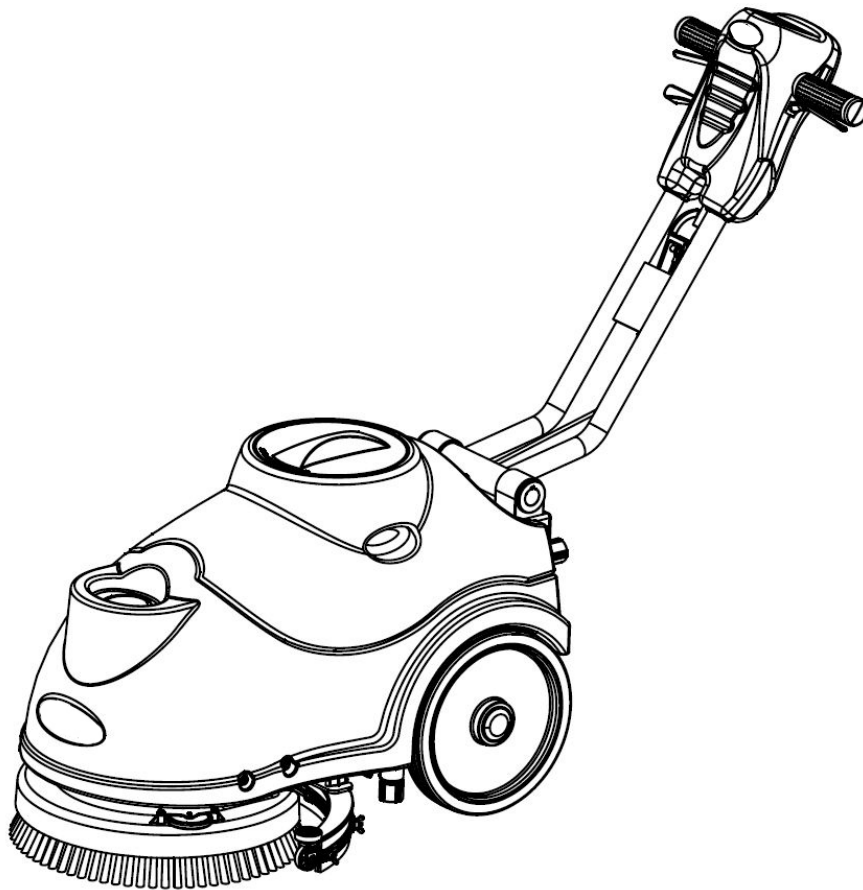




OWNER'S MANUAL

IMPORTANT: READ OWNER'S MANUAL CAREFULLY



MODEL # PANTHER 15B MICRO SCRUBBER

FOR YOUR CONVENIENCE, RECORD THE FOLLOWING
IMPORTANT INFORMATION

MODEL: _____

SERIAL NUMBER: _____

DATE PURCHASED: _____

PURCHASED FROM: _____

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SAFETY PRECAUTIONS

This machine is intended for commercial use. It is constructed for use in an indoor environment and is not intended for any other use. Use only with recommended accessories.

All operators shall read, understand and exercise the following safety precautions:

1) DO NOT OPERATE MACHINE:

Unless trained and authorized.
Unless you have read and understand the operators manual.
In flammable or explosive areas.
If not in proper operating condition.
In outdoor areas.

2) BEFORE OPERATING MACHINE:

Make sure all safety devices are in place and operate properly.

3) WHEN USING MACHINE:

Go slow on inclines and slippery surfaces.
Follow all safety guidelines.
Be very careful when using the machine in reverse.
Report and fix any damage to machine prior to operating it.

4) BEFORE LEAVING OR SERVICING MACHINE:

Stop machine on level ground.
Turn machine off.

5) WHEN SERVICING MACHINE:

Read operators manual thoroughly prior to operating or servicing this machine.
Use manufacturer supplied or approved replacement parts.
Secure machine with wheel blocks prior to jacking the machine up.
Use approved jack or hoist to safely elevate the machine.

Disconnect batteries prior to working on machine.
Wear gloves when handling batteries or battery cables.
Avoid any contact with battery acid.
Avoid moving parts. Do not wear loose fitting clothing while servicing machine.



WARNING !

Batteries emit hydrogen gas. Explosion or fire can result from hydrogen gas. Keep sparks and open flames away! Keep battery compartment open when charging.



WARNING !

Flammable materials can cause an explosion or fire. Do not use flammable materials in tanks.



WARNING !

Flammable materials or reactive metals can cause explosion or fire. Do not pick up.

MACHINE SET UP & INSTALLATION

UNCRATING MACHINE

Be sure and check packing carton for any damage. Immediately report any damage to carrier. Check contents of package to ensure that the following items are included:

1. Machine
2. Batteries (x2)
3. Squeegee assembly
4. Scrubber-dryer User Manual
5. Electric Battery Charger Manual (if equipped)
6. Connecting wire for battery and charger (if equipped)
7. Brush or pad driver (if equipped)

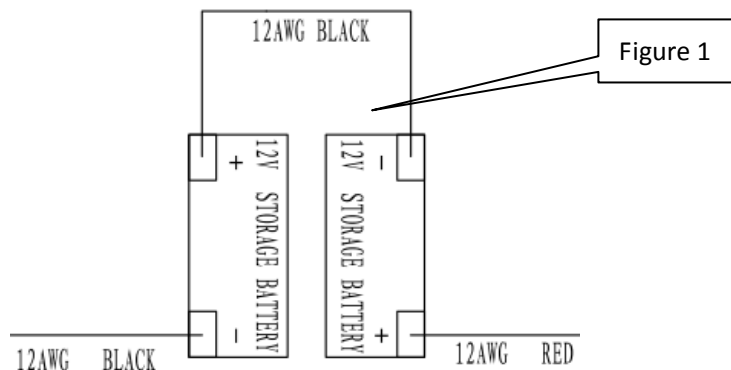
BATTERY DISASSEMBLY AND INSTALLATION

1. Switch off the main switch (47).
2. Remove the recovery tank (2) as shown in the relevant paragraph.
3. Unscrew the bolt from batteries (16), then remove or change.
4. Install the batteries on the machine according to the diagram below.
5. Install the recovery tank.



WARNING!

Do not connect+ to +, or - to -, when disassembly or install the batteries. It is very dangerous.



Battery charging

Charge the batteries (see battery charging section).

MACHINE SET UP

Pre-operation Checks

1. Sweep or dust mop the surface to be cleaned.
2. Check that squeegee is properly installed.
3. Lower the squeegee (33) with the lift lever (26).
4. Be sure batteries are fully charged (see Battery Charging section).
5. Check that brush/pad is properly installed.

Brush/Pad Driver Installation and Disassembly



NOTE

Only install manually. If auto-installation, it will wear brush hub.

Make sure that the tanks are empty before disassembling the brush.

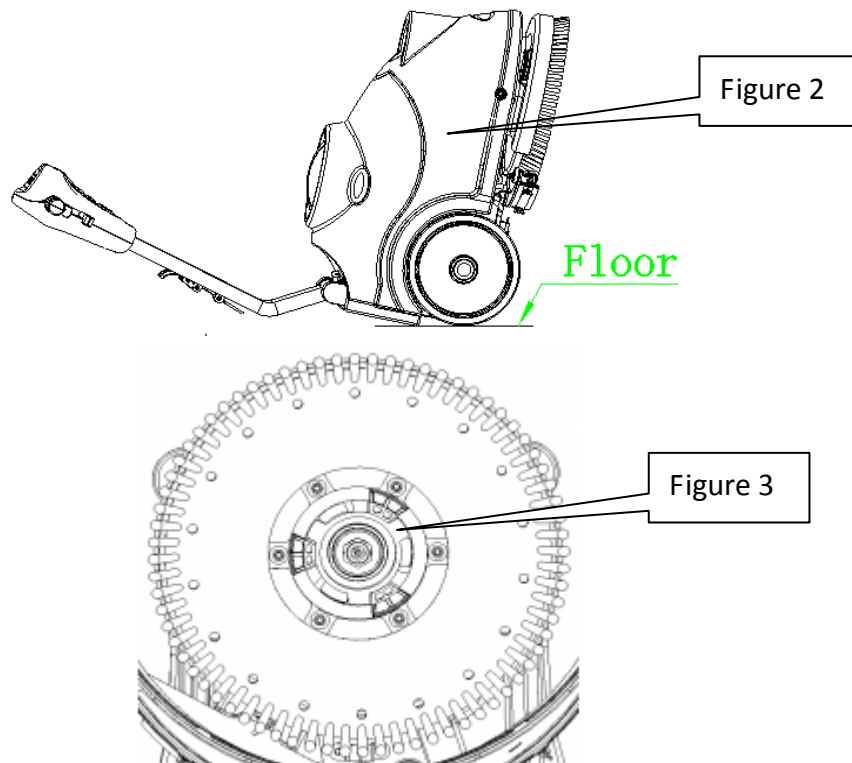
1. Turn off the machine.
2. Lay down the machine in this position as indicated in figure 2. Pull up the lift lever (26) to raise the squeegee up (33).

3. Mount the brush or pad driver onto the drive wheel hub and then rotate counterclockwise until it locks, as indicated in figure 3.
4. To remove the brush/pad, rotate the brush/pad clockwise until it is released from drive wheel hub.



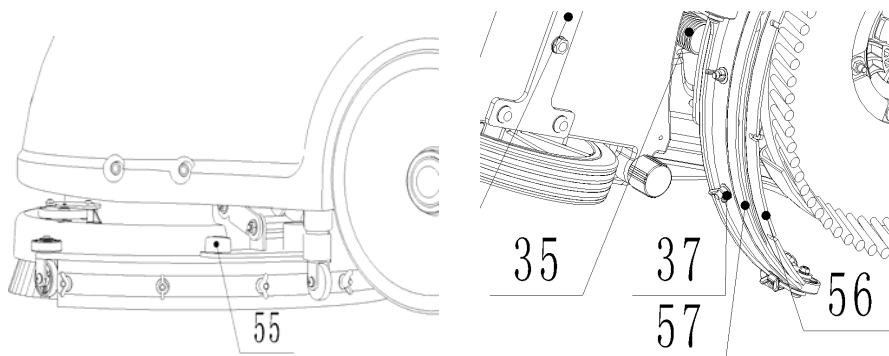
WARNING!

Do not turn on the machine in the position shown below. The brush/pad could disengage and cause injury.



Squeegee Installation

1. Turn off the main switch (47).
2. Pull down the squeegee lift lever (26) to put down the squeegee on the “working” position.
3. Lay down the machine in this position as indicated in figure 2.
4. Loosen the two knobs (55) on the squeegee and slide the squeegee into the slots of the squeegee brackets. Tighten the knobs securely (unscrew the knobs, if disassembling).
5. To replace the front/rear squeegee (56/57), unscrew the thumb nut (37).



Solution Tank Filling

NOTE



The machine can be filled with a pipe or bucket. Do not remove the Solution Filter (21) while filling.

1. Fill water into solution tank (3) from the inlet (20) through pipe or bucket.
2. Do not fill the solution tank completely, leave a few centimeters from the edge.
3. The water temperature must not exceed 40°C.

**CAUTION !**

Use only low-foam and non-flammable detergents, intended for automatic scrubber applications.

Solution Tank Draining**NOTE**

Solution tank should be drained and cleaned after each scrubber operation is completed.

1. Unscrew the solution tank drain cap (22) on the bottom of the solution tank. The solution/water will flow freely into a bucket or floor drain.
2. Rinse the solution tank with clean water after every use. This will help prevent chemical build up and clogging of the solution lines.
3. Screw on the solution tank drain cap (22).

Recovery Tank Draining**NOTE**

Recovery tank should be drained and cleaned after each scrubber operation is completed.

1. Turn the latch (17) off the recovery tank, take off the recovery tank from machine by grasping two grooves of tank. Open the lid (1) and overturn the recovery tank to drain the dirty water into a container, or unscrew the solution tank drain cap (22) to let water pour out to a bucket.
2. Clean and rinse the recovery tank with clean water after every use.
3. Replace the recovery tank on the machine and turn the latch (17) to lock the tank.

MACHINE OPERATION

1. Set the handle to a comfortable height by pressing handle rotate lever (25).
2. Lower the squeegee (33) onto the floor by pulling down the squeegee lift lever (26).
3. Turn on the main switch (47).
4. Turn on the brush motor switch (48) and the solution switch (50), the indicate light will be on.
5. Turn on the vacuum motor switch (49), the indicate light will be on.
6. If necessary, adjust the water flow by turning the solution flow control lever (31) manually.
7. Pull one or both operating triggers (24), and then brush will start to spin, solution will begin to flow. Move the machine and start cleaning.

NOTE

If the battery indicator light (51) is green, the machine can be used. If it is yellow or red, the batteries must be charged.

**CAUTION !**

Before lifting the brush, turn it off by pressing the main switch (47).

**CAUTION !**

When cleaning excessively aggressive floors this may cause the machine to not work. Brush motor and vacuum indicators on the control panel (46) will flash simultaneously. This means the machine is being overloaded. Please turn off all the switches on the control panel (46).

**CAUTION!**

Do not use the machine with discharged batteries to avoid damaging the batteries and reducing the battery life.

AFTER USING THE MACHINE

After scrubbing, please proceed with below actions before leaving the machine:

1. Remove the brush/pad holder.
2. Empty the tanks as shown in the previous paragraph.
3. Perform the daily maintenance procedures (see the maintenance section).
4. Store the machine in a clean and dry place, with the brush/pad holder and the squeegee.
5. If storing in an area which may reach freezing temperatures, be sure to drain all fluids from the machine prior to storage. Any damage caused by freezing temperatures will not be covered by the warranty.

DO NOT USE MACHINE FOR A LONG TIME

If the machine is not going to be used for more than 30 days, please proceed with below actions:

1. Perform the procedures shown above in (After Using the Machine section).
2. Disconnect the battery connector.

MAINTENANCE

The lifespan of the machine and its maximum operating safety are ensured by correct and regular maintenance. The following chart provides the scheduled maintenance. The intervals shown may vary according to particular working conditions, which will be defined by the person in charge of the maintenance.

**WARNING!**

Maintenance procedures must be performed with the machine switched off and the batteries/battery charger cable disconnected. Carefully read the instruction in the Safety precaution section.

All scheduled or extraordinary maintenance procedures must be performed by qualified personnel, or by an authorized Service Center. This manual describes the easiest and most common maintenance procedures. For other maintenance procedures shown in the Scheduled Maintenance Table, refer to the Service Manual that can be consulted at any Service Center.

SCHEDULED MAINTENANCE TABLE

Procedure	Daily, (after using the machine)	Weekly	Every Six Months	Yearly
Battery charging				
Squeegee cleaning				
Brush cleaning				
Tank and vacuum grid with float cleaning, the cover gasket check				
Squeegee blade check and replacement				
Solution filter cleaning				

Out-water pipe filter cleaning				
Screw and nut tightening check			(1)	
rotary parts lubricated			(1)	
Brush/Pad holder motor carbon brush check or replacement				(2)
Vacuum system motor carbon brush check or replacement				(2)

(1) After the first 8 working hours.

(2) This maintenance procedure must be performed by an authorized Service Center.

BATTERY CHARGING



NOTE

Charge the batteries when the yellow or red indicator (51), or at the end of every working cycle



CAUTION!

Keeping the batteries charged makes battery life last longer.



CAUTION!

If the machine is not equipped with on-board battery charger, choose an external battery charger suitable for the type of batteries installed.



WARNING!

Please use appropriate charger to charge the battery.



WARNING!

Pay careful attention when charging WET batteries as there may be battery fluid leaks. The battery fluid is corrosive. If it comes in contact with skin or eyes, rinse thoroughly with water and consult a physician.

1. Place charger and machine in a well ventilated area.
2. Turn machine off (47).
3. Take away the recovery tank (2). Exposing battery compartment.
4. Plug the charging cable to the grounded wall outlet (100v~240v). Connect the charging cable to the machine socket.
5. The charging indicator light (30) turns on when it's charging, green light means battery charging is completed.
6. Upon the completion of charging, first unplug the charging cable from the wall outlet and then disconnect from machine.
7. Replace the recovery tank .



NOTE

For further information about the operation of the battery charger (29), see the relevant section.

SQUEEGEE CLEANING



NOTE

The squeegee must be clean and its blades must be in good condition in order to getting a good drying performance.



CAUTION !

It is advisable to wear protective gloves when cleaning the squeegee because there may be sharp debris.

SQUEEGEE BLADE CHECK AND REPLACEMENT

1. Take off the squeegee as shown in the previous paragraph.
2. Check to see if the edge of the front/rear blades are cracked or split, if necessary replace them with new.
3. Unscrew the thumb nut (37) to remove the blades.
4. Check the front/rear blades for integrity, cut and tears. Replace if necessary.
5. Install the squeegee in the reverse order of removal.

BRUSH/PAD DRIVER CLEANING



CAUTION !

It is advisable to wear protective gloves when cleaning the brush/pad because there may be sharp debris.

1. Remove the brush/pad as shown in Machine set up section.
2. Clean and wash the brush/pad with water and detergent.
3. Check the brush bristles for integrity and wearing status; if necessary, replace the brush.
4. Check the pad for wearing status; if necessary, replace the pad driver.

TANK/VACUUM GRID WITH FLOAT CLEANING AND COVER GASKET



CAUTION !

It is advisable to wear protective gloves when cleaning the tank and vacuum/suction assembly because there may be sharp debris.

1. Move the machine to the appointed disposal area.
2. Turn off the main switch (47).
3. Take off the recovery tank (2), clean and rinse both solution/recovery tank, and drain out.
4. Take off all vacuum kits, gasket, filter, clean and re-install.
5. Check the recovery tank lids gasket ring and the vacuum rubber connector (18) between two tanks are integrity or not.



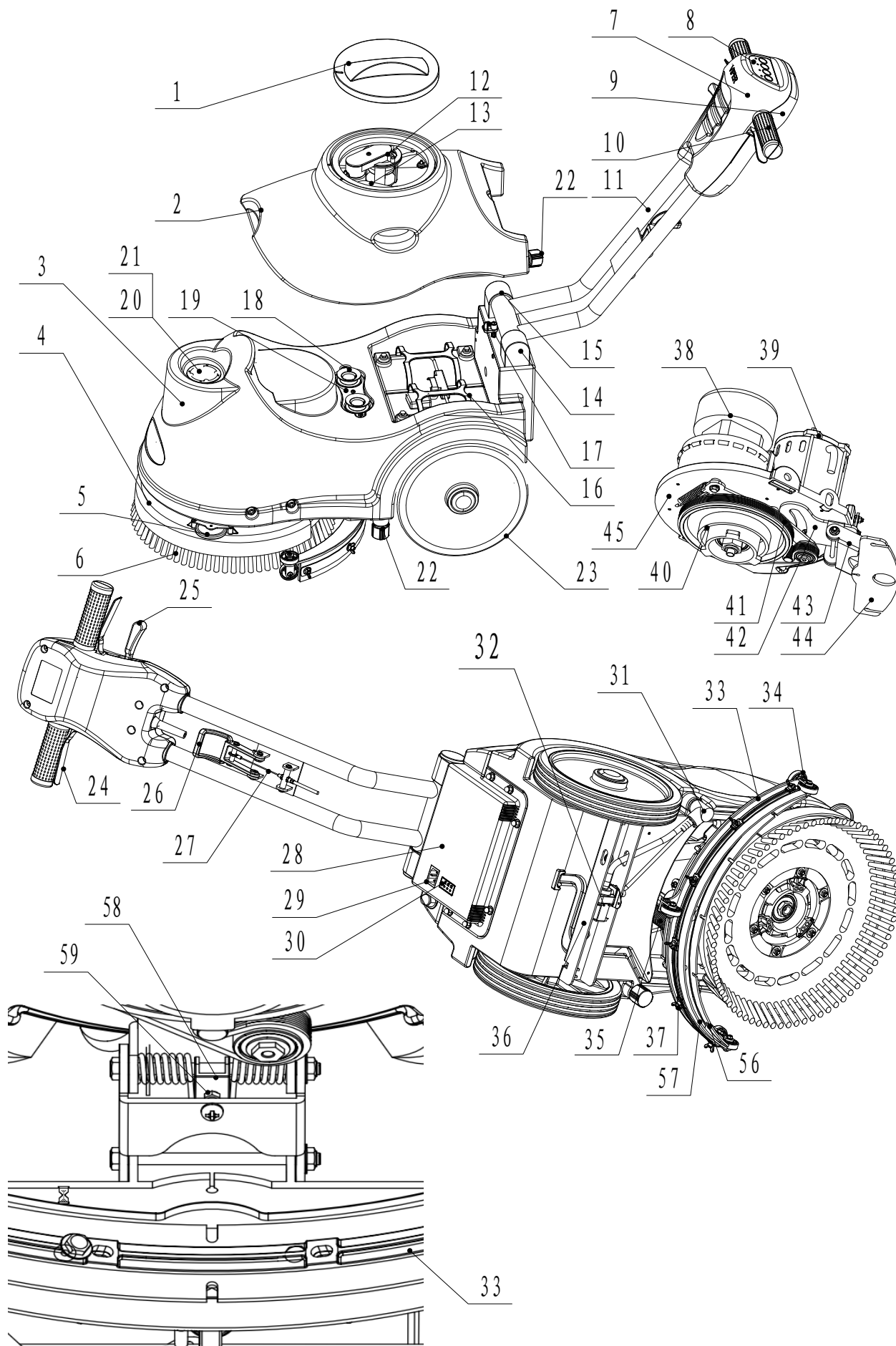
NOTE

The gasket ring of recovery tank and the rubber connector between two tanks create vacuum in the tank. If necessary, replace them.

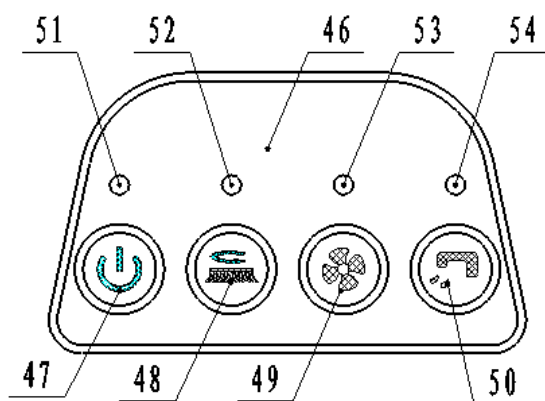
PARTS LIST

1. Recovery tank lid
2. Recovery tank
3. Solution tank
4. Brush cover
5. Protective rollers
6. Brush
7. Front handle shell
8. Control panel
9. Rear handle shell
10. Handle rubber
11. Handle iron pipe
12. Squeegee vacuum assembly
13. Squeegee suction assembly
14. Left positioning
15. Right positioning
16. Batteries
17. Latch
18. Rubber sealing
19. Limit hose joint
20. Inlet
21. Solution filter
22. Solution tank drain
23. Wheels on fixed axle
24. Handle left and right
25. Handle rotate lever
26. Squeegee lift lever
27. Squeegee string
28. Box circuit
29. Battery Charger
30. Battery charge indicator
31. Solution flow control lever
32. Electromagnetic valve data
33. Squeegee
34. Squeegee wheels
35. Squeegee hose
36. Axle
37. Thumb nut
38. Vacuum system motor
39. Brush motor
40. Drive belt
41. Belt
42. Squeegee rotation plate
43. Squeegee lift plate
44. Squeegee fixing plate
45. Motor fixing plate
46. Control panel
47. Main switch
48. Brush motor switch
49. Vacuum motor switch
50. Suction Electromagnetic valve data switch
51. Electric quantity indicator
52. Brush motor indicator
53. Vacuum motor indicator
54. Suction Electromagnetic valve data indicator
55. Knob
56. Front squeegee
57. Rear squeegee
58. Squeegee adjustment piece
59. Screw nut

PARTS BREAKDOWN



Control Panel

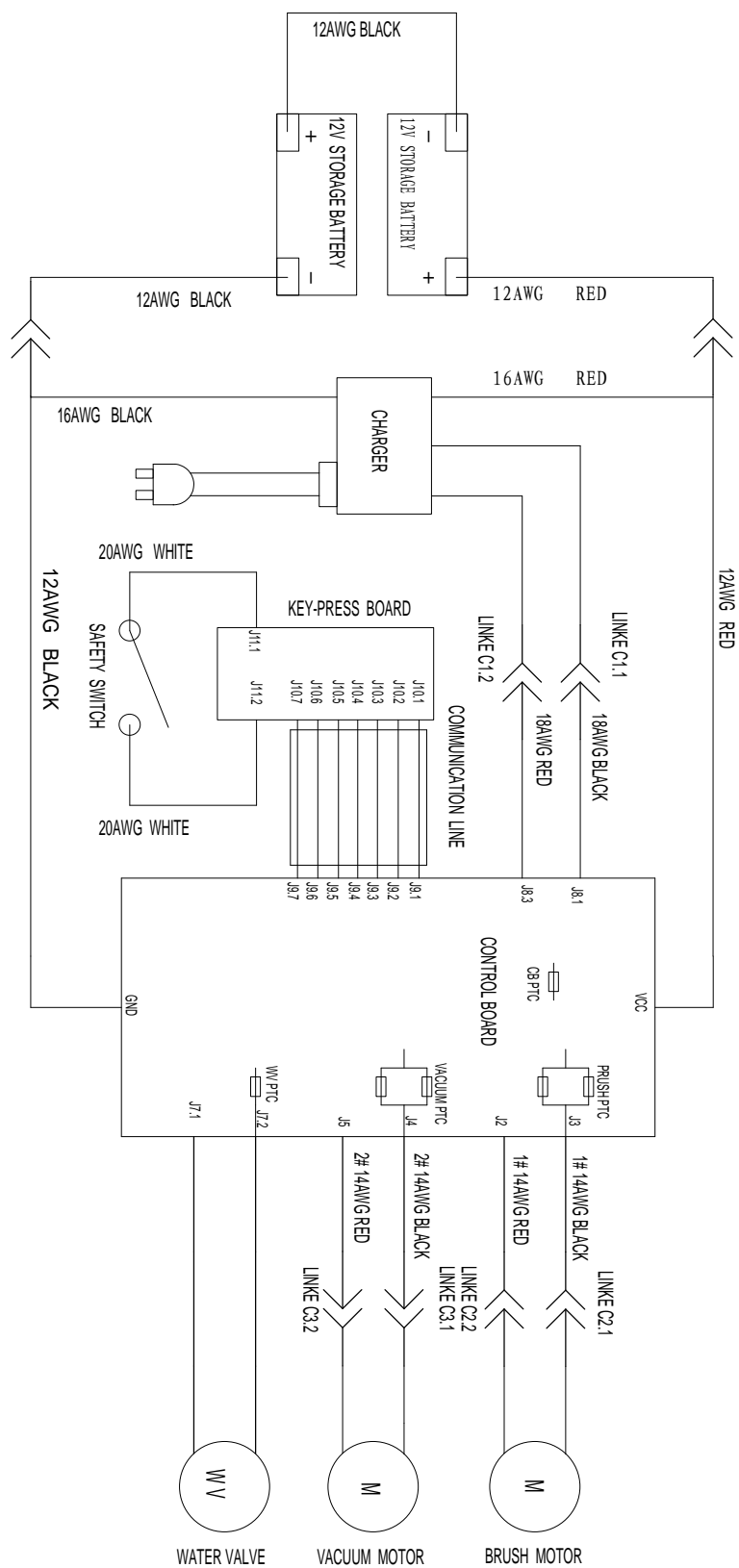


- | | |
|---|--|
| 46. Control panel | 51. Electric quantity indicator |
| 47. Main switch | 52. Brush motor indicator |
| 48. Brush motor switch | 53. Vacuum motor indicator |
| 49. Vacuum motor switch | 54. Suction Electromagnetic valve data indicator |
| 50. Suction Electromagnetic valve data switch | |

TECHINICAL DATA

Machine length x width x height	770x500x550MM
Solution tank capacity	15L
Recovery tank capacity	15L
Wheel diameter	254MM
Brush motor data	24V 250W
Vacuum motor data	24V 300W
Electromagnetic valve data	24V
Maximum gradient	2%
Sound level	68dBA
Batteries data	(2×12V) 24V 33Ah/20h
Power cable length	/
Batteries spec	196 x 130 x 175mm
Working capacity, up to	800mm H ₂ O
Cleaning productivity	750m ² /hour
Squeegee width	490mm
Brush diameter	380mm
Brush rpm	150rpm
Charger	Input 100-240 Vac, 50-60HZ Output 24Vdc, 5A
Machine weight	60kg
Machine weight (with charger and package)	65kg
Carton spec	780x415x590MM

WIRING DIAGRAM



TROUBLESHOOTING

Trouble	Possible Cause	Remedy
The machine does not work, indicator light (51) does not turn on	The battery connector is disconnected	Connect
	The batteries are completely discharged	Charge the batteries
	The power line disconnected from the power	Connect
The machine does not work, indicator light (51) turns red	The batteries are discharged	Charge the batteries
Brush motor does not work, brush indicator light (52) does not turn on	The PCB or key board is faulty	Change the PCB or key board
Brush motor does not work, brush indicator lights (52) flash	The deck motor is overloaded	Use less aggressive brushes suitable for the floor to be cleaned
	There are foreign materials (tangled threads,etc) preventing the brush from rotating	Clean the brush hub
Vacuum system motor does not work, vacuum motor indicator light (53) does not turn on	The PCB or key board is faulty	Change the PCB or key board
Vacuum system motor does not work, brush indicator lights (53) flash	The vacuum system motor is overloaded	Check the vacuum system motor
The suction power is insufficient	The recovery tank is full	Empty the recovery tank
	The hose is disconnected from the squeegee	Connect
	Vacuum assembly is clogged	Clean or check
	The squeegee is dirty, or the squeegee blades are worn or damaged	Clean and check the squeegee
	The recovery tank is not locked	Lock the latch (17)
	The tank cover is not properly closed, or the gasket is damaged	Close the cover properly or replace the gasket
	Squeegee adjustment piece(58)not set at an appropriate position	Adjust the screw nut(59)to the appropriate position
The solution flow is insufficient	The solution is empty	Fill the tank
	Solution flow control valve (31) is blocked up	Clean the valve
	The solution is dirty	Empty the solution, clean the tank and refill with clean solution.
The squeegee leaves marks on the floor	There is debris under the squeegee blades	Remove the debris
	The squeegee blades are worn, chipped or torn	Replace the blades



WARRANTY POLICY

The warranty terms outlined below are in lieu of any other warranties, either stated or implied, including any implied warranty of merchantability, fitness for a particular purpose or otherwise. Under no circumstances will seller be liable for any loss, damage, expense or consequential damages arising in connection with the use or inability to use this product.

This warranty does not apply to damage or defect caused by accident, misuse, negligence, abuse, fire or to any Triple S product which has been serviced by anyone other than a Triple S authorized service representative. Housings or parts that have become damaged as a result of improper use of the machine are excluded from this warranty. Refer to owner's manual for proper machine use and maintenance. Parts that are expected to wear from normal use and, therefore are not covered under the parts warranty include, but are not limited to: batteries (pro-rated for one year); bearings; belts; brushes; filters; squeegees; switches; and tires.

This warranty commences on the date of purchase of the product by the original end user from an authorized Triple S distributor, subject to proof of purchase. If proof of purchase date is unavailable, the warranty begins 90 days after the sale of the product to an authorized Triple S distributor.

- Subject to the conditions outlined above, the manufacturer warrants the rotationally-molded polyethylene housings and parts on its machines to be free from defects in materials and workmanship, under normal use and service for twelve (12) years to the original purchaser.
- Under this warranty, the manufacturer guarantees the performance of non-polyethylene parts and components on Triple S machines to be free from defects for up to five (5) years to the original end user. Parts replaced under this warranty are guaranteed for the remainder of the original warranty period.
- Labor charges are covered for five (5) full years from the date of purchase for Triple S products, provided an authorized Triple S service provider is used for repair. No travel coverage is extended for cord electric machines.

Product Exceptions & Exclusions: Battery chargers and all accessories are warranted for one year.

Triple S reserves the right to change the warranty policy without notice.