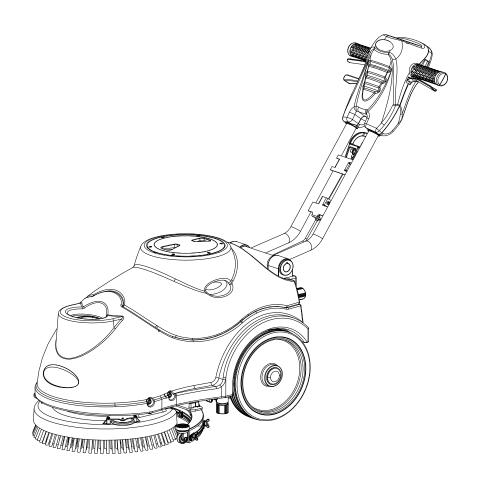


OWNER'S MANUAL

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 loosefitting 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*)

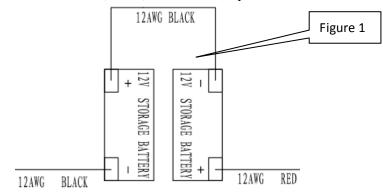
BATTERY DISASSEMBLY AND INSTALLATION

- 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.

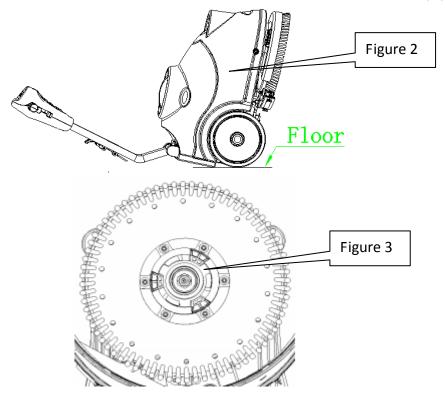
- 1. Turn off the machine.
- 2. Lay down the machine in this position as indicated in figure 2. Pull up the lift lever (26) to raise the squeegee up (33).

- 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.



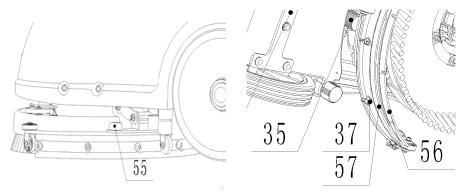
WARNING!

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.



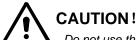
CAUTION!

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).



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

| | After each use | Weekly | Every six | Annually |
|---|----------------|--------|-----------|----------|
| Procedure | | | months | |
| Battery charging | | | | |
| Squeegee cleaning | | | | |
| Brush cleaning | | | | |
| Clean tank, vacuum screen & check top cover | | | | |
| gasket | | | | |
| Squeegee blade check and replacement | | | | |
| Inlet filter cleaning | | | | |

| Screw and nut tightening check | | (1) | |
|-----------------------------------|--|-----|-----|
| Lubricate rotary parts | | (1) | |
| Check brush motor carbon brushes | | | (2) |
| Check vacuum motor carbon brushes | | | (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.

- 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.

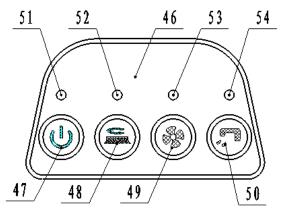
- 1. Move the machine to the appointed disposal area.
- 2. Turn off the main switch (47).
- 3. Take off the recovery tank (2), clean and rinse both solution/recovery tank, and drain out.
- 4. Take off all vacuum kits, gasket, filter, clean and re-install.
- 5. Check the recovery tank lids gasket ring 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. .

Control Panel

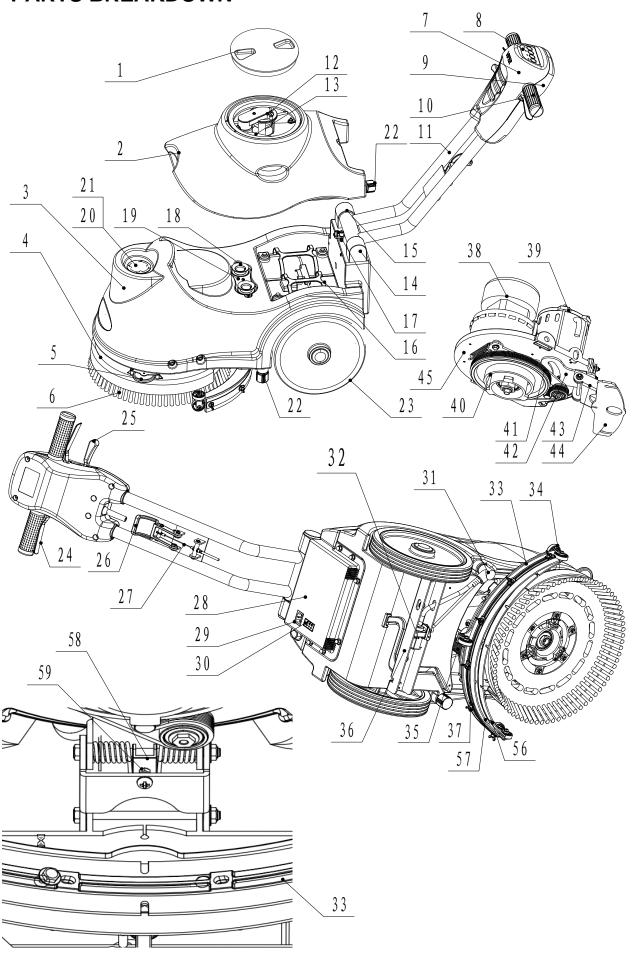


- 46. Control panel
- 47. Main switch
- 48. Brush motor switch
- 49. Vacuum motor switch
- 50. Suction Electromagnetic valve data switch
- 51. Electric quantity indicator
- 52. Brush motor indicator
- 53. Vacuum motor indicator
- 54. Suction Electromagnetic valve data indicator

TECHINICAL DATA

| Machine length x width x height | $770 \times 500 \times 550 MM$ |
|---|--|
| 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 | 750m²/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 |

PARTS BREAKDOWN

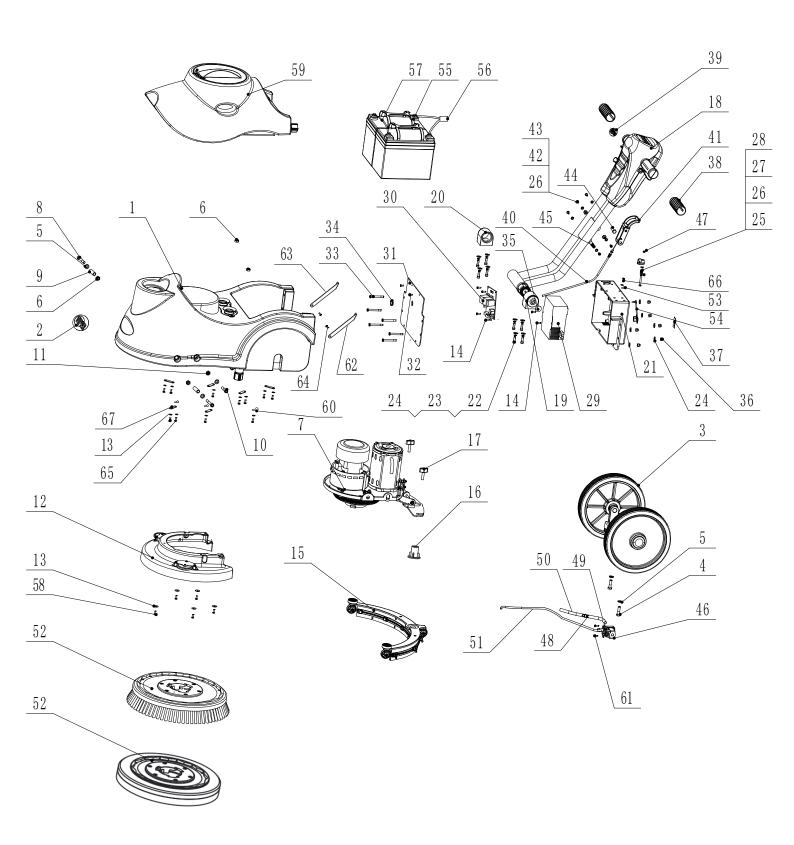


PARTS BREAKDOWN

- 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

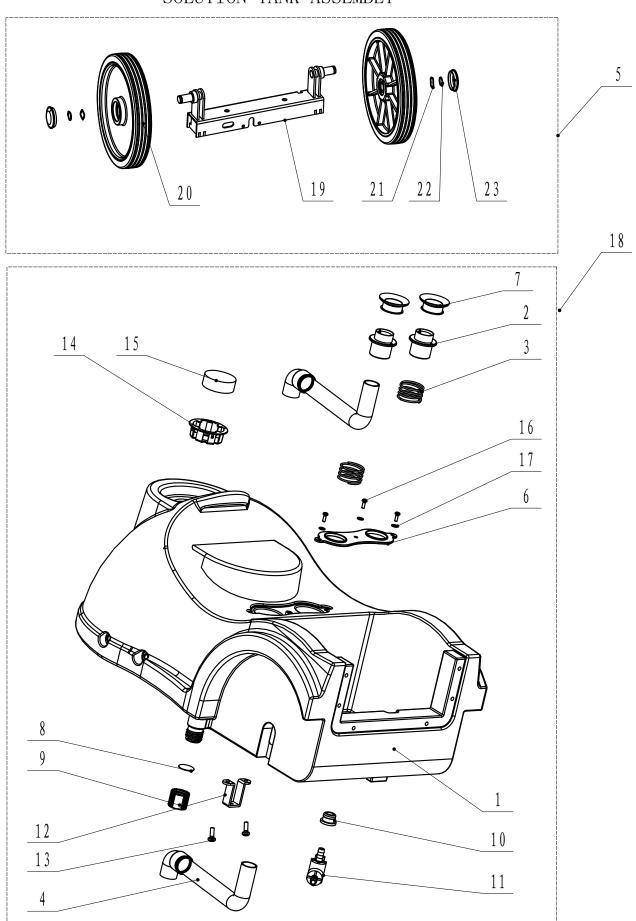
COMPLETE ASSEMBLY



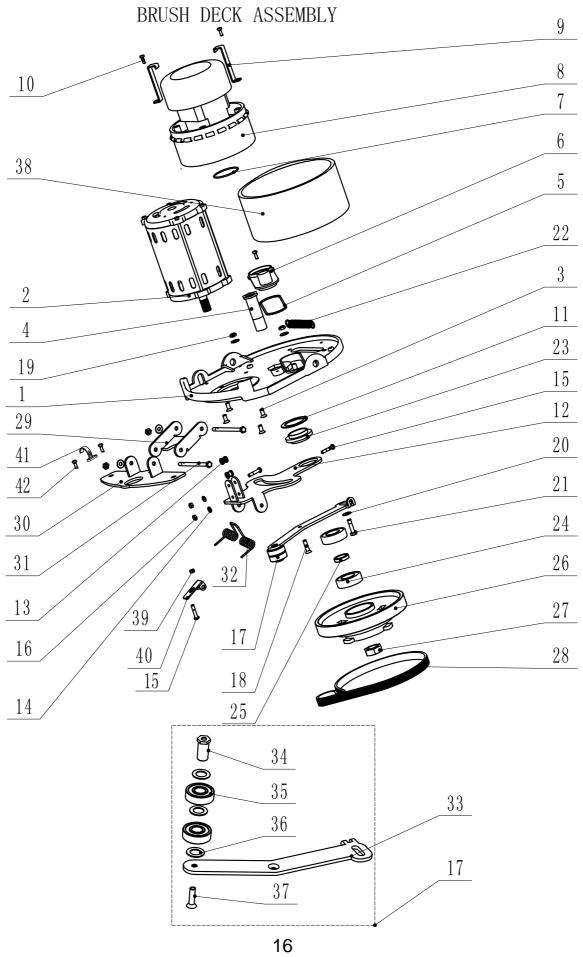
| COMPLETE MACHINE - SSS PANTHER 15B | | | |
|------------------------------------|-------------|----------------------------------|-----|
| Item | Part No. | Description | Qty |
| 1 | VF89100-SSS | KIT, SOLUTION TANK | 1 |
| 2 | VF89018SSS | LABEL, SOLUTION TANK | 1 |
| 3 | VF89200 | KIT, AXLE WHEEL | 1 |
| 4 | VF14251 | BOLT, M8X30, HEX HEAD | 2 |
| 5 | VF13514A | WASHER, D8X1XD16.5 | 5 |
| 6 | VF14516 | NUT, NYLON INSERT, M8 | 4 |
| 7 | VF89831 | KIT, MOTOR MOUNTING PLATE | 1 |
| 8 | VF85698 | HEX SOCKET SCREW, M8X55 | 2 |
| 9 | VF89030 | BUSHING | 2 |
| 10 | VF14258 | HEX SOCKET SCREW, M8X40 | 1 |
| 11 | VF14503 | NUT, M8 | 1 |
| 12 | VF89400 | KIT, SKIRT ASSEMBLY | 1 |
| 13 | VV13664 | WASHER, D4X1XD8 | 15 |
| 14 | VF13491 | PH SCREW, M4X12 | 15 |
| 15 | VF89821 | KIT, SQUEEGEE | 1 |
| 16 | VF89029A | HOSE, CONNECT SQUEEGEE | 1 |
| 17 | VF85420 | THUMB SCREW | 2 |
| 18 | VF89840 | KIT, HANDLE ASSEMBLY | 1 |
| 19 | VF89001 | HANDLE BLOCK, LEFT | 1 |
| 20 | VF89002 | HANDLE BLOCK, RIGHT | 1 |
| 21 | VF89003 | CIRCUIT BOX | 1 |
| 22 | VV60220S1 | HEX SOCKET SCREW, M6X15 | 8 |
| 23 | VV20290 | WASHER LOCK, ¢6 | 8 |
| 24 | VF13614 | WASHER, ¢6 | 14 |
| 25 | GT13027 | PH SCREW, M5X45 | 1 |
| 26 | VA13482 | WASHER, D5X1XD10 | 6 |
| 27 | VF89004SSS | LATCH, RECOVERY TANK | 1 |
| 28 | VF89005 | SPRING, PRESS | 1 |
| 29 | VF89023US | KIT, CHARGER | 1 |
| 30 | VF89025-1 | PLATE, MAIN CONTROL | 1 |
| 31 | VF89006 | CIRCUIT COVER | 1 |
| 32 | VF14301 | SCREW, M4X12 | 2 |
| 32 | | HEX BOLT M6X50 | 4 |
| 33 | VF89034 | | |
| 0.4 | VF89034A | HEX BOLT M6X55 | 2 |
| 34 | VF89052 | COVER, WATERPROOF | 1 |
| 35 | VF89037 | PLUG, RUBBER | 1 |
| 36 | VF89035 | COVER NUT, M6 | 6 |
| 37 | VF89016 | LABEL, CHARGE DISPLAY | 1 |
| 38 | VF89012 | HANDLE GRIP, RUBBER | 2 |
| 39 | VF89017SSS | LABEL, REAR HOUSING | 1 |
| 40 | VF89007 | CABLE, SQUEEGEE LIFT | 1 |
| | VF89007-1 | CABLE, SQUEEGEE LIFT | 1 |
| 41 | VF89008 | HANDLE, SQUEEGEE LIFT | 1 |
| 42 | VV20509 | PH SCREW, M5X10 | 3 |
| 43 | VF89010 | ROTATE AXLE, SQUEEGEE LIFT CABLE | 2 |
| 44 | VF89011 | AXLE, SQUEEGEE LIFT CABLE | 1 |
| 45 | VF89009A | ROTATE AXLE, SQUEEGEE LIFT CABLE | 2 |
| 46 | VF89056 | SOLENOID VALVE, 24V | 1 |
| 47 | VF14514 | NUT, NYLON INSERT, M5 | 1 |
| 48 | VF89033 | HOSE | 1 |
| 49 | VF89847 | PIPE SI, D6XD10, 0.115M | 1 |
| 50 | VF89848 | PIPE SI, D4XD8, 0.115M | 1 |
| 51 | VF89846 | PIPE SI, D6XD10, 0.45M | 1 |
| F0 | VF89830 | BRUSH ASSEMBLY | 1 |
| 52 | VF89817 | PAD DRIVER | 1 |

| COMPLETE MACHINE - SSS PANTHER 15B | | | | |
|------------------------------------|----------|-----------------------------|-----|--|
| Item | Part No. | Description | Qty | |
| 53 | VF85102 | SMALL CLAMP | 1 | |
| 54 | VF89055 | RUBBER PLUG, CHARGER INSERT | 1 | |
| 55 | VF89020 | BATTERY, 2-12V 35Ah | 1 | |
| 56 | VF89036 | POWER WIRE | 1 | |
| 57 | VF89021 | KIT, BATTERY CONNECT LINE | 1 | |
| 58 | VA13473 | PH SCREW, M4X16 | 5 | |
| 59 | VF89827 | KIT, RECOVERY TANK | 1 | |
| 60 | VF85141 | BIG CLAMP | 1 | |
| 61 | VA13472 | PH SCREW, M4X8 | | |
| 62 | VS00001 | SUPPORT,LEFT | 1 | |
| 63 | VS00002 | SUPPORT,RIGHT | 1 | |
| 64 | GT13054 | SCREW, M5X12 | 2 | |
| 65 | VV13650A | SCREW, M4X10 | 11 | |
| 66 | VF14214 | SCREW, M5X8 | 1 | |
| 67 | VF89015 | PLATE | 6 | |

SOLUTION TANK ASSEMBLY

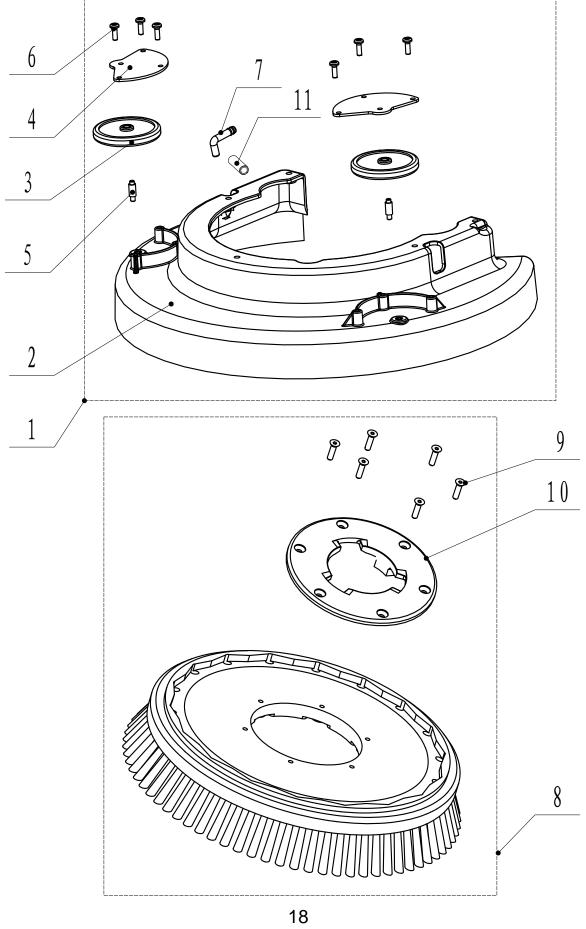


| | SOLUTION TANK ASSY - SSS PANTHER 15B | | | | |
|------|--------------------------------------|---------------------------------|-----|--|--|
| Item | Part No. | Description | Qty | | |
| 1 | VF89101SSS | SOLUTION TANK | 1 | | |
| 2 | VF89102 | HOSE, CONNECT VACUUM | 2 | | |
| 3 | VF89103 | SPRING, PRESS | 2 | | |
| 4 | VF89104 | VACUUM HOSE | 2 | | |
| 5 | VF89200 | KIT, WHEEL AXLE | 1 | | |
| 6 | VF89106 | PLASTIC PLATE, HOSE LIMIT | 1 | | |
| 7 | VF89107 | RUBBER SEAL | 2 | | |
| 8 | VF89115 | GASKET | 1 | | |
| 9 | VF89110 | CAP, DRAIN | 1 | | |
| 10 | VF85302 | RUBBER BUSHING | 1 | | |
| 11 | VF89091 | SOLUTION TAP | 1 | | |
| 12 | VF89112 | CABLE BRACKET | 1 | | |
| 13 | VF14200 | PH SCREW, M6X15 | 2 | | |
| 14 | VF89113 | SEAT, INLET, FRESH WATER TANK | 1 | | |
| 15 | VF89114 | FILTER, INLET, FRESH WATER TANK | 1 | | |
| 16 | VF13491 | PH SCREW, M4X12 | 3 | | |
| 17 | VV13664 | WASHER ¢4 | 3 | | |
| 18 | VF89100-SSS | KIT, SOLUTION TANK | 1 | | |
| 19 | VF89201 | WHEEL AXLE | 1 | | |
| 20 | VF89202 | DRIVE WHEEL, 10" | 2 | | |
| 21 | VF14563 | WASHER,WAVE | 2 | | |
| 22 | VF14552 | SNAP SPRING | 2 | | |
| 23 | VF89202-3 | CAP, WHEEL | 2 | | |



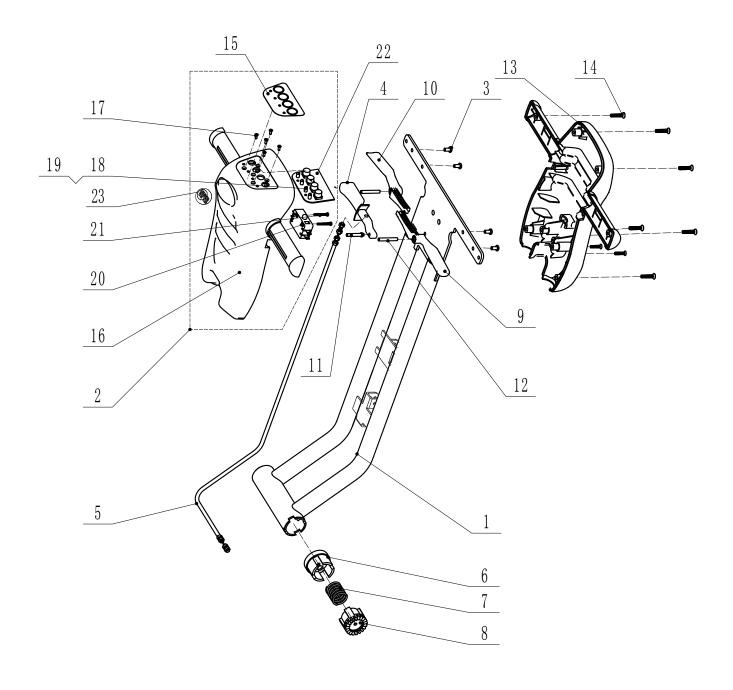
| 1 | BRUSH DECK ASSY - SSS PANTHER 15B | | | | |
|------|-----------------------------------|----------------------------|-----|--|--|
| Item | Part No. | Description | Qty | | |
| 1 | VF89301 | PLATE, MOTOR MOUNT | 1 | | |
| 2 | VF89302 | BRUSH MOTOR ASSEMBLY | 1 | | |
| 3 | VF89303 | SCREW, M6X14 | 4 | | |
| 4 | VF89304 | BOLT, DIRVE BELT | 1 | | |
| 5 | VF89305 | O-RING, BIG | 1 | | |
| 6 | VF89306 | SEALING COVER, VACUUM | 1 | | |
| 7 | VF89307 | O-RING, SMALL | 1 | | |
| 8 | VF89309 | KIT, VACUUM MOTOR | 1 | | |
| 9 | VF89310 | BRACKET, VAC MOTOR | 2 | | |
| 10 | VF13491 | PH SCREW, M4X12 | 3 | | |
| 11 | VF89311 | WASHER, THIN | 1 | | |
| 12 | VF89312 | PLATE, SQUEEGEE ROTATE | 1 | | |
| 13 | VF89313 | GUIDE WHEEL, SQUEEGEE | 2 | | |
| 14 | VA13482 | WASHER ¢5 | 2 | | |
| 15 | VA13475 | PH SCREW, M5X25 | 3 | | |
| 16 | VF14514 | NUT, NYLON INSERT, M5 | 2 | | |
| 17 | VF89314 | KIT, BELT ADJUSTMENT | 1 | | |
| 18 | VF14223 | SCREW, M6X25 | 1 | | |
| 19 | VF14506 | NUT, NYLON INSERT, M6 | 4 | | |
| 20 | VF13614 | WASHER, ¢6 | 3 | | |
| 21 | VV20058 | BOLT, M6X25, HEX | 1 | | |
| 22 | VF89318 | SPRING | 1 | | |
| 23 | VF89319 | BUSHING, SQUEEGEE ROTATE | 1 | | |
| 24 | ZD45425 | BEARING, 6204 | 2 | | |
| 25 | VF89320 | BUSHING | 1 | | |
| 26 | VF89321 | DRIVE HUB | 1 | | |
| 27 | VF89322 | NUT, M20 | 1 | | |
| 28 | VF89323 | DRIVE BELT, PJ270 | 1 | | |
| 29 | VF89324 | PLATE, SQUEEGEE LIFT | 1 | | |
| 30 | VF89325 | PLATE, SQUEEGEE BRACKET | 1 | | |
| 31 | VF89326 | ROTATE BOLT, SQUEEGEE LIFT | 2 | | |
| 32 | VF89823 | TORSION SPRING | 1 | | |
| 33 | VF89315 | PLATE, BELT ADJUSTMENT | 1 | | |
| 34 | VF89316 | BOLT, BEARING | 1 | | |
| 35 | VF51126A | BEARING, 6201 | 2 | | |
| 36 | VF89317 | WASHER, D12.2XD20X1 | 3 | | |
| 37 | GT13084 | SCREW, M6X20 | 1 | | |
| 38 | VF89308 | SILENCER SPONGE | 1 | | |
| 39 | VV13633 | NUT, M5 | 1 | | |
| 40 | VF89337 | PRESSURE ADJUSTMENT PLATE | 1 | | |
| 41 | VF89092 | CLAMP DRAIN HOSE | 1 | | |
| 42 | VV13667 | SCREW, M4X8 | 2 | | |

BRUSH SKIRT & BRUSH



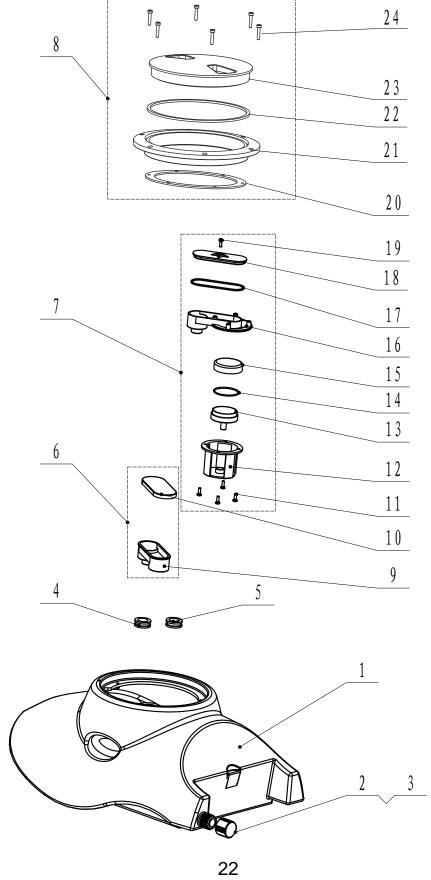
| | | BRUSH SKIRT & BRUSH ASSEMBLY - SSS PANTHER 15B | |
|------|-------------|--|-----|
| Item | Part No. | Description | Qty |
| 1 | VF89400 | BRUSH SKIRT ASSEMBLY | 1 |
| 2 | VF89401 | BRUSH SKIRT | 1 |
| 3 | VF89402 | WHEEL, BUMPER | 2 |
| 4 | VF89403 | COVER, WHEEL | 2 |
| 5 | VF89404 | SHAFT | 2 |
| 6 | VF14401 | SCREW, ST4X10 | 6 |
| 7 | VF89051 | ELBOW | 1 |
| 7 | VF89838 | ELBOW | 1 |
| 0 | VF89830 | BRUSH ASSEMBLY | 1 |
| 8 | VF89817 | PAD DRIVER ASSEMBLY | 1 |
| 9 | MF-VF002-4A | SCREW, ST6.5X25 | 6 |
| 10 | VF89803 | BRUSH HUB | 1 |
| 11 | VF89824 | HOSE | 1 |

HANDLE CONTROL ASSEMBLY



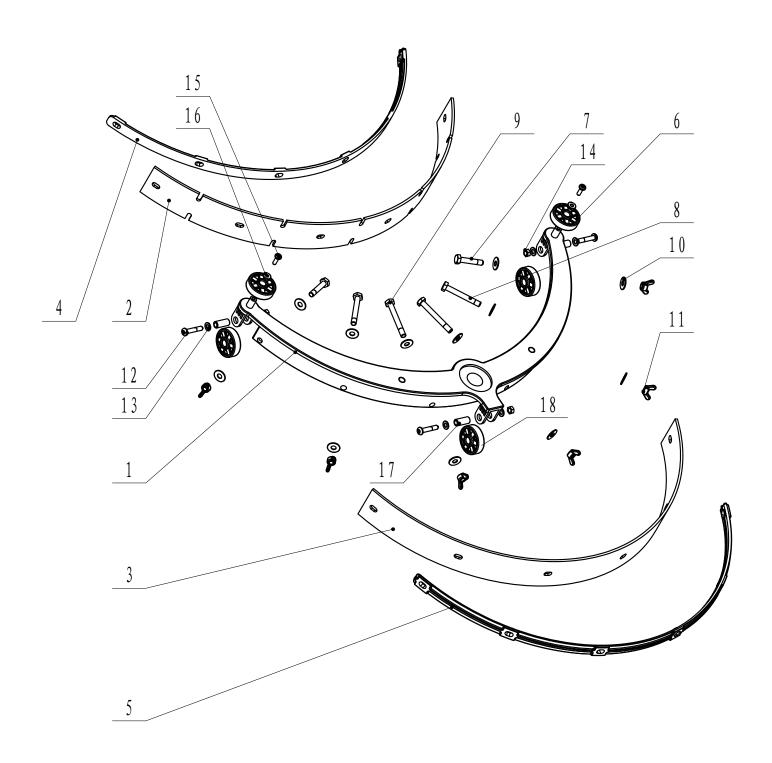
| | | HANDLE ASSY - SSS PANTHER 15B | |
|------|------------|-------------------------------|-----|
| Item | Part No. | Description | Qty |
| 4 | VF89601 | HANDLE TUBE ASSY | 1 |
| 1 | VF89601A | HANDLE TUBE ASSY | 1 |
| 2 | VF89839 | KIT, FRONT CONTROL HOUSING | 1 |
| 3 | 80405A | PH SCREW, M5X12 | 4 |
| 4 | VF89610 | TRIGGER, HANDLE ADJUSTMENT | 1 |
| 5 | VF89611 | CABLE, HANDLE ADJUSTMENT | 1 |
| 6 | VF89612 | BUSHING, GUIDE GEAR | 1 |
| 7 | VF89613 | SPRING, HANDLE GEAR | 1 |
| 8 | VF89614 | GEAR, HANDLE ADJUSTMENT | 1 |
| 9 | VF89615 | TRIGGER, LEFT | 1 |
| 10 | VF89616 | TRIGGER, RIGHT | 1 |
| 11 | VF89617 | PIN, HANDLE ADJUSTMENT | 1 |
| 12 | VF89621 | PIN, TRIGGER | 2 |
| 13 | VF89618 | CONTROL HOUSING, REAR | 1 |
| 14 | VF80407A | PH SCREW ,M5X25 | 8 |
| 15 | VF89619SSS | LABEL, SWITCH | 1 |
| 16 | VF89608 | CONTROL HOUSING, FRONT | 1 |
| 17 | 33005101 | PH SCREW, M3X8 | 5 |
| 18 | VF89622 | BOLT, INSULATION, M3X15 | 5 |
| 19 | VV13617 | NUT, M3 | 5 |
| 20 | VF40263A | SWITCH | 1 |
| 21 | VF14244 | PH SCREW, M3X20 | 2 |
| 22 | VF89025-2 | CIRCUIT BOARD | 1 |
| 23 | VF89017SSS | LABEL, CONTROL HOUSING | 1 |

RECOVERY TANK ASSEMBLY



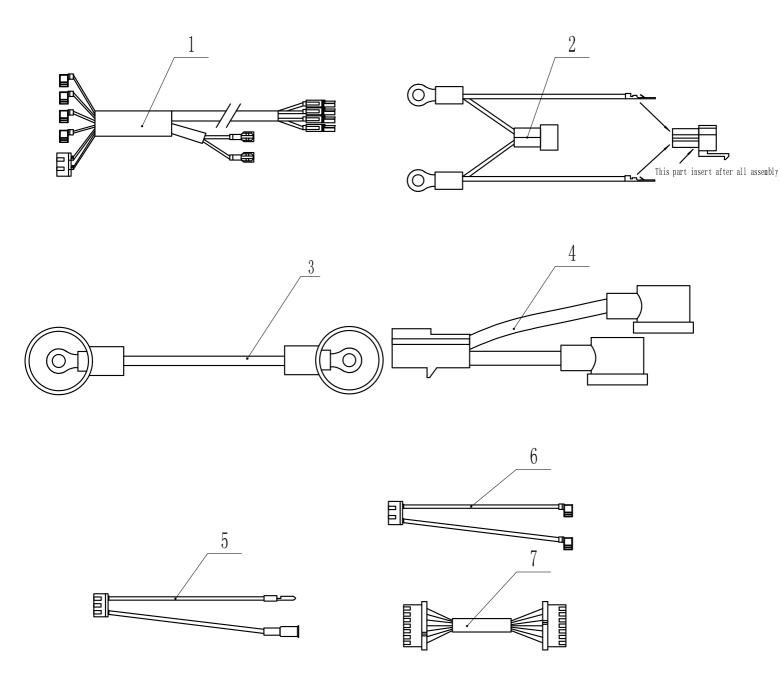
| | | RECOVERY TANK - SSS PANTHER 15B | |
|------|----------|---------------------------------|-----|
| Item | Part No. | Description | Qty |
| 1 | VF89701 | RECOVERY TANK | 1 |
| 2 | VF89115 | GASKET | 1 |
| 3 | VF89110 | CAP, DRAIN | 1 |
| 4 | VF89810 | RUBBER BUSHING, TANK | 1 |
| 5 | VF89811 | RUBBER BUSHING, TANK, GREY | 1 |
| 6 | VF89828 | KIT, SQUEEGEE SUCTION | 1 |
| 7 | VF89829 | KIT, SQUEEGEE VACCUM | 1 |
| 0 | VF89716 | KIT, RECOVERY TANK COVER | 1 |
| 8 | VF89716A | KIT, RECOVERY TANK COVER | 1 |
| 9 | VF89813 | BASE, OUTLET | 1 |
| 10 | VF89712 | COVER, RUBBER | 1 |
| 11 | VA50523 | SCREW, ST4X8 | 4 |
| 12 | VF89709 | GUIDE BASE, PLUG VACUUM | 1 |
| 13 | VF89711 | PLUG, BASE | 1 |
| 14 | VF89712 | O-RING, PLUG | 1 |
| 15 | VF89710 | PLUG, COVER | 1 |
| 16 | VF89814 | BASE, VACUUM | 1 |
| 17 | VF89705 | O-RING | 1 |
| 18 | VF89706 | COVER, VACUUM | 1 |
| 19 | VA13477 | SCREW, ST4X15 | 2 |
| 20 | VF89077 | SEAL, LID | 1 |
| 21 | VF89079 | SEAT,FOR LID | 1 |
| 22 | VF89078 | SEAL, LID | 1 |
| 23 | VV96001S | LID, RECOVERY TANK | 1 |
| 24 | VF89080 | SCREW, M4X12 | 6 |

SQUEEGEE ASSEMBLY



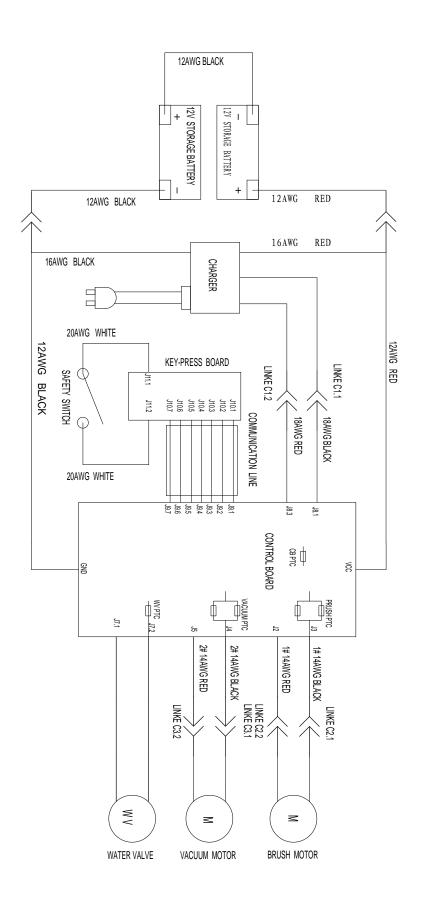
| SQUEEGEE ASSY - SSS PANTHER 15B | | | | | |
|---------------------------------|------------|---------------------------------------|-----|--|--|
| Item | Part No. | Description | Qty | | |
| 1 | VF89815 | SQUEEGEE BRACKET | 1 | | |
| 2 - | VF89807 | SQUEEGEE BLADE, FRONT | 1 | | |
| _ | VF89807-PU | SQUEEGEE BLADE, FRONT (PU - OPTIONAL) | 1 | | |
| 3 - | VF89808 | SQUEEGEE BLADE, REAR | 1 | | |
| 3 | VF89808-PU | SQUEEGEE BLADE, REAR (PU - OPTIONAL) | 1 | | |
| 4 | VF89504 | STRAP, SQUEEGEE FRONT | 1 | | |
| 5 | VF89505 | STRAP, SQUEEGEE REAR | 1 | | |
| 6 | VF89506 | WHEEL, SQUEEGEE | 2 | | |
| 7 | VA13479 | BOLT, M6X30, HEX STAINLESS | 2 | | |
| 8 | VF89507 | BOLT, M6X45, HEX STAINLESS | 2 | | |
| 9 | VF14264 | BOLT, M6X50, HEX STAINLESS | 2 | | |
| 10 | VF13614 | WASHER, D6.3XD12.6X1.2, STAINLESS | 12 | | |
| 11 | VF89509 | NUT, THUMB, M6 | 6 | | |
| 12 | 80398A | SCREW, M5X35 | 3 | | |
| 13 | VA13482 | WASHER, D5XD10X1.0, STAINLESS | 6 | | |
| 14 | VF14514 | NUT, NYLON INSERT, M5 | 3 | | |
| 15 | VF13491 | PH SCREW, M4X12 | 2 | | |
| 16 | VV13664 | WASHER, D4XD12X1MM, STAINLESS | 2 | | |
| 17 | VF89508 | BUSHING | 3 | | |
| 18 | VF89809 | WHEEL, SQUEEGEE | 3 | | |

ELECTRICAL



| ELECTRICAL PARTS - SSS PANTHER 15B | | | | | |
|------------------------------------|-----------|----------------------|-----|--|--|
| Item | Part No. | Description | Qty | | |
| 1 | VF89026 | MOTOR WIRE | 1 | | |
| 2 | VF89022 | MAIN POWER WIRE | 1 | | |
| 3 | VF89021 | BATTERY CONNECT WIRE | 1 | | |
| 4 | VF89036 | POWER WIRE | 1 | | |
| 5 | VF89024 | CHARGER INPUT WIRE | 1 | | |
| 6 | VF89620 | KIT, 4-LEG SWITCH | 1 | | |
| 7 | VF89025-3 | COMMUNICATION WIRE | 1 | | |

WIRING DIAGRAM



TROUBLESHOOTING

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

