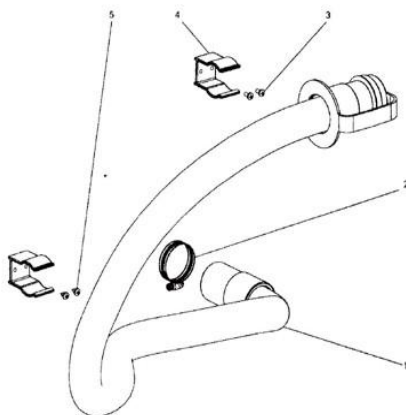


Number	Description	Quantity
1	Bolt	1
2	Left Baffle	1
3	Pipe	1
4	Handle	1
5	Rear Baffle	1
6	Screw	2
7	Washer	1
8	Screw	1
9	Nut	1
10	Pad	3
11	Pull Rope Components	1
12	Ring	1
13	Nut	1
14	Balancing Frame	1
15	Axis	1
16	Cotter Pin	1
17	Washer	1
18	Hinge Pin	1
19	Adjustment Bolt	1
20	Support Arm	1
21	Support Arm	1
22	Nut	1
23	Washer	1
24	Spring	1
25	Screw	1
26	Cotter Pin	1
27	Washer	1
28	Hinge Pin	1
29	Adjustable Bolt	1
30	Adjustment Device	1
31	Spring Pin	1

## Vacuum Hose Components

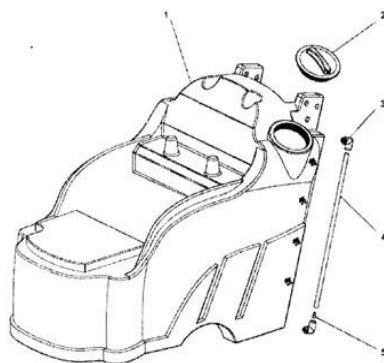


## Sewage Drainage Pipe Components



## Clear Water Tank Components

Number	Description	Quantity
<b>Vacuum Hose Components</b>		
1	Hose	1
2	Bolt	3
3	Water Inlet	1
4	Gasket	1
<b>Sewage Drainage Pipe Components</b>		
	Drainage Pipe Components	1
	Clamp	1
	Screw	2
	Clamp	1
	Screw	2
<b>Clear Water Tank Components</b>		
	Clear Water Tank	1
	Clear Water Tank Cover	1
	Water Level Connection Pipe Interface	2
	Water Level Pipe of Clear Water Tank	1
	Bobber	1





Malfunction	Possible Causes:
Cleaning solution does not work	<p>Water suction motor does not run</p> <p>The water filter device is blocked</p> <p>The sewage tank is full</p> <p>Water wiper or water suction hose is blocked, damaged or not connected in the right way</p> <p>Water tank, water suction motor or water wiper is not sealed well</p> <p>The pressure of water wiper is not correct</p> <p>Water wiper arm and mechanical arm mechanism do not operate well</p>
The wiper comes unglued	<p>There are debris on the water wiper scraping strip</p> <p>The water wiper scraping strip is worn or damaged</p> <p>The floor is not cleaned before using the machine to wash</p>
The washing operation can not be done or stopped accidentally	<p>The hose or valve is blocked</p>
The batteries can not be charged	<p>Batteries shall be replaced</p> <p>The suction cup with high pressure causes a large battery current</p> <p>Charger needs repair</p> <p>The batteries have run out of power</p>
Floor is not cleaned completely, with the dirt being not cleaned while the floor is not polished	<p>The water suction motor does not work well</p> <p>Excessive use of water suction device or needle holder dose a damage to the machine</p> <p>Washing the floor at a high speed</p> <p>Insufficient supply of cleaning solution</p> <p>Improper operation of cleaning steps</p>