

SC100 - SCRUBTEC 130



Service Manual

Nilfisk SC100, 107408100 - 107408102 - 107408103

Nilfisk Alto Scrubtec 130, 107408140 - 107408150 - 107408152

Table of Contents

| | |
|---|-----------|
| General Information | 2 |
| Machine General Description | 2 |
| Service Manual Purpose and Field of Application | 2 |
| Other Reference Manuals | 2 |
| Conventions. | 3 |
| Service and Spare Parts | 3 |
| Serial Number Label | 3 |
| Safety | 4 |
| Visible Symbols on the Machine | 4 |
| Symbols that appear on this manual | 4 |
| General Instructions. | 5 |
| SC100 Nomenclature. | 7 |
| Scrubtec 130 Nomenclature | 8 |
| Technical Data | 9 |
| Maintenance | 9 |
| Scheduled Maintenance Table | 9 |
| Troubleshooting | 10 |
| Electrical System | 11 |
| General Wiring Diagram. | 11 |
| SC100. | 11 |
| Scrubtec 130 | 11 |
| Function Board Connections | 12 |
| Removal and Installation | 13 |
| Motor Disassembly/Assembly | 13 |
| Function Electronic Board Disassembly/Assembly. | 21 |
| Switch Panel Disassembly/Assembly | 22 |
| Parking Position Microswitch Disassembly/Assembly | 23 |
| Solution System | 28 |
| Maintenance and Adjustments | 28 |
| Cylindrical brush, brush compartment and dosing bridge cleaning. | 28 |
| Solution filter cleaning. | 28 |
| Removal and Installation | 29 |
| Disassembly/assembly of the solution level sensor (inside the tank) | 29 |
| Disassembly/assembly of the sensor receiving the solution level | 30 |
| Dosing pump Disassembly/Assembly | 31 |
| Cylindrical Brush System | 36 |
| Removal and Installation | 36 |
| Belt and Pulley Disassembly/Assembly. | 36 |

General Information

Machine General Description

SC100 and Scrubtec 130 are commercial machines for cleaning (scrubbing and drying) smooth and compact floors. The scrubber-dryer can be used to clean carpets or fitted carpet only when the specific accessories installed.

For power supply, the machine must be connect to the electrical mains with the power supply cable connector. The machine is equipped with a single cylindrical brush, a controlled solution flow dosing system, front and rear squeegees to dry the floor by vacuuming the dirty water.

Service Manual Purpose and Field of Application

This Service Manual is a technical resource intended to help service technicians when carrying out maintenance and repairs on the scrubber-dryer, to guarantee the best cleaning performance and a long working life for the machine.

Please read this manual carefully before performing any maintenance and repair procedure on the machine.

Other Reference Manuals

| Model | Product Code | Instructions for Use | Spare Parts List |
|---------------------------|--------------|----------------------|------------------|
| Nilfisk SC100 | 107408100 | 107412885 | |
| | 107408102 | | |
| | 107408103 | | |
| Nilfisk Alto Scrubtec 130 | 107408140 | 107412886 | |
| | 107408150 | | |
| | 107408152 | | |

These manuals are available at:

Local Advance or Nilfisk retailer

Nilfisk website: www.nilfisk.com

Nilfisk-Alto website: www.nilfisk-alto.com

Conventions

In this Manual, forward, backward, front, rear, left or right are intended with reference to the operator's position when using the machine.

Service and Spare Parts

Service and repairs must be performed only by authorised personnel or Nilfisk Service Centers. The authorised personnel is trained directly at the manufacturer's premises and has original spare parts and accessories. Contact Nilfisk Retailer indicated below for service or to order spare parts and accessories, specifying the machine model and serial number.

(Apply Retailer label here)

Serial Number Label

The machine serial number and model name are marked on the plate (see the example to the side). Product number and year of production are marked on the same plate.

This information is useful when requiring machine spare parts.

Use the following table to write down the machine identification data.

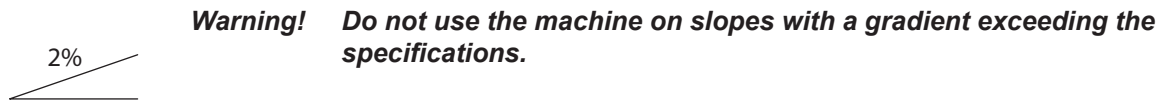
| |
|-----------------------------|
| MACHINE model |
| PRODUCT code |
| MACHINE serial number |

Safety

The following symbols indicate potentially dangerous situations. Always read this information carefully and take all necessary precautions to safeguard people and property.

The operator's cooperation is essential in order to prevent injury. No accident prevention program is effective without the total cooperation of the person responsible for the machine operation. Most of the accidents are caused by failure to comply with the simplest rules for exercising prudence.

Visible Symbols on the Machine



Symbols that appear on this manual



Danger! It indicates a dangerous situation with risk of death for the operator.



Warning! It indicates a dangerous situation with risk of death for the operator.



Caution! It indicates a potential risk of injury for people.



Note: It indicates a remark related to important or useful functions.

General Instructions

Specific warnings and cautions to inform about potential damages to people and machine are shown below.



Danger!

- Before performing any maintenance, repair, cleaning or replacement procedure disconnect the plug from the electrical mains.
- Do not wear jewels when working near electrical components.
- Do not operate the machine near toxic, dangerous, flammable and/or explosive powders, liquids or vapors. This machine is not suitable for collecting dangerous powders.



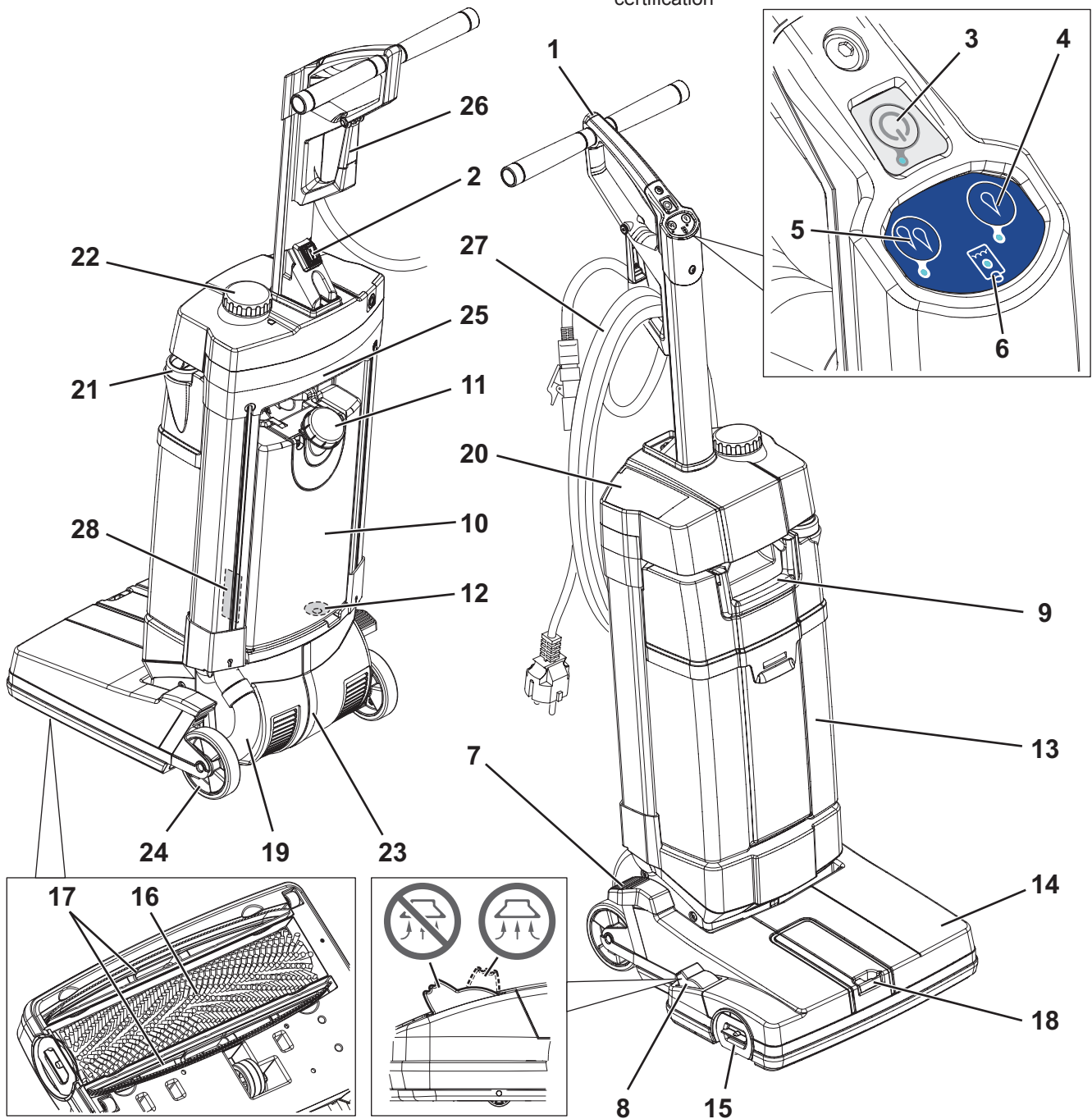
Warning!

- This machine must be used by properly trained operators only.
- Carefully read all the instructions before performing any maintenance/repair procedure.
- Improper connection can cause electric shock. Consult a qualified technician to make sure that the outlet is properly grounded.
- Do not tamper with the power supply cable plug. If the power supply cable plug cannot be connected to the outlet, have an outlet installed by a qualified technician, according to the law in force.
- Before connecting the power supply plug to the electrical mains, check that frequency and voltage, shown on the machine serial number plate, match the electrical mains voltage.
- Do not unplug the machine by pulling the supply cable. To unplug, grasp the plug, not the cable.
- Do not handle the plug or the machine with wet hands.
- Turn off all controls before unplugging.
- Regularly check the power supply cable for damages, cuts, cracks and wear. If necessary, replace it.
- If the power supply cable is damaged, it must be replaced by the Manufacturer or by an authorised Service Centre.
- Do not pull or carry the machine by the power supply cable and never use the power supply cable as a handle. Do not close a door on the power supply cable, or pull the power supply cable around sharp edges or corners. Do not run the machine on the power supply cable. The rotating brush must not come into contact with the power supply cable.
- Keep the supply cable away from heated surfaces.
- To reduce the risk of fire, electric shock, or injury, do not leave the machine unattended when it is plugged in. Disconnect the machine from the electrical mains when not in use and before performing maintenance procedures.
- Not suitable to be used outdoors. Protect the machine from the sun and moisture. This machine must be stored indoor.
- Before using the machine, close all doors and/or covers as shown in the Instructions for Use Manual.
- EU countries: This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Non-EU countries: This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.

- Close attention is necessary when used near children.
- Use only as shown in this Manual. Use only Nilfisk's recommended accessories.
- Check the machine carefully before each use, always check that all the components have been assembled before use. If the machine is not perfectly assembled it can cause damages to people and properties.
- Take all necessary precautions to prevent hair, jewels and loose clothes from being caught by the machine moving parts.
- Do not use the machine on slopes.
- Do not use the machine on slopes with a gradient exceeding the specifications.
- Do not use the machine in particularly dusty areas.
- Use the machine only where a proper lighting is provided.
- While using this machine, take care not to cause damage to people or objects.
- Do not bump into shelves or scaffoldings, especially where there is a risk of falling objects.
- The machine working temperature must be between 0 °C and +40 °C.
- The machine storage temperature must be between 0 °C and +40 °C.
- The humidity must be between 30 % and 95 %.
- When using floor cleaning detergents, follow the instructions on the labels of the detergent bottles.
- To handle floor cleaning detergents, wear suitable gloves and protections.
- Do not use the machine as a means of transport.
- Do not allow the brush to operate while the machine is stationary to avoid damaging the floor.
- In case of fire, use a powder fire extinguisher, not a water one.
- Do not tamper with the machine safety guards and follow the ordinary maintenance instructions scrupulously.
- Do not allow any object to enter into the openings. Do not use the machine if the openings are clogged. Always keep the openings free from dust, hairs and any other foreign material which could reduce the air flow.
- Do not remove or modify the plates affixed to the machine.
- This machine cannot be used on roads or public streets.
- Pay attention during machine transportation when temperature is below freezing point. The water in the recovery tank or in the hoses could freeze and seriously damage the machine.
- Use brushes and pads supplied with the machine or those specified in the Instructions for Use Manual. Using other brushes could reduce safety.
- In case of machine malfunctions, ensure that these are not due to lack of maintenance. If necessary, request assistance from the authorised personnel or from an authorised Service Center.
- If the machine
 - does not work properly
 - is damaged
 - has water or foam leaks
 - has been left outdoors exposed to bad weather conditions
 - is wet or has been dropped into waterturn it off immediately and contact the Nilfisk Service Center or a qualified technician.
- If parts must be replaced, require ORIGINAL spare parts from an Authorised Dealer or Retailer.
- To ensure machine proper and safe operation, please follow the scheduled maintenance table in this Manual.
- Do not wash the machine with direct or pressurised water jets, or with corrosive substances.
- The machine must be disposed of properly, because of the presence of toxic-harmful materials (electronic components, etc.), which are subject to standards that require disposal in special centres (see the Scraping chapter).

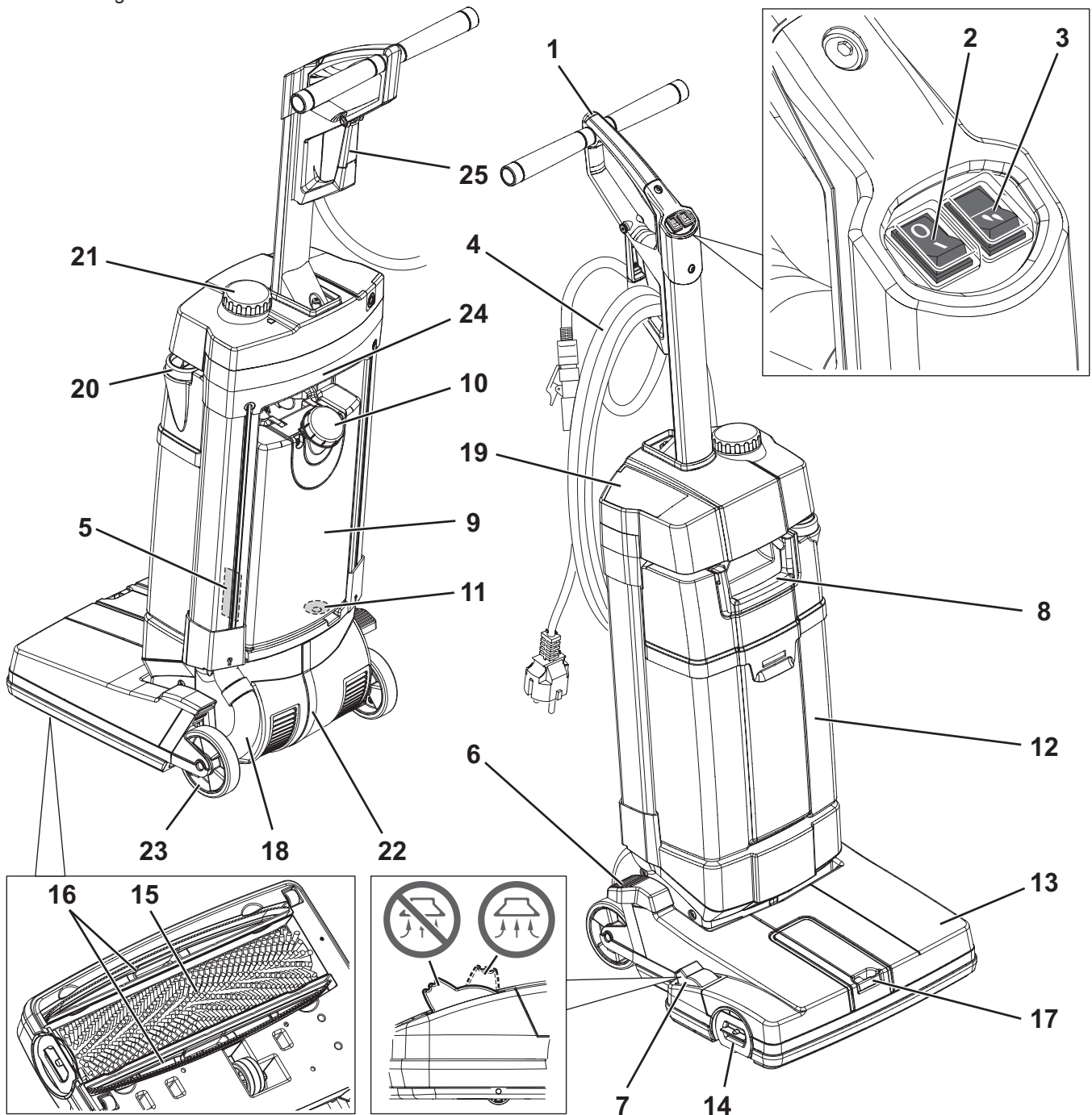
SC100 Nomenclature

- | | |
|--|---|
| 1. Handle | 15. Brush engagement/disengagement lever |
| 2. Main switch | 16. Brush |
| 3. Start/stop switch | 17. Squeegee bars |
| 4. Solution switch, level 1 | 18. Inspection lid |
| 5. Solution switch, level 2 | 19. Recovery water vacuum hose |
| 6. Empty solution tank warning LED | 20. Air filter cover |
| 7. Stop position unlocking pedal | 21. Recovery tank drain plug |
| 8. Squeegee bar lifting/lowering pedal | 22. Vacuum inlet plug |
| 9. Tank coupling and transport handle | 23. Brush/vacuum motor compartment |
| 10. Solution tank | 24. Rear wheels |
| 11. Solution tank filler plug | 25. Transport handle housing |
| 12. Solution filter | 26. Power supply cable holder |
| 13. Recovery tank | 27. Power supply cable with connector |
| 14. Cleaning deck | 28. Serial number plate/technical data/conformity certification |



Scrubtec 130 Nomenclature

- | | |
|--|--|
| 1. Handle | 14. Brush engagement/disengagement lever |
| 2. Start/stop switch | 15. Brush |
| 3. Solution switch | 16. Squeegee bars |
| 4. Power supply cable with connector | 17. Inspection lid |
| 5. Serial number plate/technical data/conformity certification | 18. Recovery water vacuum hose |
| 6. Stop position unlocking pedal | 19. Air filter cover |
| 7. Squeegee bar lifting/lowering pedal | 20. Recovery tank drain plug |
| 8. Tank coupling and transport handle | 21. Vacuum inlet plug |
| 9. Solution tank | 22. Brush/vacuum motor compartment |
| 10. Solution tank filler plug | 23. Rear wheels |
| 11. Solution filter | 24. Transport handle housing |
| 12. Recovery tank | 25. Power supply cable holder |
| 13. Cleaning deck | |



Technical Data

| Model | SC100 - Scrubtec 130 |
|--|-------------------------|
| Solution tank capacity | 3 liters |
| Recovery tank capacity | 4 liters |
| Machine size (length x width x height) | 400 x 360 x 1,150 mm |
| Cleaning width | 310 mm |
| Brush diameter | 66 mm |
| Min/max solution flow | 0.2 / 0.6 L/min |
| Sound pressure level at workstation (ISO 11201, ISO 4871, EN 60335-2-72) (LpA) | 72 dB(A) ± 2 dB(A) |
| Machine sound power level (ISO 3744, ISO 4871, EN 60335-2-72) (LwA) | 83 dB(A) |
| Vibration level at the operator's arms (ISO 5349-1, EN 60335-2-72) | < 2.5 m/s ² |
| Maximum gradient when working | 2 % |
| IP protection class | X4 |
| Protection class (electric) | II |
| Vacuum system capacity | 360 mm H ₂ O |
| Brush rotation speed | 2,100 rpm |
| Total absorbed power | 0.8 kW |
| Electrical system voltage | 220-240 V - 50-60 Hz |
| Weight with empty tanks | 12 kg |
| Gross vehicle weight (GVW) | 15 kg |
| Shipping weight | 16 kg |

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.



Warning! *Maintenance procedures must be performed with the machine switched off and the power supply cable plug disconnected from the electrical mains. Moreover, carefully read the instructions in the Safety chapter.*

Scheduled Maintenance Table

| Procedure | Daily, after using the machine | Weekly | Every six months |
|---|--------------------------------|--------|------------------|
| Squeegee bar cleaning | | | |
| Brush Cleaning | | | |
| Recovery Tank Cleaning | | | |
| Brush compartment and inspection compartment cleaning | | | |
| Power supply cable check | | | |
| Dosing bridge cleaning | | | |
| Squeegee bar check | | | |
| Detergent filter cleaning | | | |
| Air filter cleaning | | | |
| Solution tank cleaning | | | |
| Squeegee bar replacement | | | |

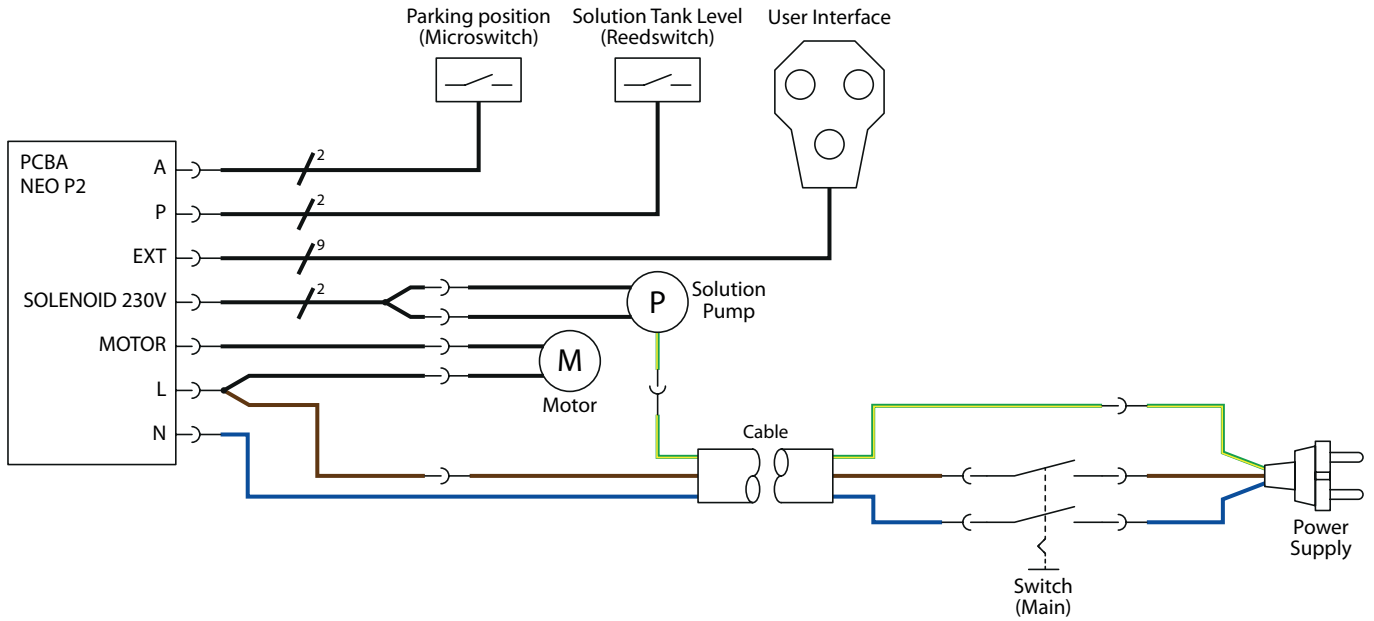
Troubleshooting

| Trouble | Possible Causes | Remedy |
|---|--|------------------------------------|
| The machine does not work. | The power supply cable or the relevant plug is broken. | Replace the cable. |
| | The main switch is broken. | Replace the switch. |
| | The switch panel is broken. | Replace the switch panel. |
| | The function electronic board is broken. | Replace the electronic board. |
| | The parking position microswitch is broken. | Replace the microswitch. |
| | The motor is broken. | Replace the motor. |
| | The driving belts are broken. | Replace the belts. |
| The dirty water vacuuming is insufficient. | The recovery tank is full. | Empty the tank. |
| | The squeegee bars are dirty or the blades are worn or damaged. | Clean and check the squeegee bars. |
| | The inspection compartment is dirty. | Clean the compartment. |
| | The vacuum hose is disconnected or dirty. | Connect or clean the hose. |
| | The air filter is dirty. | Clean the filter. |
| The solution flow to the brush is insufficient. | The solution filter is dirty. | Clean the filter. |
| | The dosing bridge are clogged. | Clean the dosing bridge. |
| | The solenoid valve is broken. | Replace the solenoid valve. |
| The squeegees leave 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. |

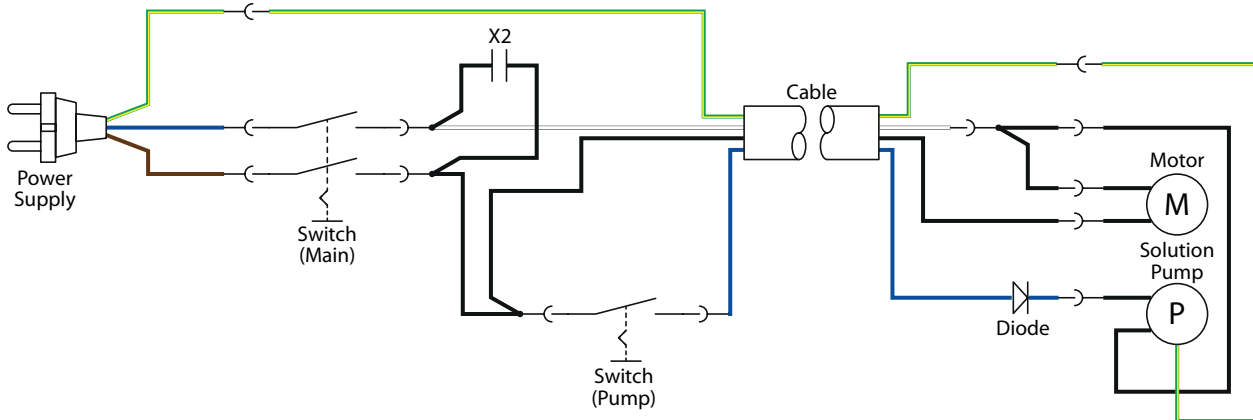
Electrical System

General Wiring Diagram

SC100

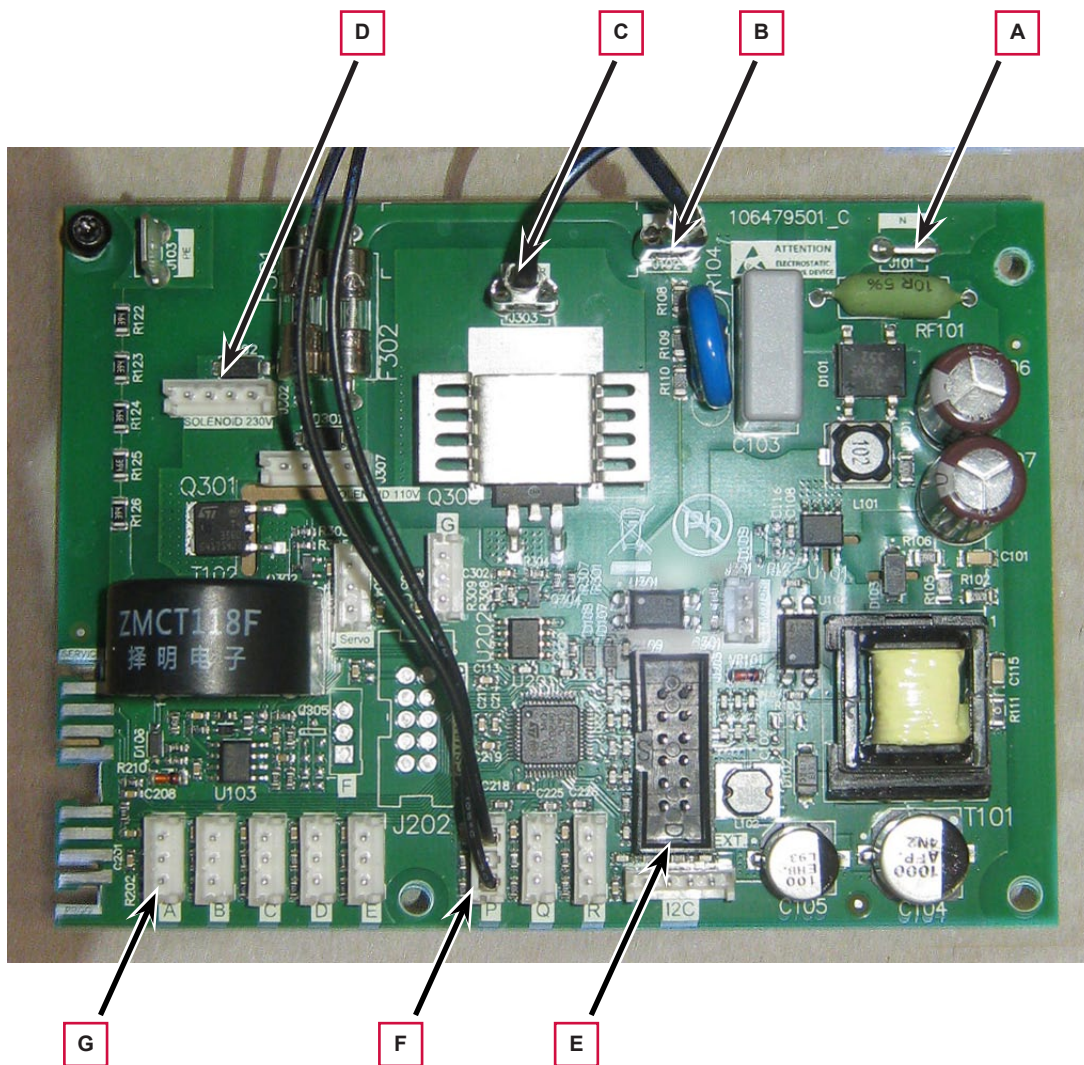


Scrubtec 130



Function Board Connections

- (A) Power supply connection (blue cable).
- (B) Split power supply connection (brown cable) - Main motor (black cable).
- (C) Main motor connection (black cable).
- (D) Dosing pump connection (4-way connector - 2 cables).
- (E) Switch panel connection (12-way connector - 9 cables).
- (F) Solution level connection (3-way connector - 2 cables).
- (G) Parking position microswitch connection (3-way connector - 2 cables).

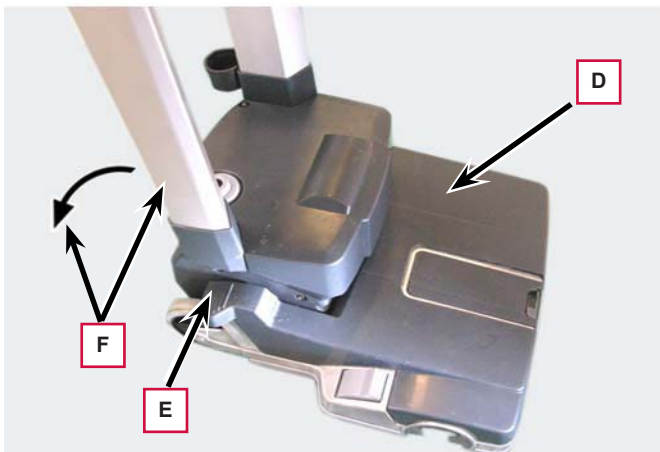
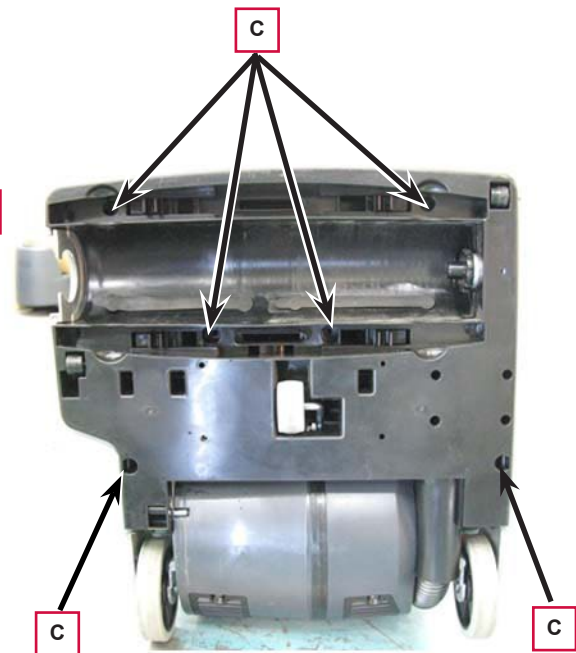
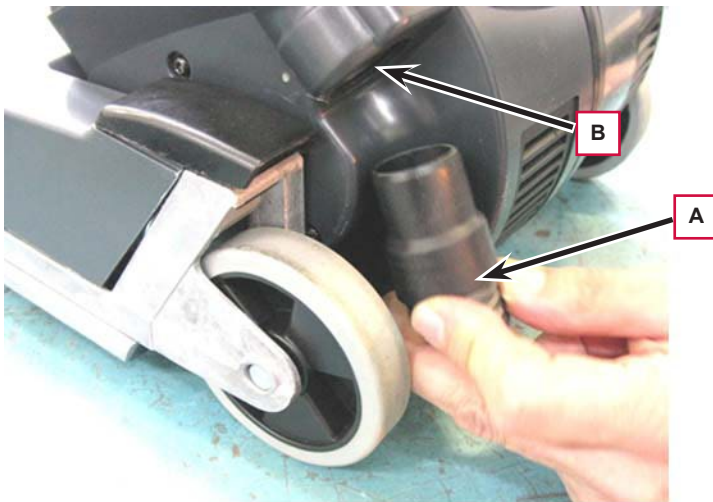


Removal and Installation

Motor Disassembly/Assembly

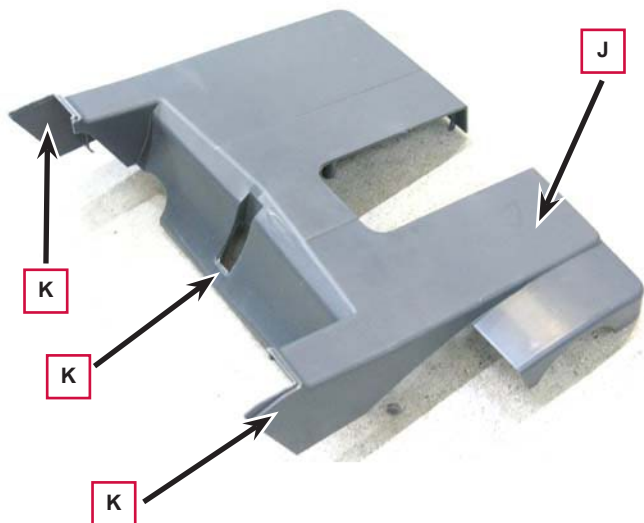
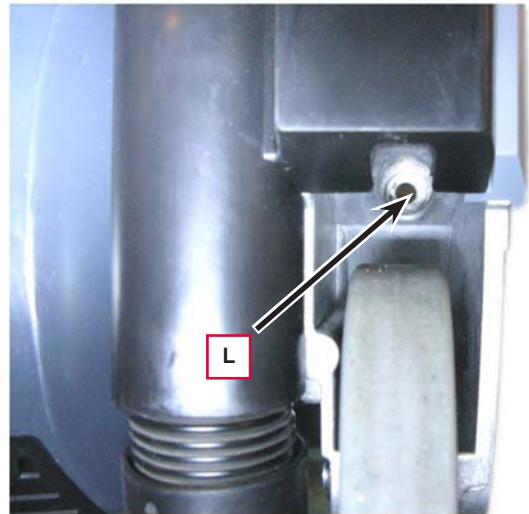
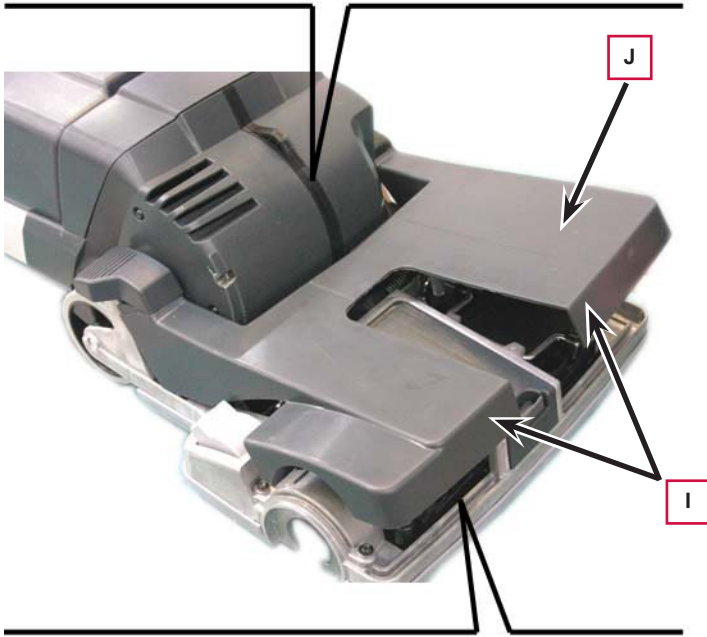
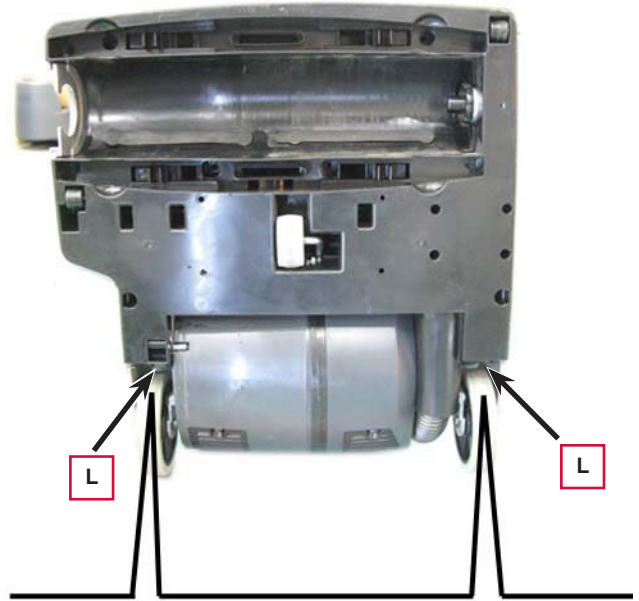
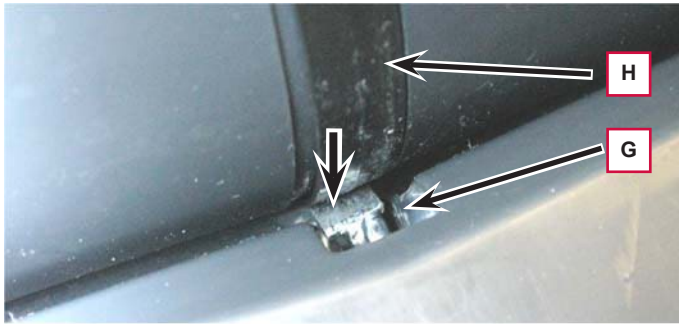
Disassembly

1. Set the machine to stop position.
2. Make sure that the machine power supply cable is disconnected from the electrical mains.
3. Remove the brush.
4. Remove two squeegee bars.
5. Remove the function electronic board (see the procedure in the relevant paragraph).
6. Remove the sensor receiving the solution level (see the procedure in the relevant paragraph).
7. Disconnect the vacuum hose (A) from the housing (B) of the motor assembly.
8. On the lower side of the deck, remove the screws (C).
9. Turn the machine to its original position (D).
10. Press the unlock pedal (E) and fully lower the frame (F).



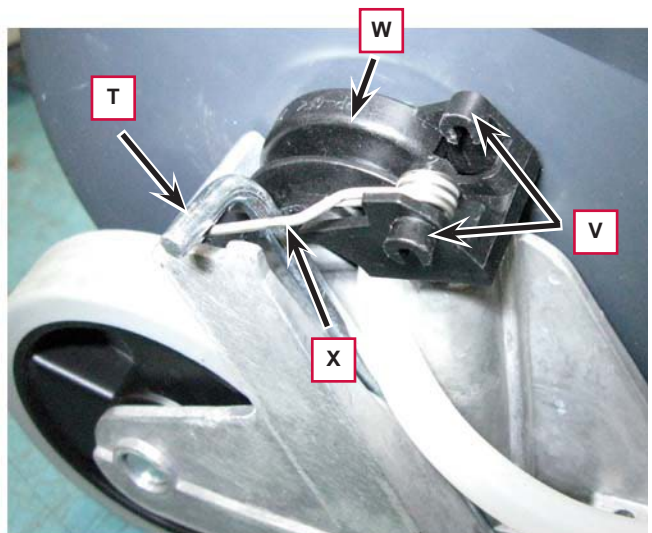
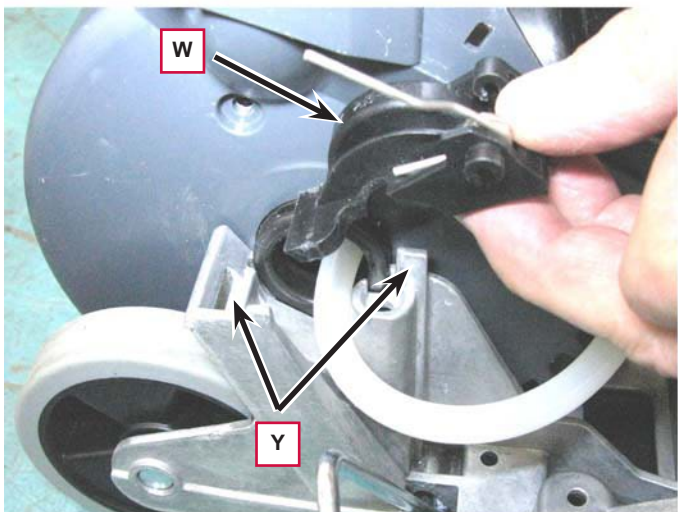
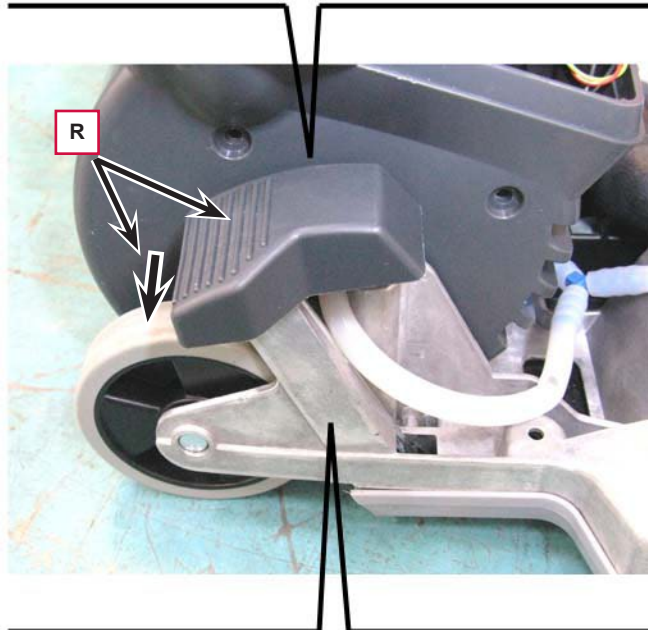
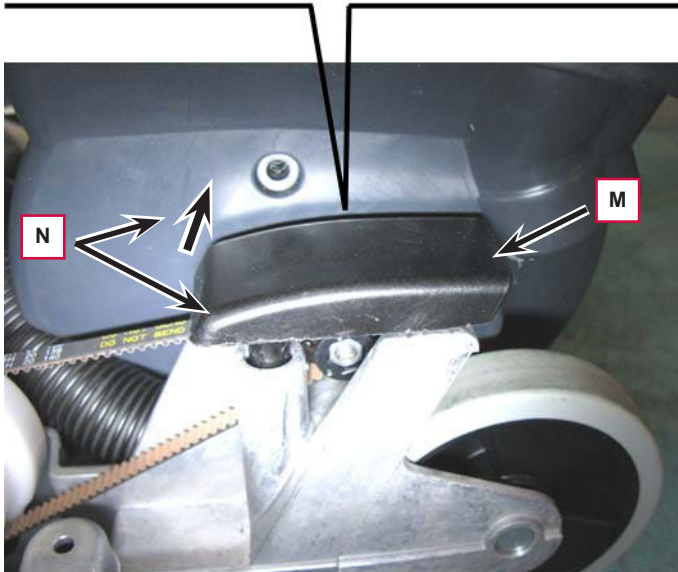
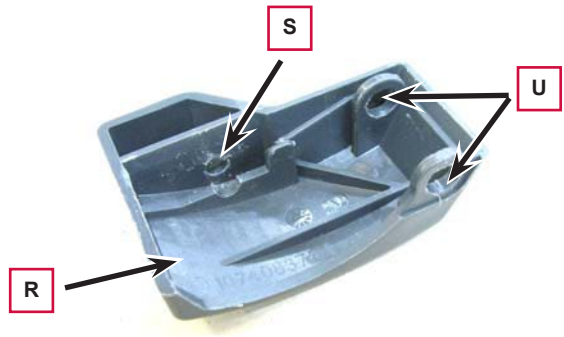
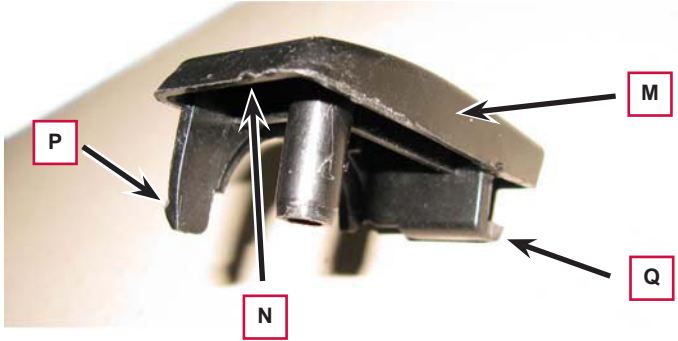
Motor Disassembly/Assembly (Continues)

11. With a screwdriver slightly separate the trigger lever (G) from the track (H), then lift the front side (I) of the cover (J).
12. Remove the cover (J) by disengaging its fasteners (K) from the machine.
13. On the lower side of the deck, remove the screws (L).
14. Turn the machine to its original position.



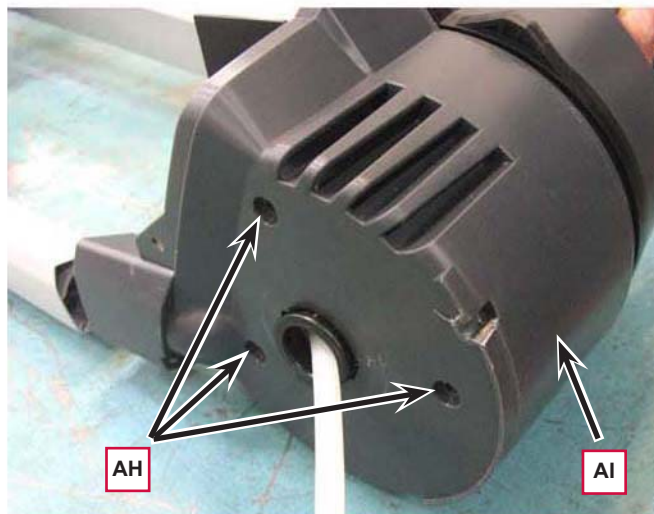
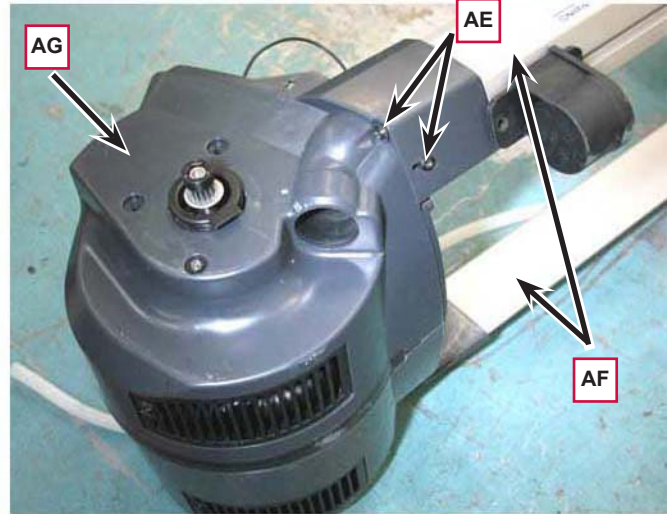
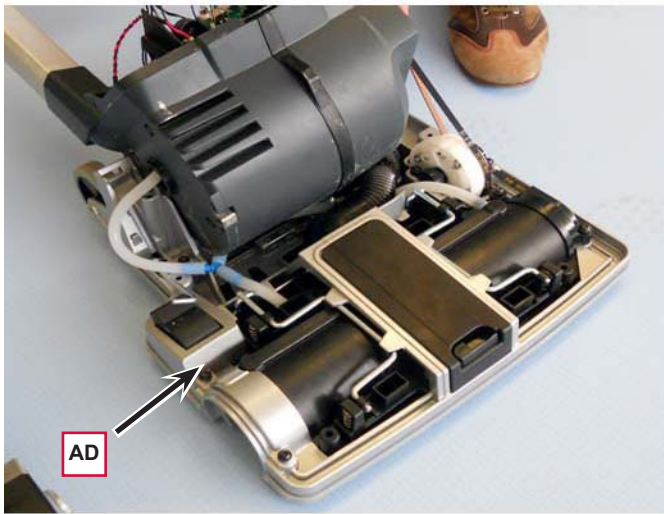
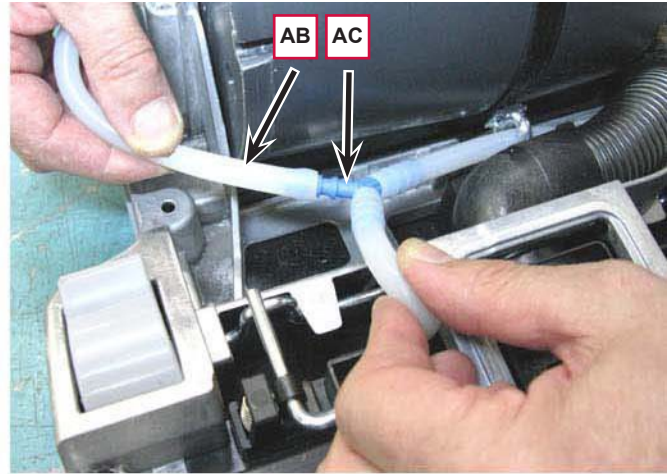
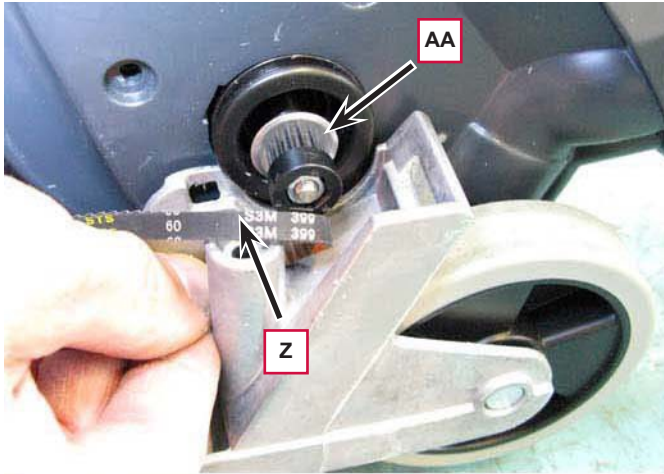
Motor Disassembly/Assembly (Continues)

15. On the left side of the machine, lift the half clamp (M) from the front side (N) and disengage the inner fastener (P), then remove it by disengaging the rear fastener (Q).
16. On the right side of the machine, remove the pedal (R) by moving it in the direction shown by the arrow, by disengaging its housing (S) from the pin (T) and its housings (U) from the pins (V) of the pedal mechanism (W).
17. Remove the pedal mechanism (W) by disengaging its spring (X) from the pin (T) and its housings from the fastener (Y) on the deck.



Motor Disassembly/Assembly (Continues)

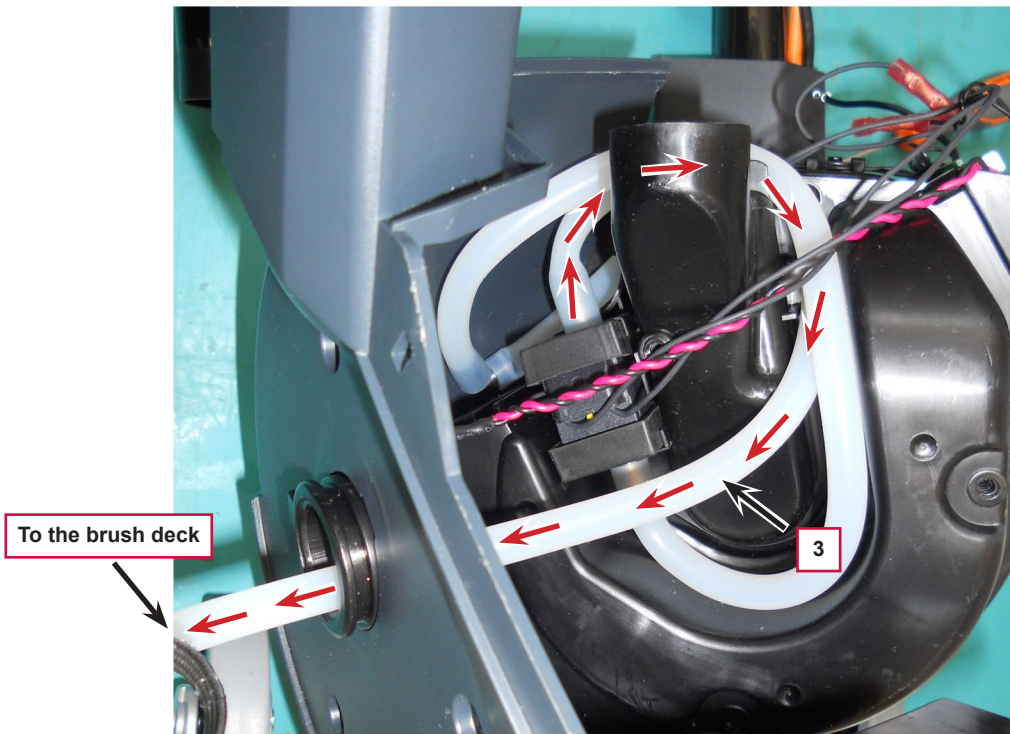
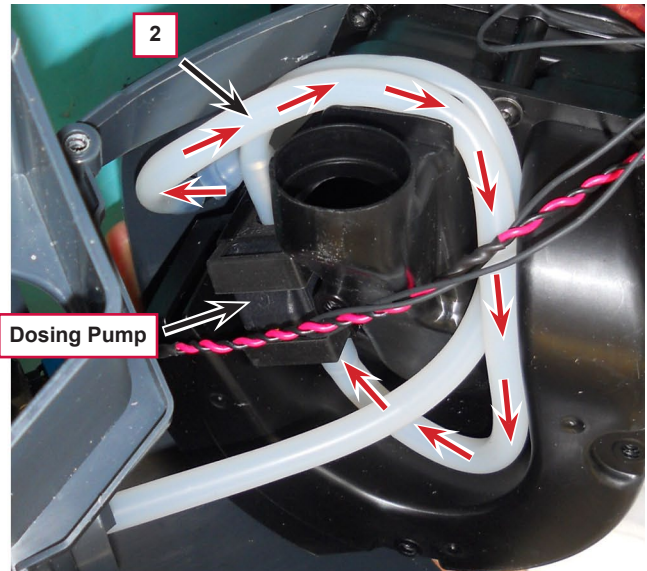
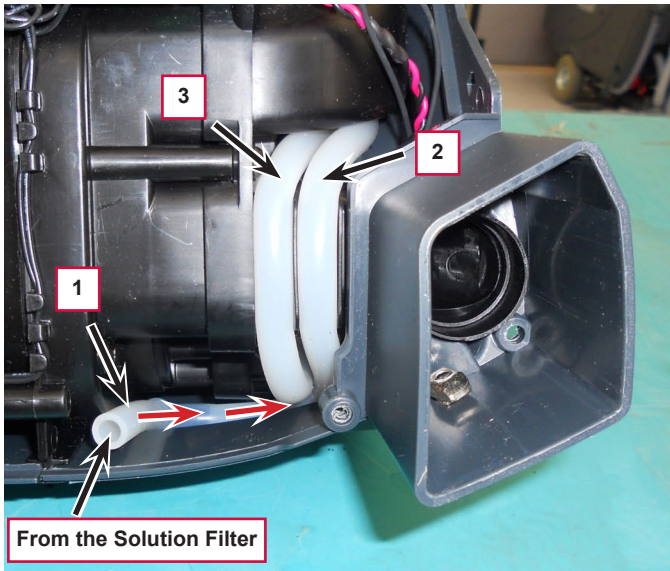
18. Disconnect the belt (Z) from the motor ring gear (AA).
19. Disconnect the solution hose (AB) from the fitting (AC).
20. Release and remove the nozzlehead (AD).
21. On both sides of the machine, remove the screws (AE), then remove the columns (AF) from the motor assembly (AG).
22. On the right side of the motor assembly, remove the screws (AH) and move the case (AI).



Motor Disassembly/Assembly (Continues)

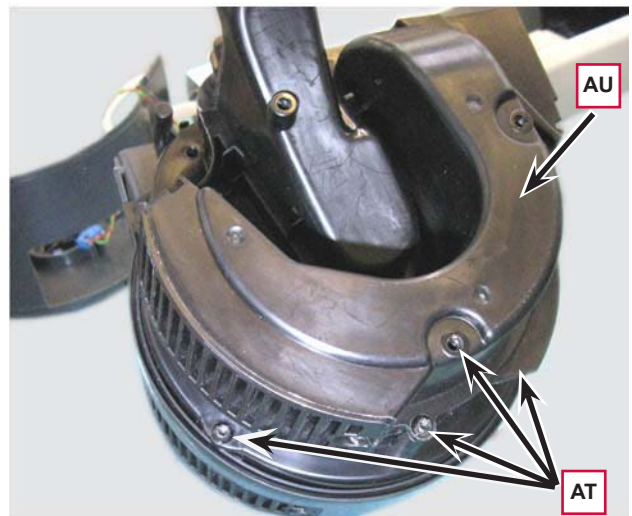
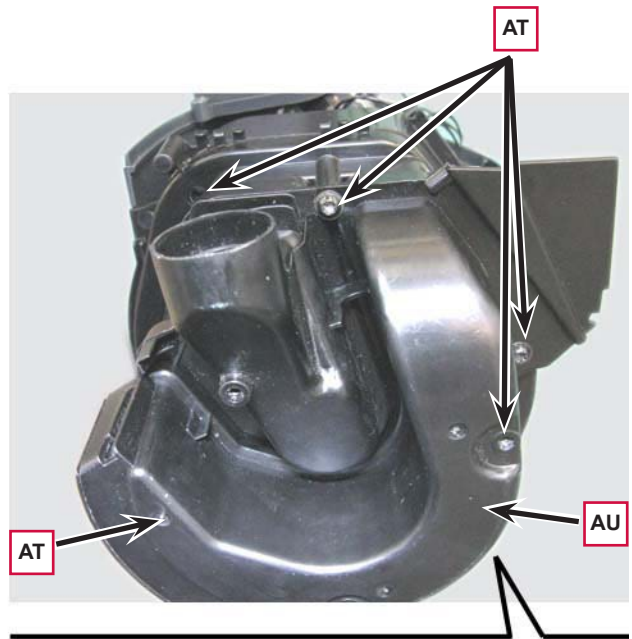
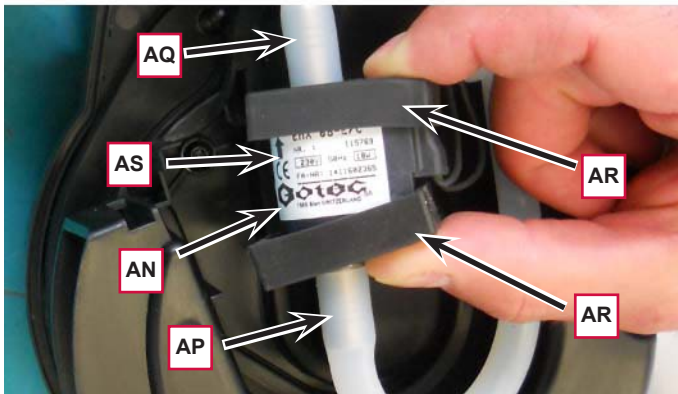
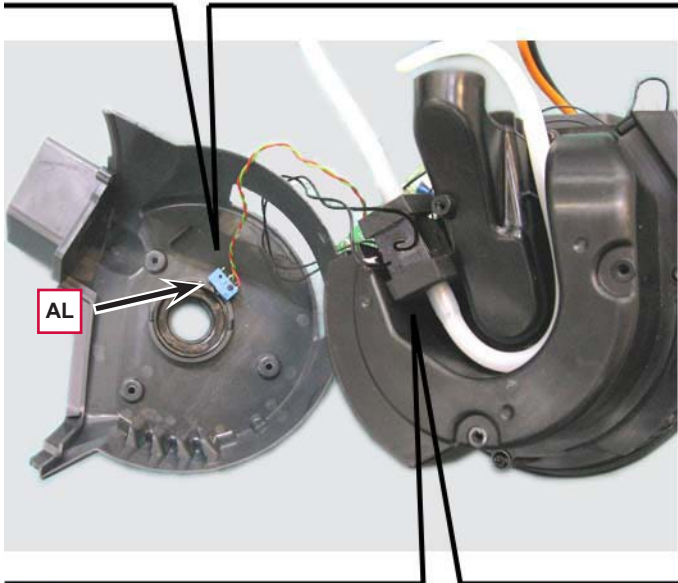
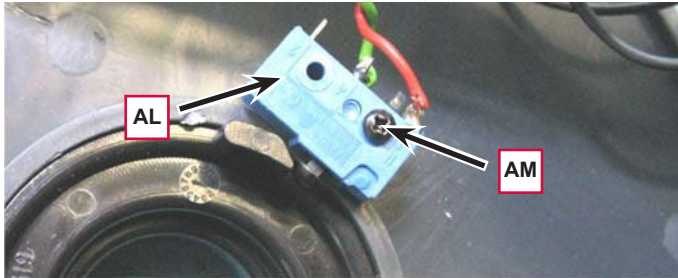


Note: Keep and store the lap of the dosing pump hoses by repositioning the hoses as shown in figure.



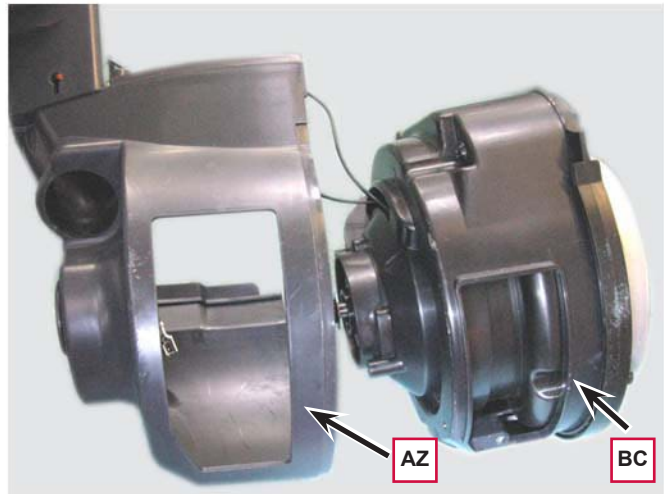
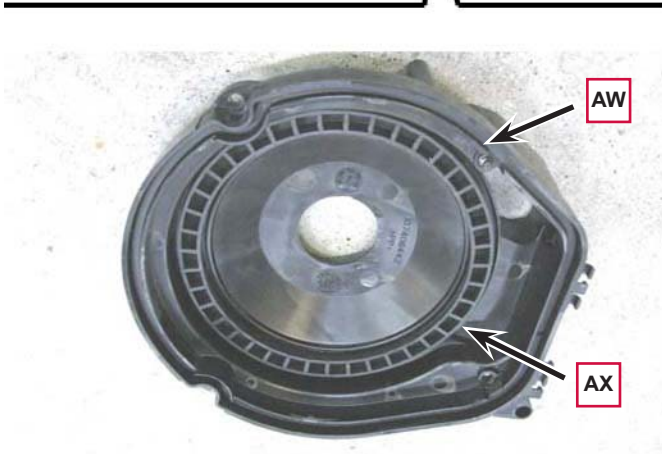
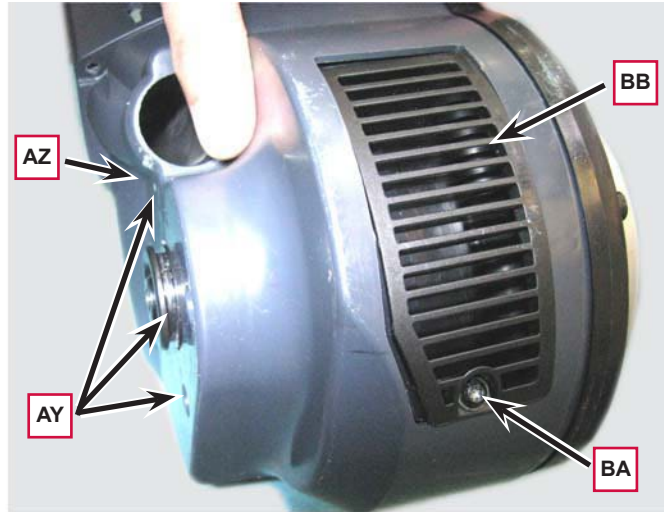
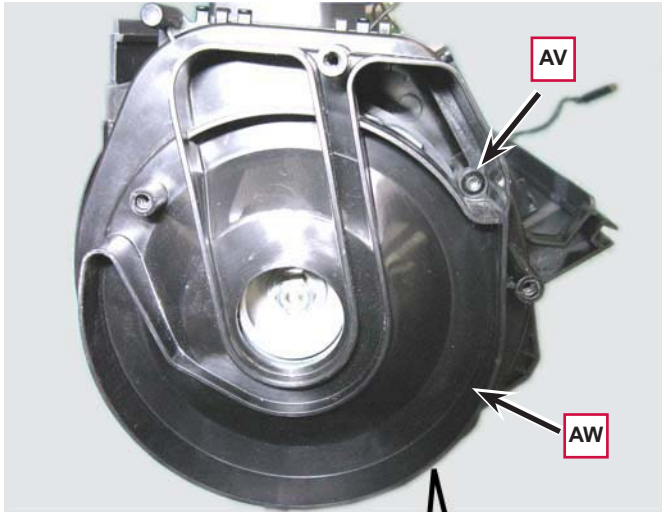
Motor Disassembly/Assembly (Continues)

23. If necessary, loosen the fastening screw (AM) and remove the parking position microswitch (AL) with the wiring harness.
24. If necessary, disconnect the hose (AP) and the hose (AQ) then remove the dosing pump (AN). Retrieve the gaskets (AR). When reassembling turn the dosing pump (AN) in the direction shown by the arrow (AS).
25. Remove the screws (AT) and remove the case (AU).



Motor Disassembly/Assembly (Continues)

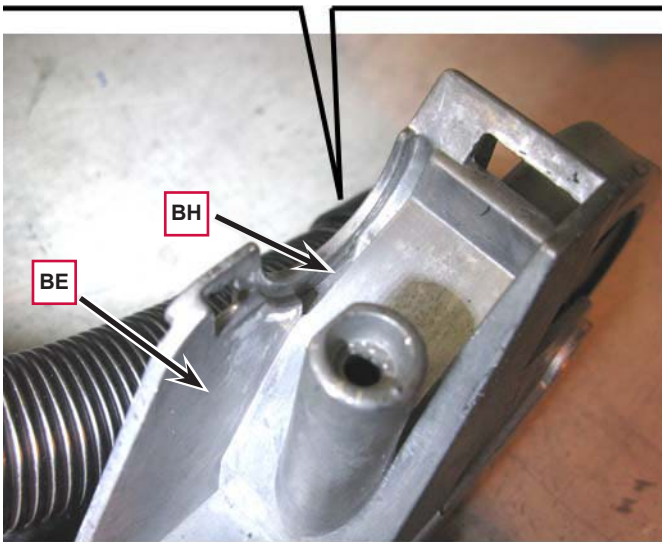
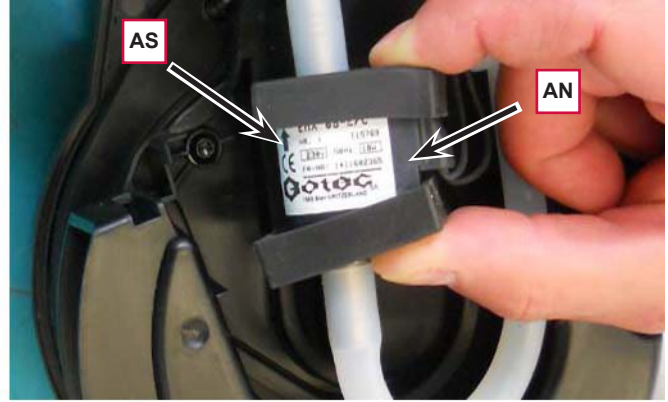
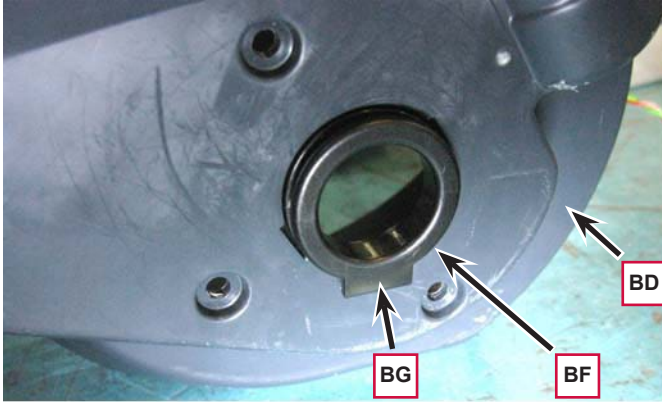
- 26. Remove the screw (AV) and remove the case (AW). Retrieve the inner gasket (AX).
- 27. Remove the fastening screws (AY) of the case (AZ). Remove the screw (BA) and remove the grille (BB).
- 28. Remove the motor assembly (BC) and the case (AZ).



Motor Disassembly/Assembly (Continues)

Assembly

29. Assemble the components in the reverse order of disassembly, and note the following:
- When reinstalling the motor assembly (BD) on the machine deck (BE), place both side bushings (BF) by engaging their notches (BG) in the relevant housings (BH).
 - When reassembling turn the dosing pump (AN) in the direction shown by the arrow (AS).



Function Electronic Board Disassembly/Assembly

Disassembly

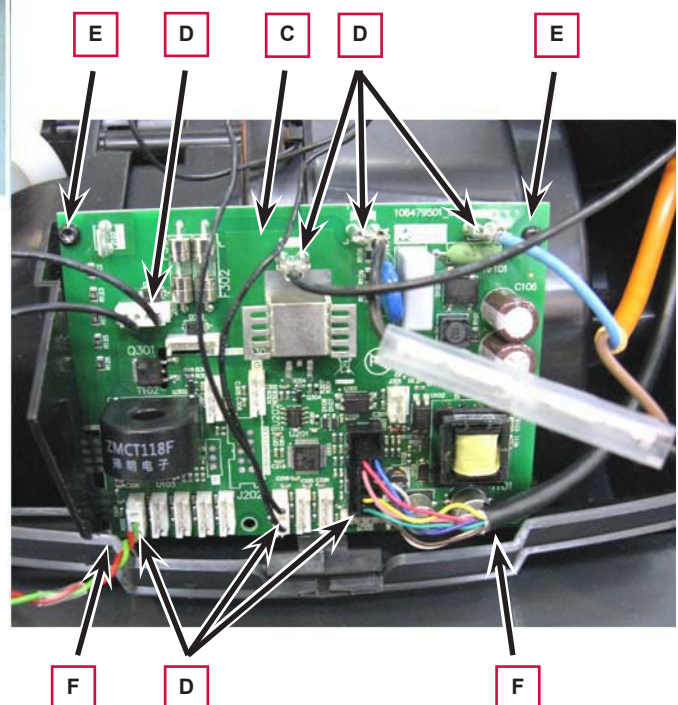
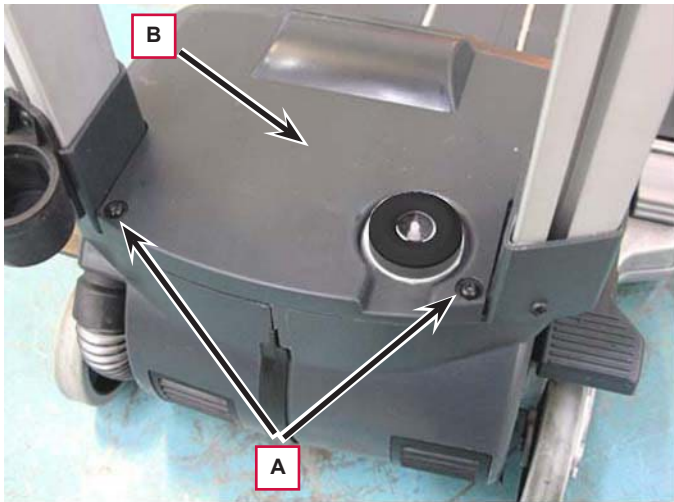
1. Set the machine to stop position.
2. Make sure that the machine power supply cable is disconnected from the electrical mains.
3. Remove the tank assembly.
4. Remove the screws (A).
5. Lift and move aside the cover (B).
6. Disconnect the electrical connections (D) from the function electronic board (C).
7. Loosen the two screws (E) and remove the function electronic board (C) by disengaging it from the fasteners on the lower sides (F).



Warning! When the function electronic board (C) is reused or replaced, take care when handling it to prevent its circuits and components from damage.

Assembly

8. Assemble the components in the reverse order of disassembly.



Switch Panel Disassembly/Assembly

Disassembly

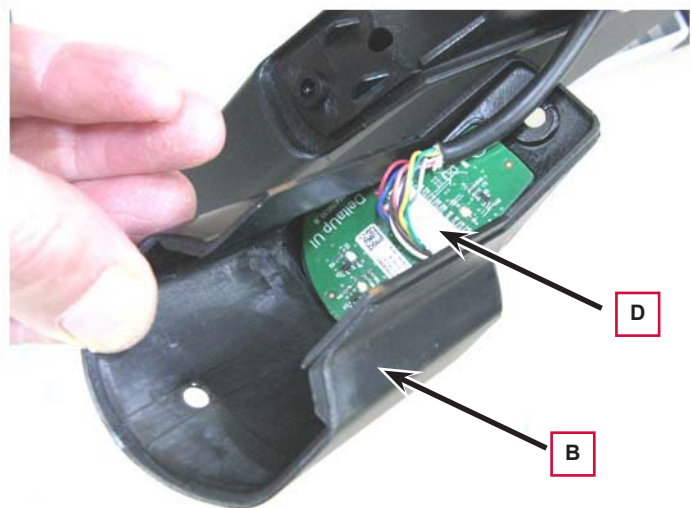
1. Set the machine to stop position.
2. Make sure that the machine power supply cable is disconnected from the electrical mains.
3. Remove the screws (A) fastening the switch panel (B).
4. Remove the switch panel (B) by sliding it in the direction of the arrow (C).
5. Disconnect the electrical connector (D) and retrieve the switch panel (B).



Warning! When the switch panel (B) is reused or replaced, take care when handling it to prevent its circuits and components from damage.

Assembly

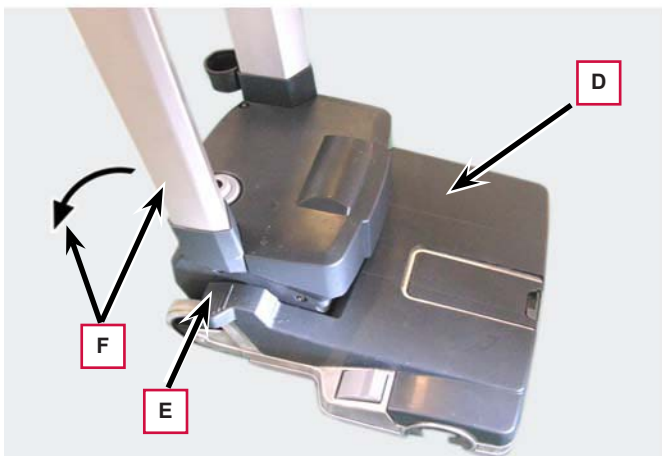
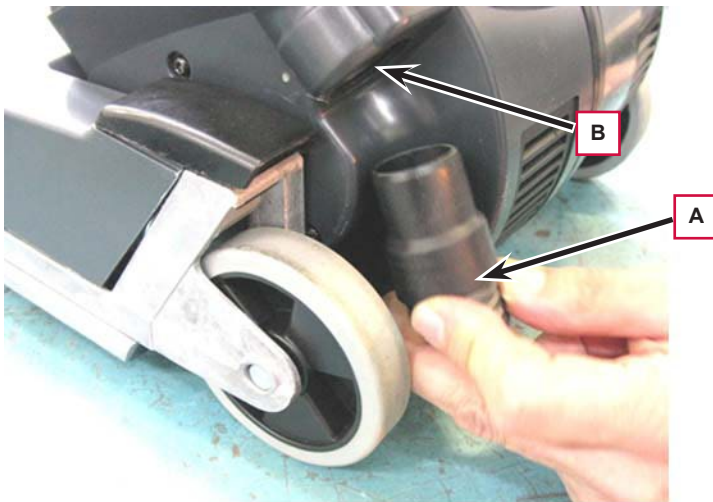
6. Assemble the components in the reverse order of disassembly.



Parking Position Microswitch Disassembly/Assembly

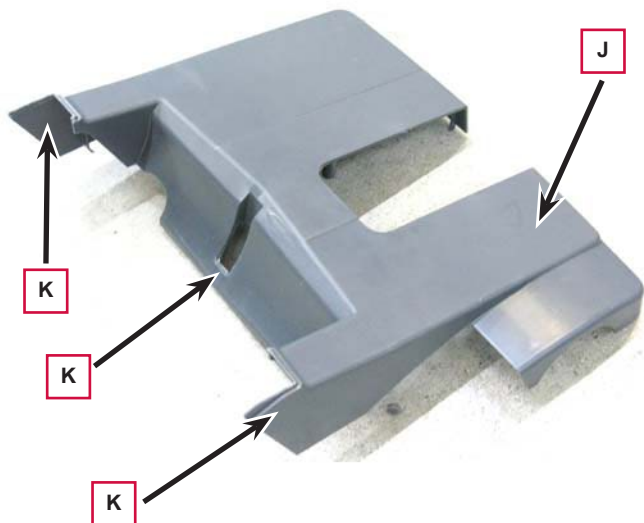
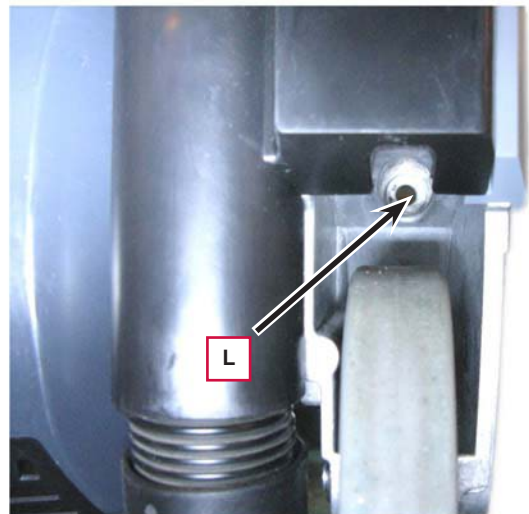
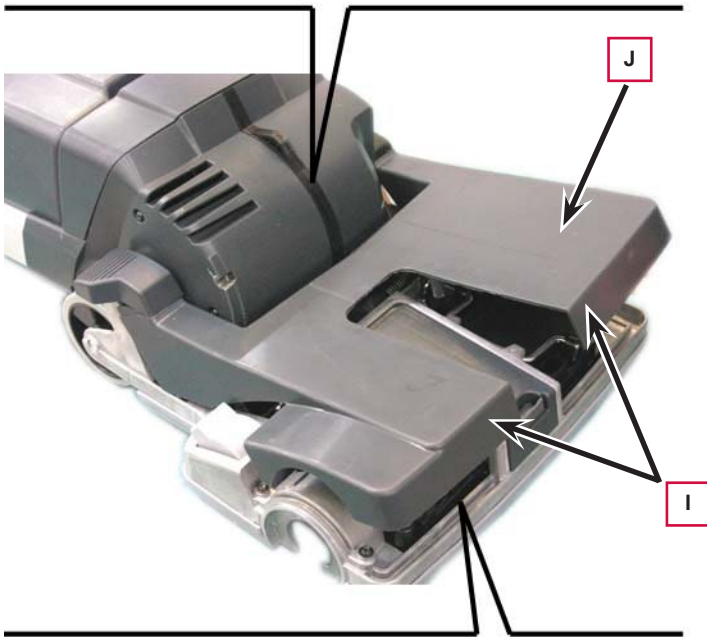
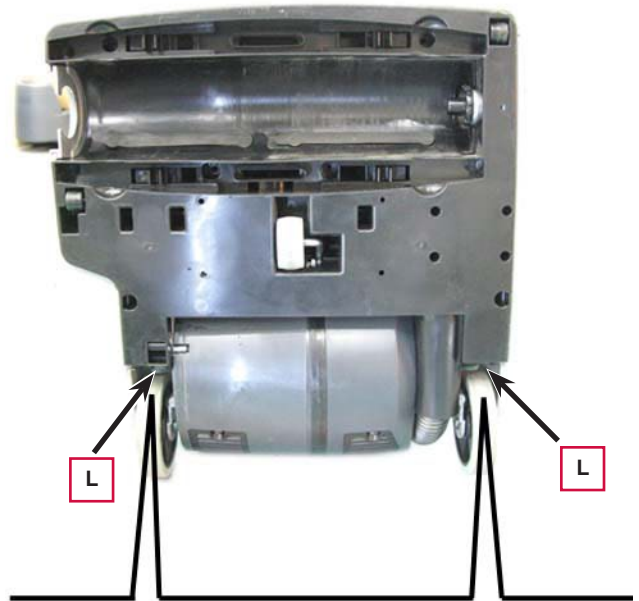
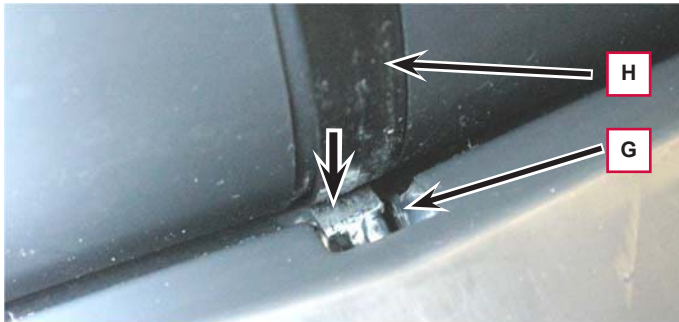
Disassembly

1. Set the machine to stop position.
2. Make sure that the machine power supply cable is disconnected from the electrical mains.
3. Remove the brush.
4. Remove two squeegee bars.
5. Remove the function electronic board (see the procedure in the relevant paragraph).
6. Remove the sensor receiving the solution level (see the procedure in the relevant paragraph).
7. Disconnect the vacuum hose (A) from the housing (B) of the motor assembly.
8. On the lower side of the deck, remove the screws (C).
9. Turn the machine to its original position (D).
10. Press the unlock pedal (E) and fully lower the frame (F).



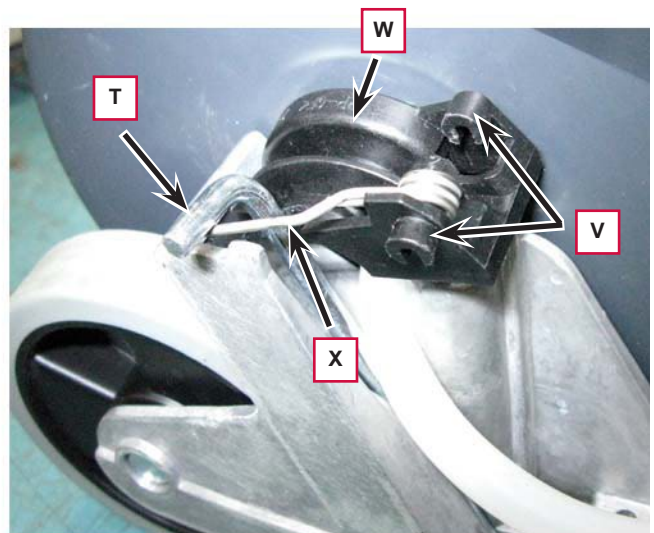
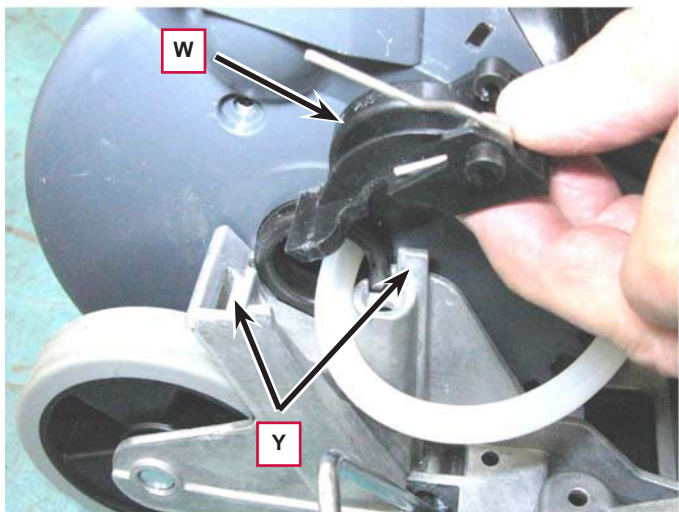
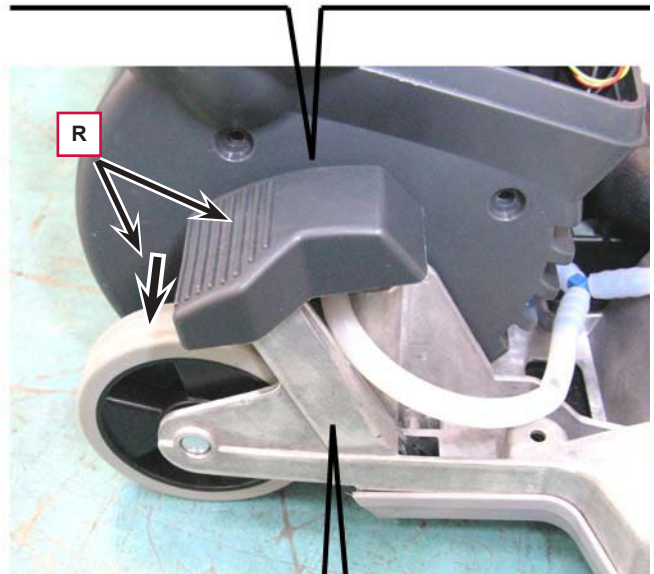
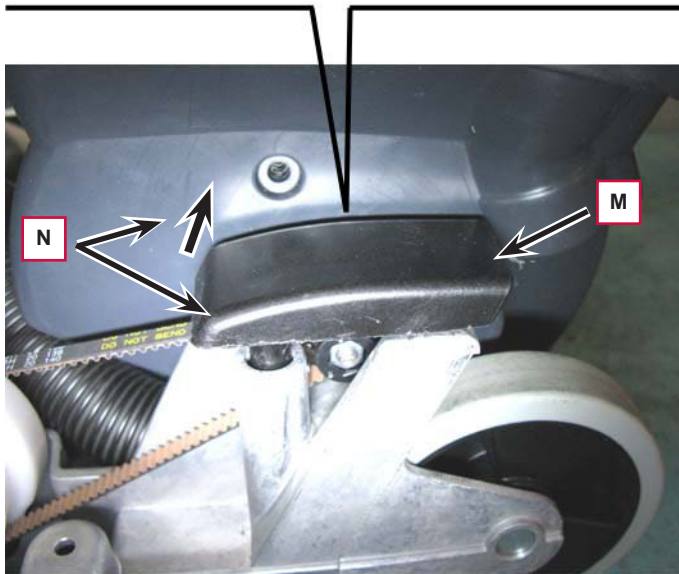
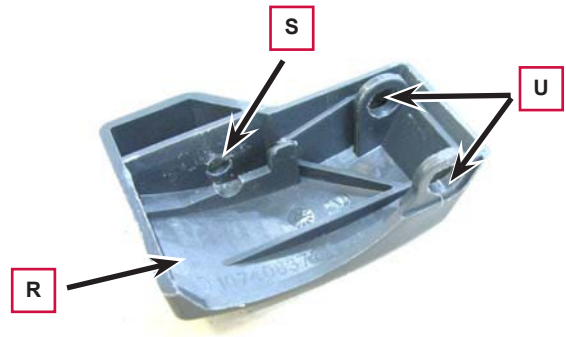
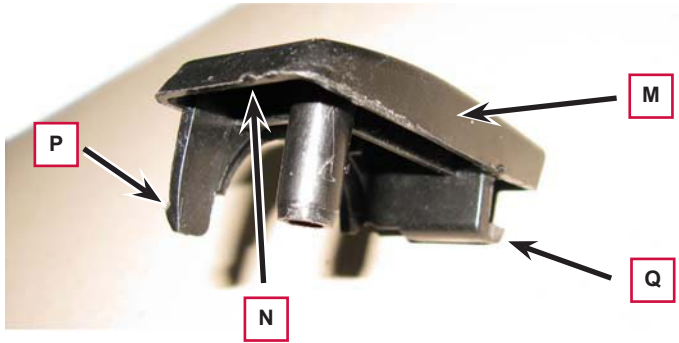
Parking Position Microswitch Disassembly/Assembly (Continues)

11. With a screwdriver slightly separate the trigger lever (G) from the track (H), then lift the front side (I) of the cover (J).
12. Remove the cover (J) by disengaging its fasteners (K) from the machine.
13. On the lower side of the deck, remove the screws (L).
14. Turn the machine to its original position.



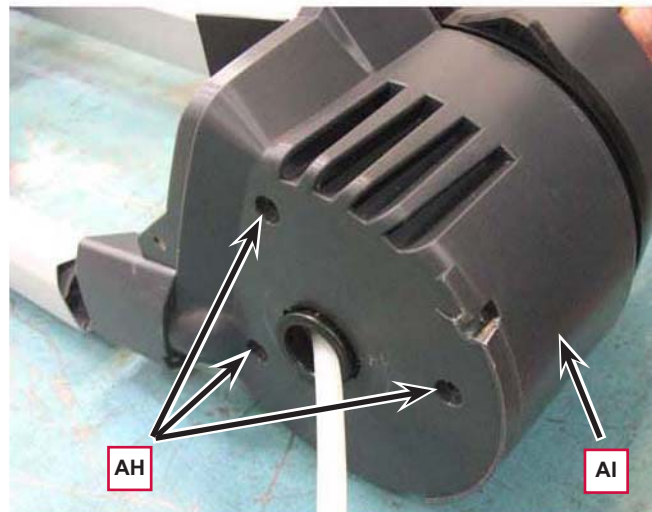
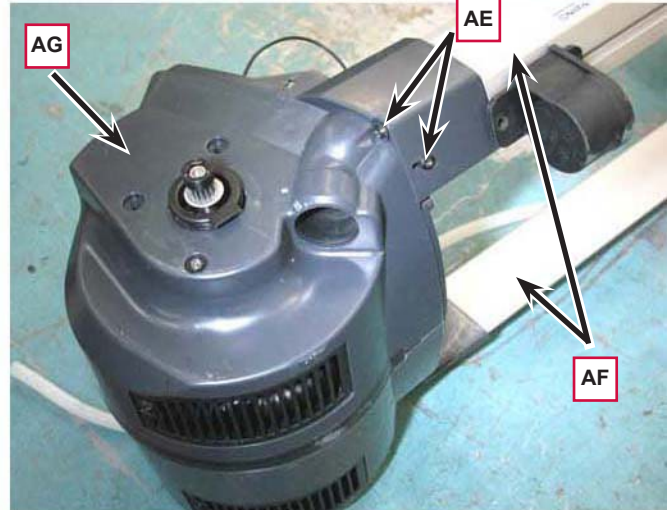
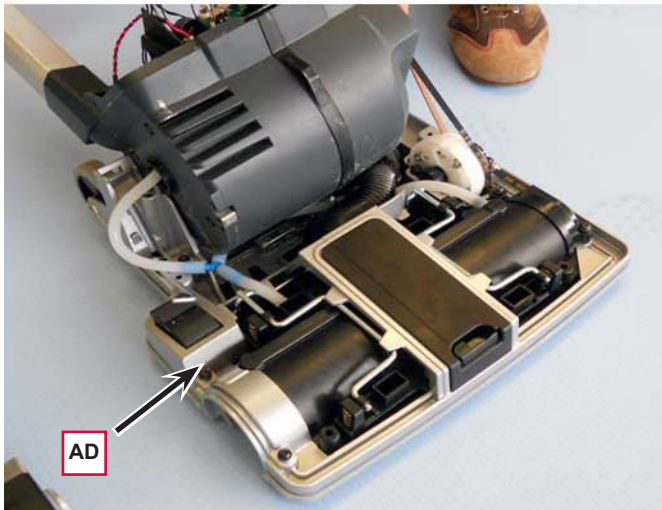
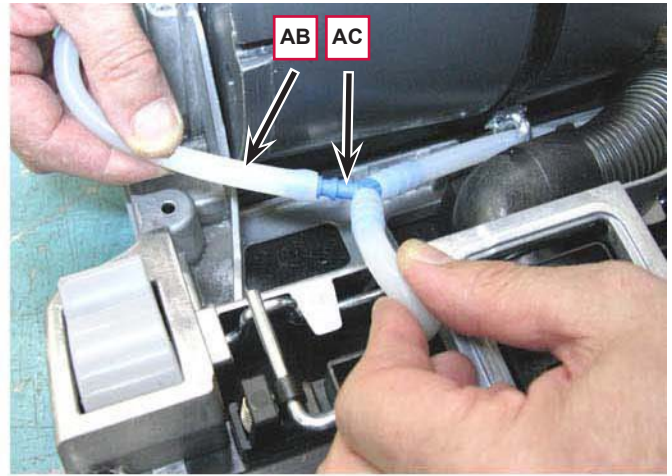
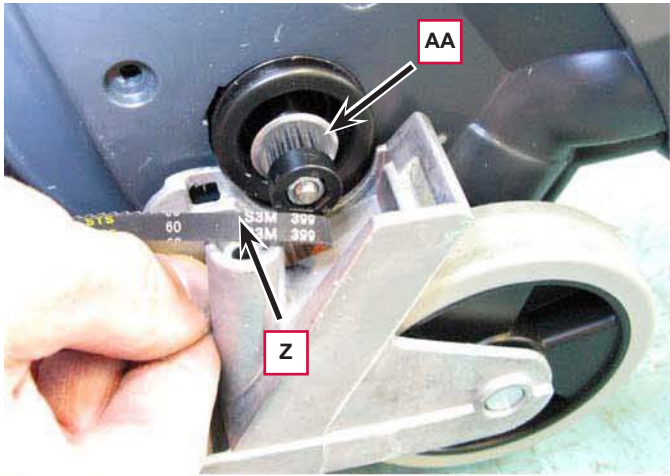
Parking Position Microswitch Disassembly/Assembly (Continues)

15. On the left side of the machine, lift the half clamp (M) from the front side (N) and disengage the inner fastener (P), then remove it by disengaging the rear fastener (Q).
16. On the right side of the machine, remove the pedal (R) by moving it in the direction shown by the arrow, by disengaging its housing (S) from the pin (T) and its housings (U) from the pins (V) of the pedal mechanism (W).
17. Remove the pedal mechanism (W) by disengaging its spring (X) from the pin (T) and its housings from the fastener (Y) on the deck.



Parking Position Microswitch Disassembly/Assembly (Continues)

18. Disconnect the belt (Z) from the motor ring gear (AA).
19. Disconnect the solution hose (AB) from the fitting (AC).
20. Release and remove the nozzlehead (AD).
21. On both sides of the machine, remove the screws (AE), then remove the columns (AF) from the motor assembly (AG).
22. On the right side of the motor assembly, remove the screws (AH) and move the case (AI).



Parking Position Microswitch Disassembly/Assembly (Continues)

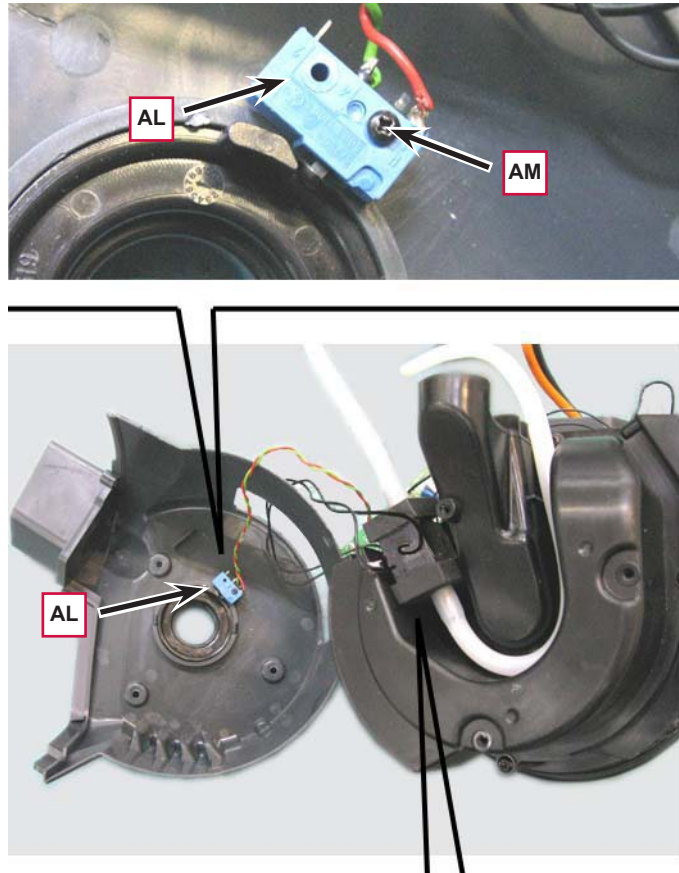
23. Loosen the fastening screw (AM) and remove the parking position microswitch (AL) with the wiring harness.

Assembly

24. Assemble the components in the reverse order of disassembly.



Note: Keep and store the lap of the dosing pump hoses by repositioning the hoses in the correct mode.

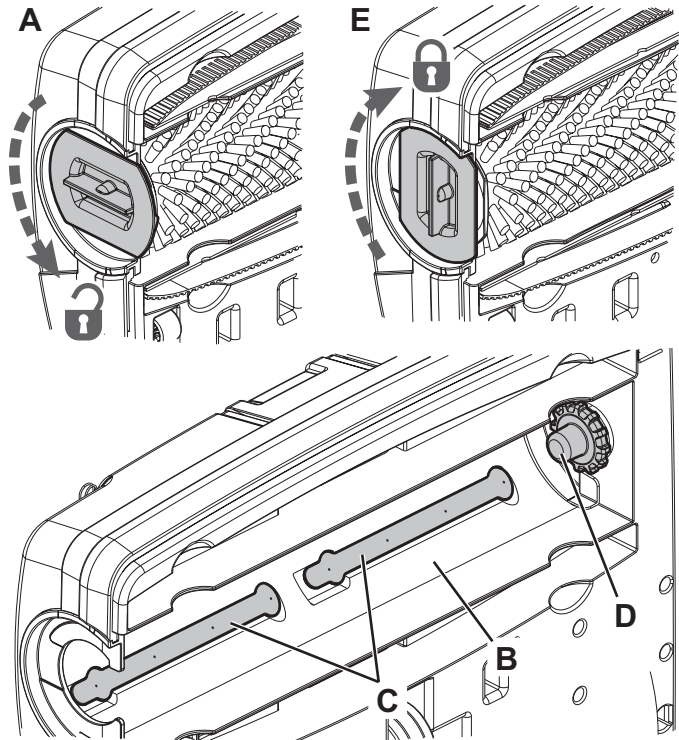


Solution System

Maintenance and Adjustments

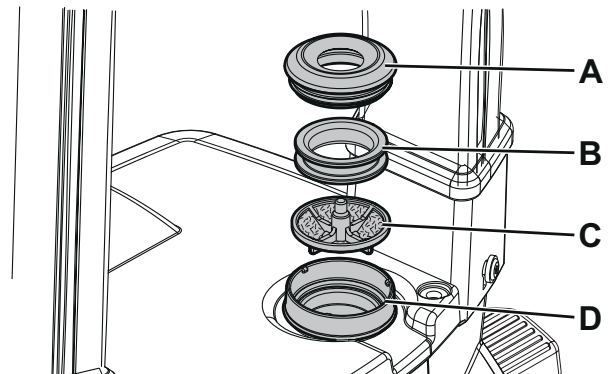
Cylindrical brush, brush compartment and dosing bridge cleaning

1. Lower the machine to reach the lower side of the cleaning deck.
2. Turn the lever (A) counter-clockwise and remove the brush.
3. Clean and wash the cylindrical brush with water and detergent.
4. Check the brush bristles for integrity and wear; if necessary, replace the brush.
5. Carefully clean the brush compartment (B).
6. Disassemble the dosing bridge (C) and clean them with water and detergent, then rinse and reassemble in the relevant housings.
7. Install the cylindrical brush on the drive hub (D) and engage it by turning the lever (E) clockwise.



Solution filter cleaning

1. Remove the tank assembly from the machine body.
2. Remove the two rubber gasket (A and B), then remove the filter strainer (C).
3. Clean and install them on the support (D).



Removal and Installation

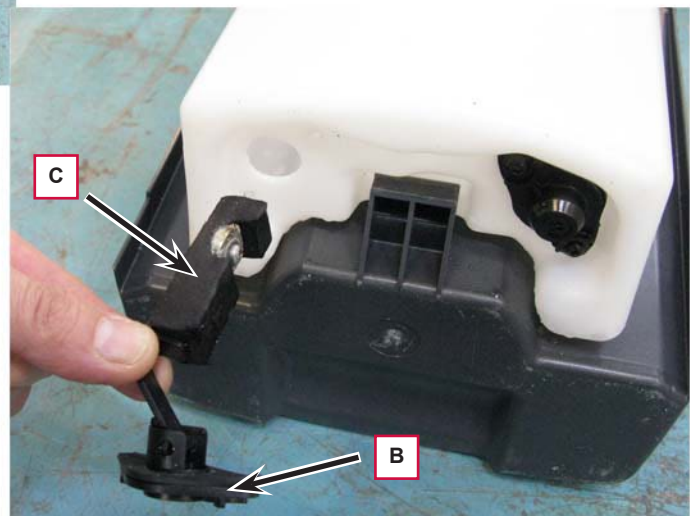
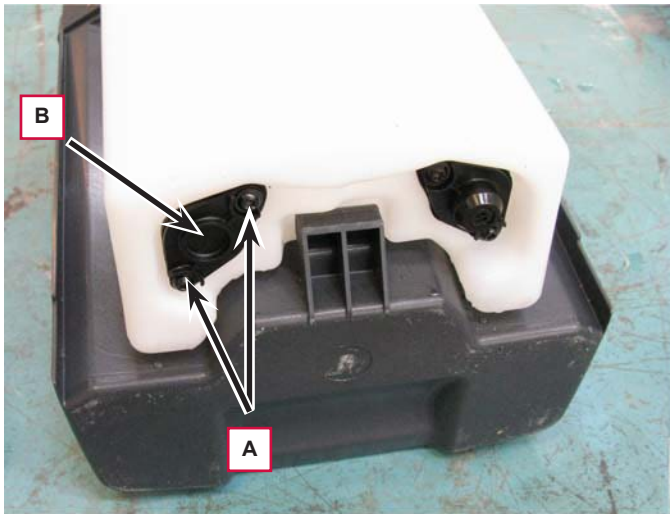
Disassembly/assembly of the solution level sensor (inside the tank)

Disassembly

4. Set the machine to stop position.
5. Make sure that the machine power supply cable is disconnected from the electrical mains.
6. Remove and drain the tank assembly.
7. On the lower side of the tank assembly, remove the screws (A) fastening the cover (B).
8. Carefully remove the cover (B) with the level sensor (C).

Assembly

9. Assemble the components in the reverse order of disassembly, and note the following:
 - Before reassembly, check the cover gasket (B) for integrity.



Disassembly/assembly of the sensor receiving the solution level

Disassembly

1. Set the machine to stop position.
2. Make sure that the machine power supply cable is disconnected from the electrical mains.
3. Remove the tank assembly.
4. Remove the screws (A).
5. Lift and move aside the cover (B).
6. Disconnect the function electronic board (E) and the electrical connector (C) of the sensor (D).

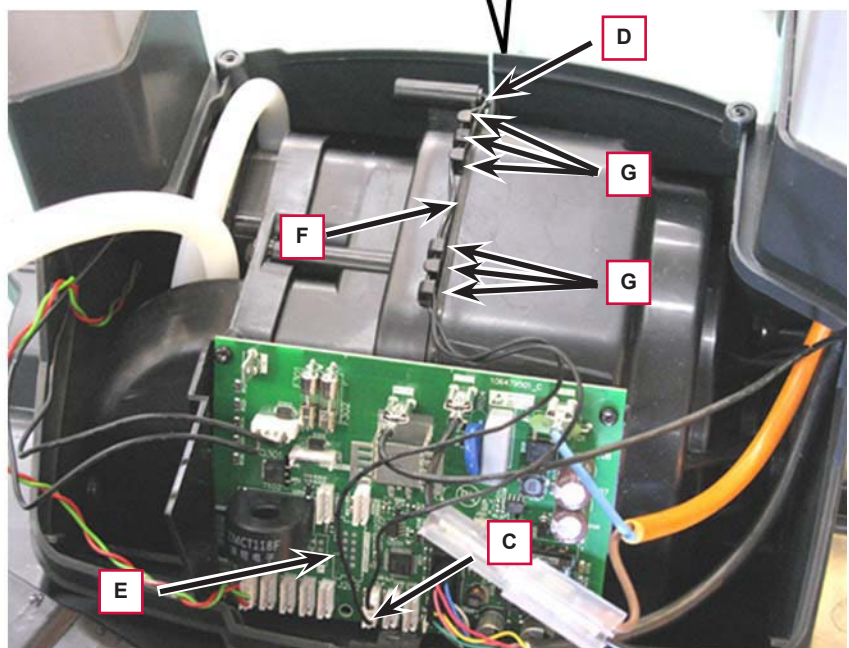
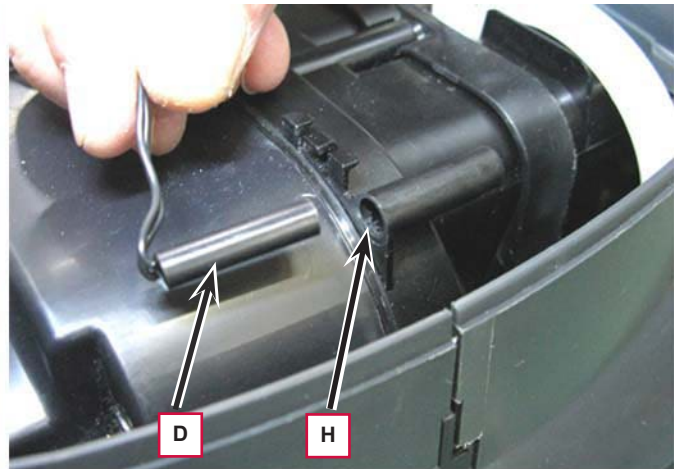
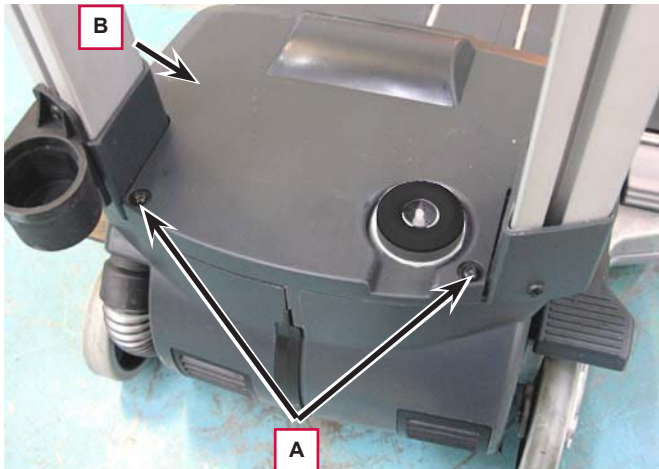


Warning! Take care when handling the function electronic board (E) to prevent its circuits and components from damage.

7. Disengage the fasteners (G) and the wiring harness (F) of the sensor (D). Remove the sensor (D) from the housing (H) and retrieve it with the wiring harness.

Assembly

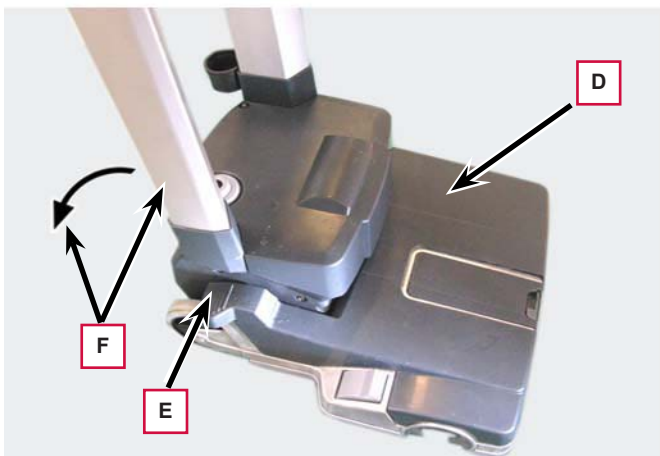
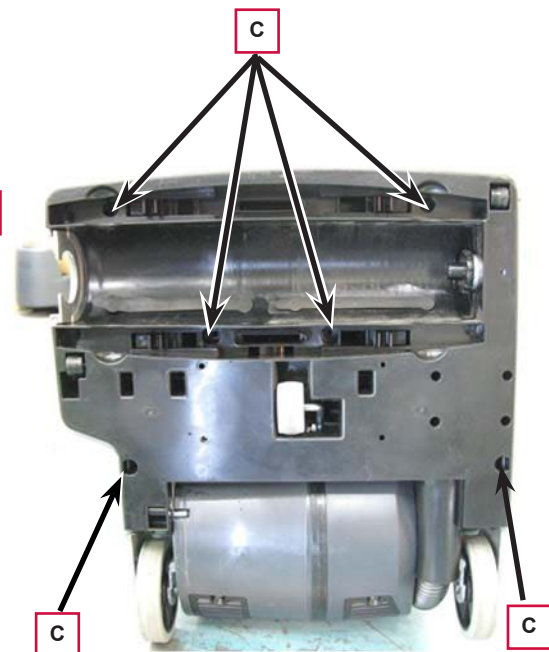
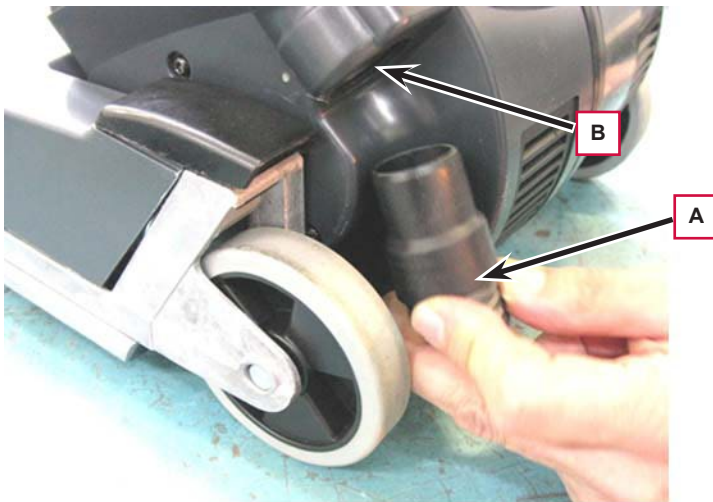
8. Assemble the components in the reverse order of disassembly.



Dosing pump Disassembly/Assembly

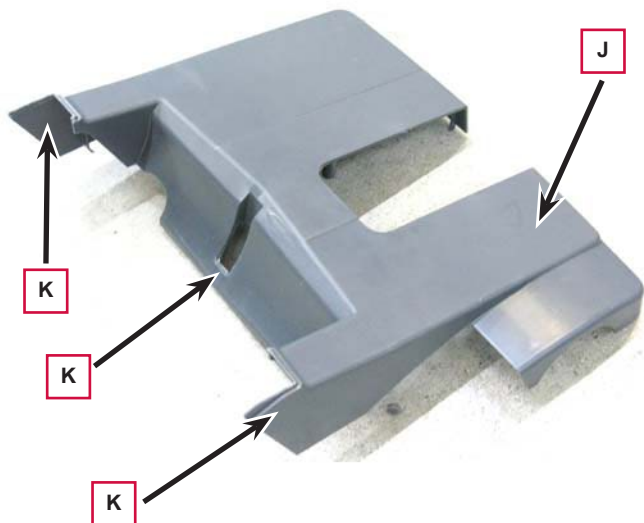
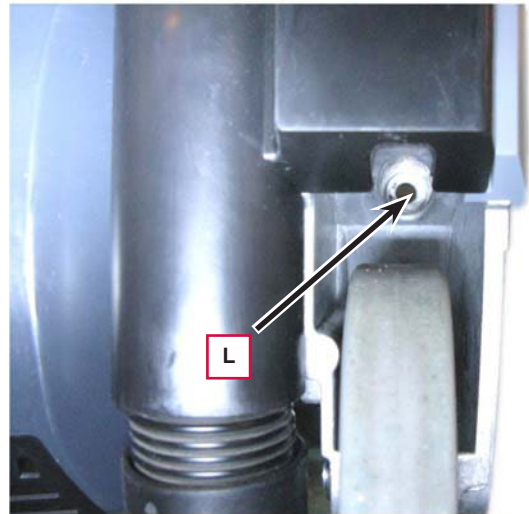
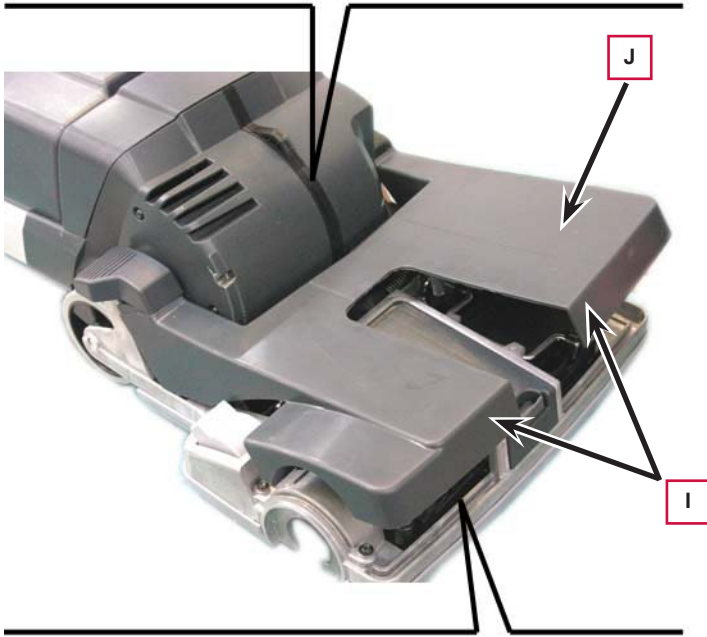
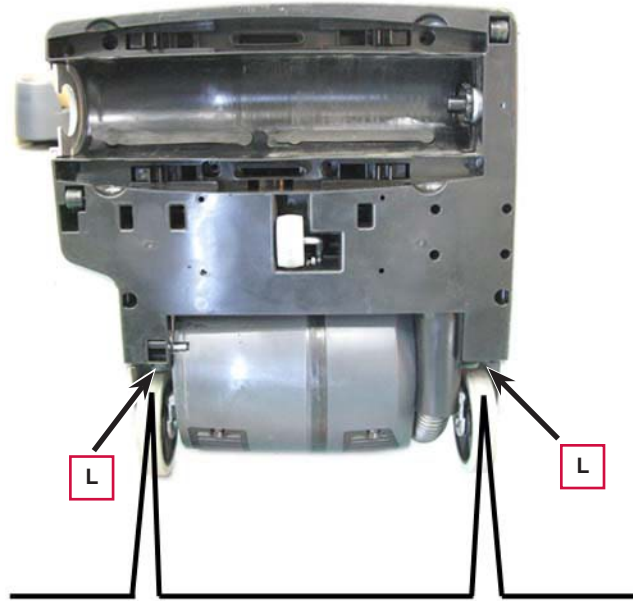
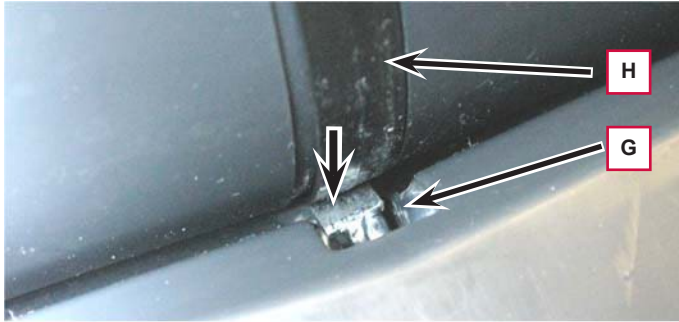
Disassembly

1. Set the machine to stop position.
2. Make sure that the machine power supply cable is disconnected from the electrical mains.
3. Remove the brush.
4. Remove two squeegee bars.
5. Remove the function electronic board (see the procedure in the relevant paragraph).
6. Remove the sensor receiving the solution level (see the procedure in the relevant paragraph).
7. Disconnect the vacuum hose (A) from the housing (B) of the motor assembly.
8. On the lower side of the deck, remove the screws (C).
9. Turn the machine to its original position (D).
10. Press the unlock pedal (E) and fully lower the frame (F).



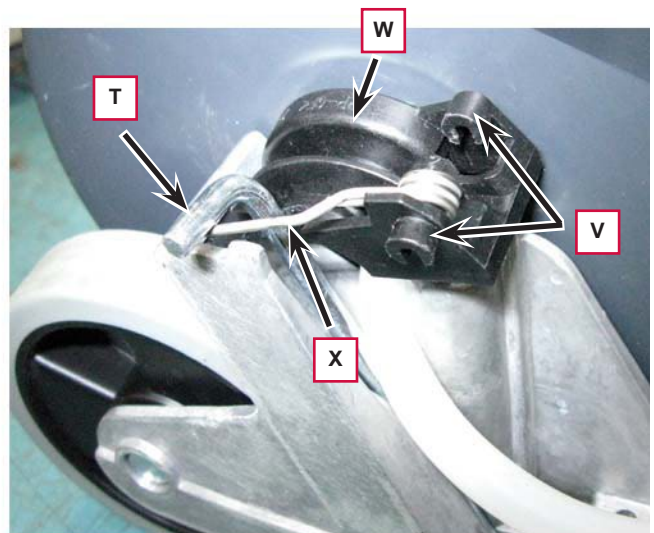
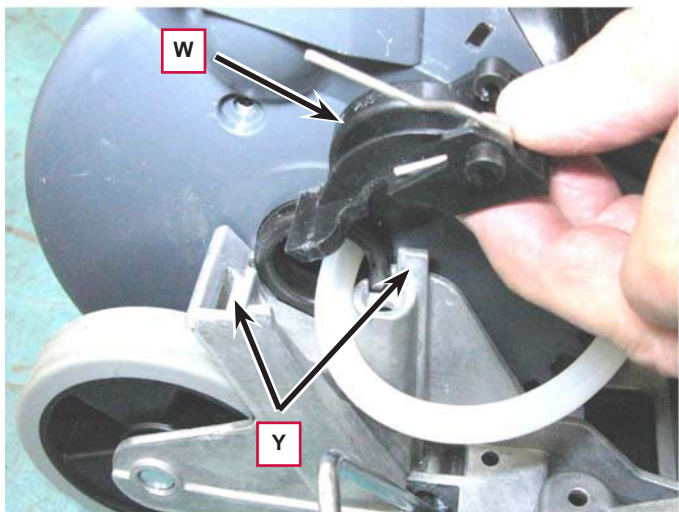
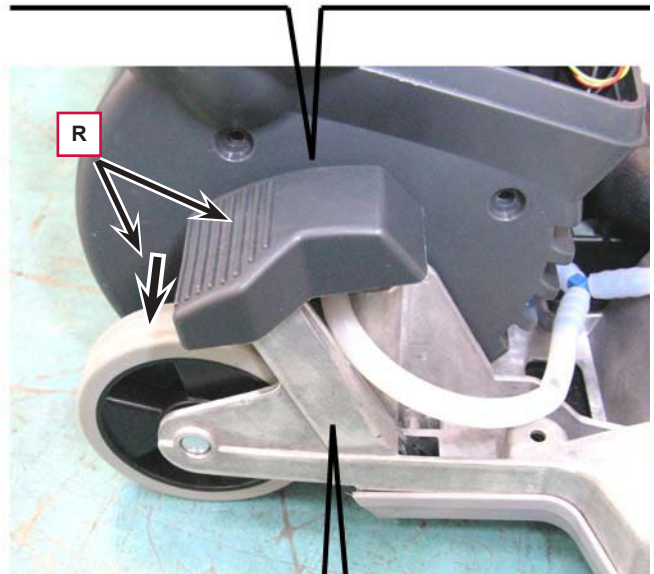
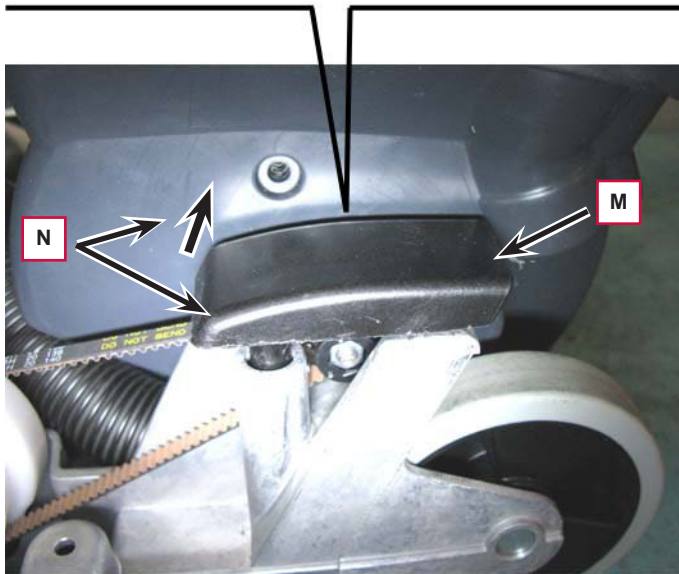
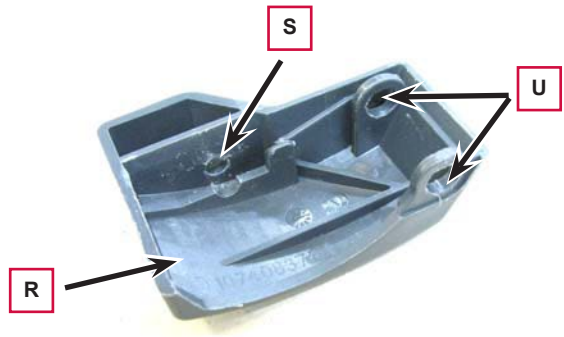
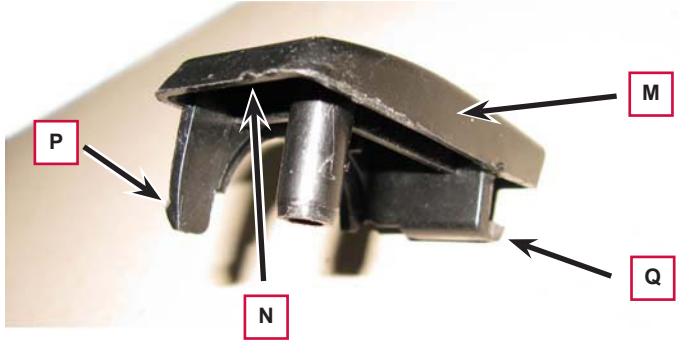
Dosing pump Disassembly/Assembly (Continues)

11. With a screwdriver slightly separate the trigger lever (G) from the track (H), then lift the front side (I) of the cover (J).
12. Remove the cover (J) by disengaging its fasteners (K) from the machine.
13. On the lower side of the deck, remove the screws (L).
14. Turn the machine to its original position.



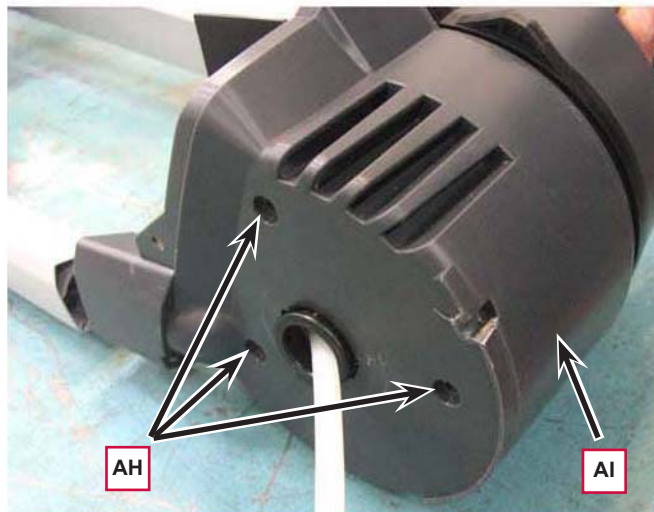
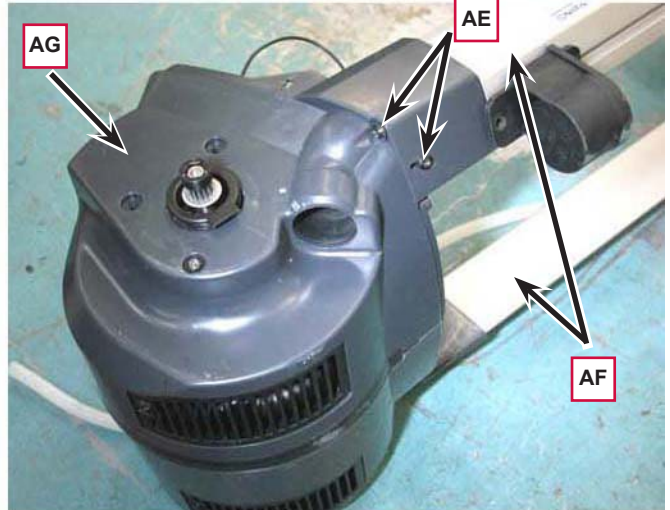
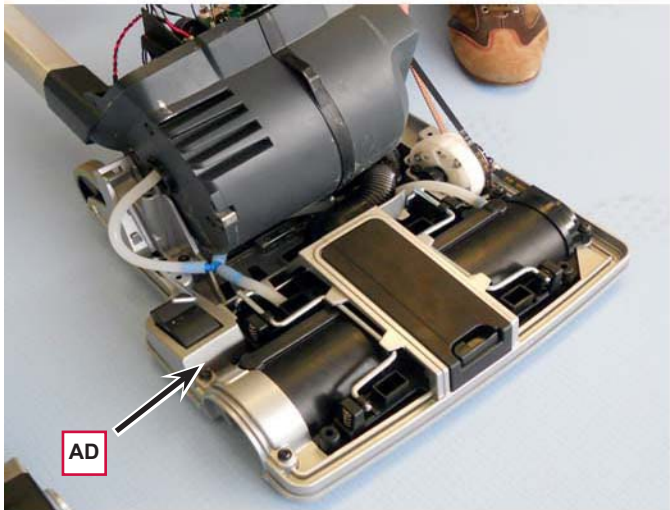
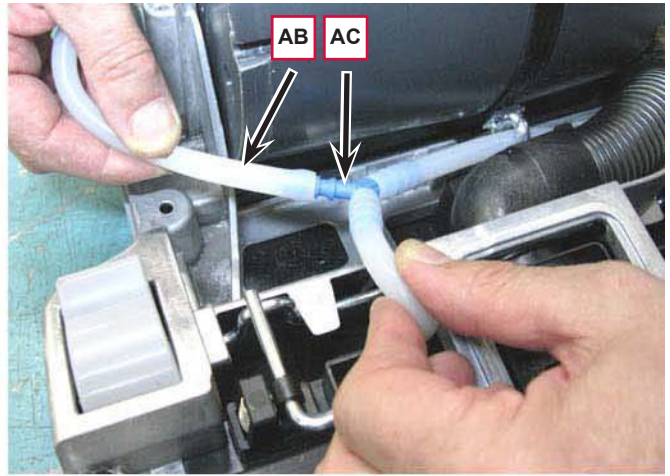
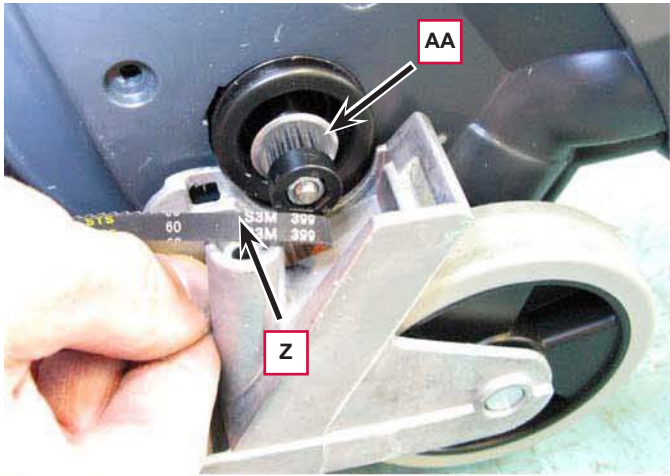
Dosing pump Disassembly/Assembly (Continues)

15. On the left side of the machine, lift the half clamp (M) from the front side (N) and disengage the inner fastener (P), then remove it by disengaging the rear fastener (Q).
16. On the right side of the machine, remove the pedal (R) by moving it in the direction shown by the arrow, by disengaging its housing (S) from the pin (T) and its housings (U) from the pins (V) of the pedal mechanism (W).
17. Remove the pedal mechanism (W) by disengaging its spring (X) from the pin (T) and its housings from the fastener (Y) on the deck.



Dosing pump Disassembly/Assembly (Continues)

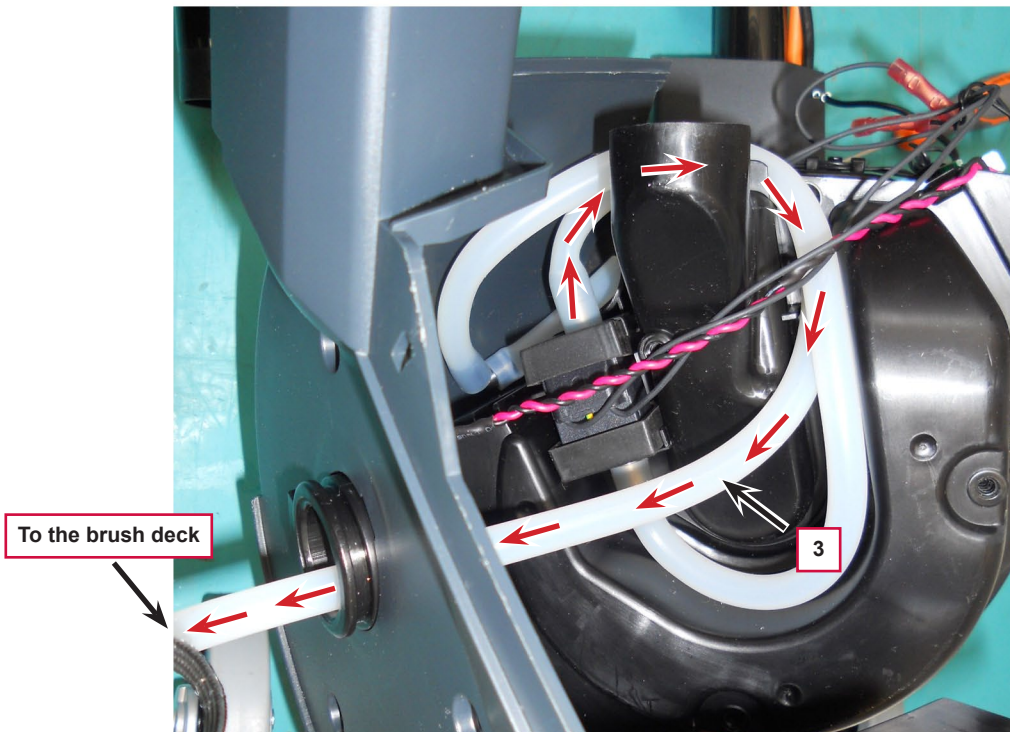
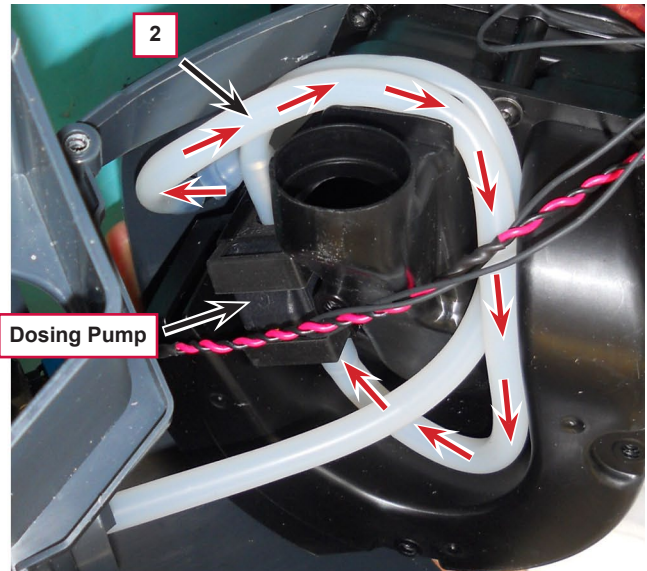
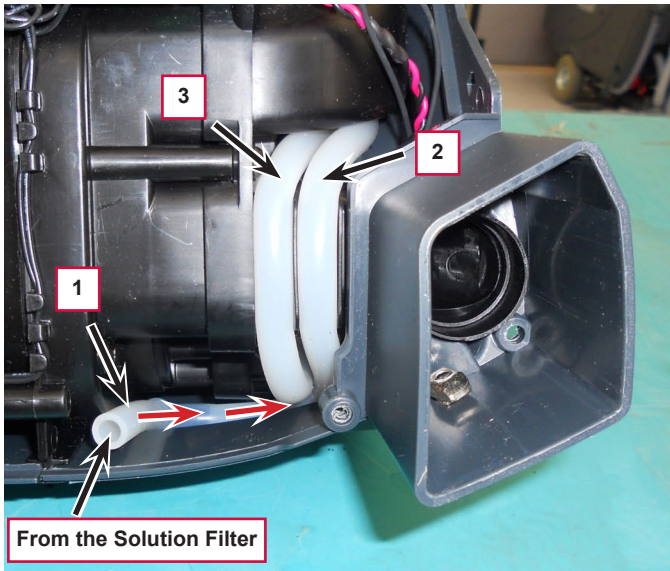
18. Disconnect the belt (Z) from the motor ring gear (AA).
19. Disconnect the solution hose (AB) from the fitting (AC).
20. Release and remove the nozzlehead (AD).
21. On both sides of the machine, remove the screws (AE), then remove the columns (AF) from the motor assembly (AG).
22. On the right side of the motor assembly, remove the screws (AH) and move the case (AI).



Dosing pump Disassembly/Assembly (Continues)



Note: Keep and store the lap of the dosing pump hoses by repositioning the hoses as shown in figure.



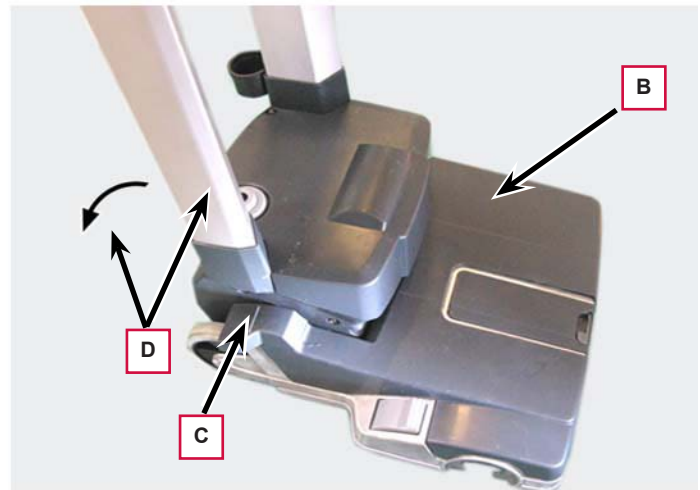
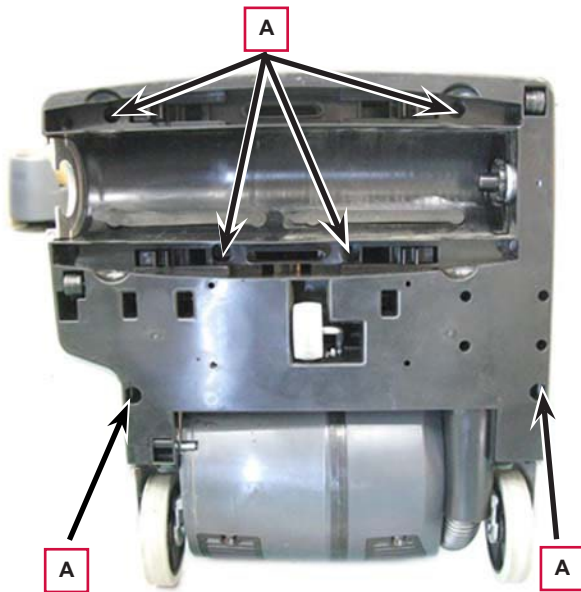
Cylindrical Brush System

Removal and Installation

Belt and Pulley Disassembly/Assembly

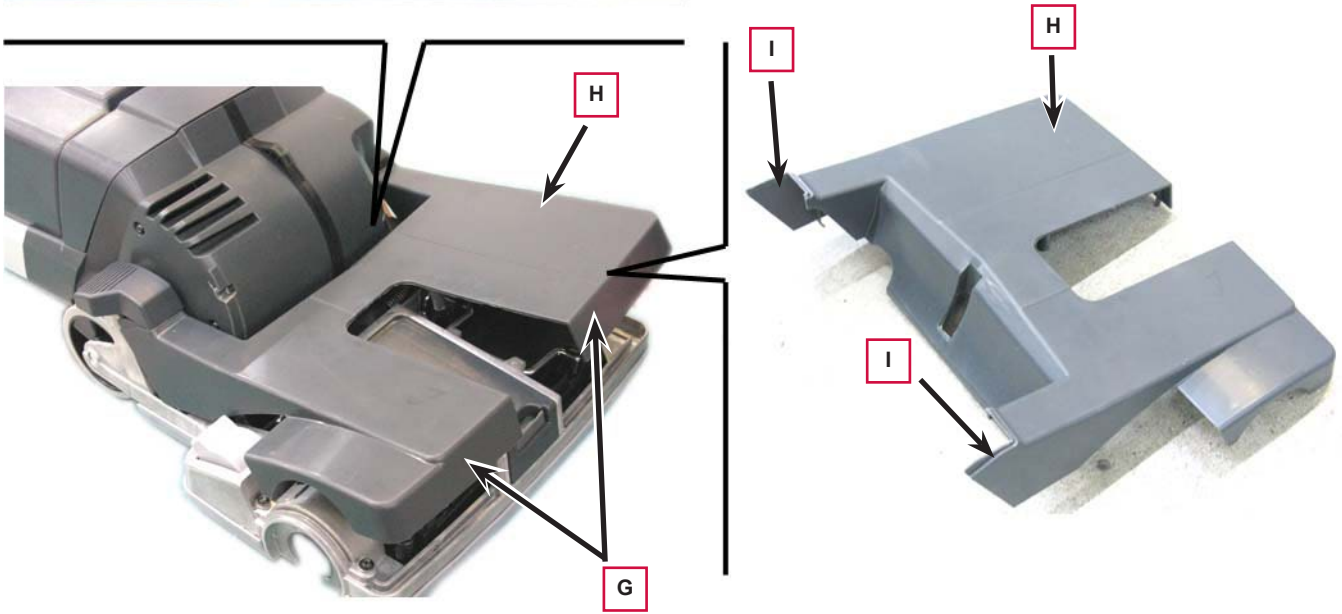
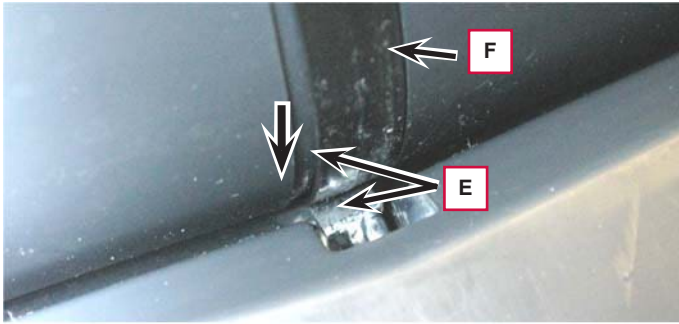
Disassembly

1. Set the machine to stop position.
2. Make sure that the machine power supply cable is disconnected from the electrical mains.
3. Remove the tank assembly.
4. Remove the brush.
5. Remove two squeegee bars.
6. On the lower side of the deck, remove the screws (A).
7. Turn the machine to its original position (B).
8. Press the unlock pedal (C) and fully lower the frame (D).



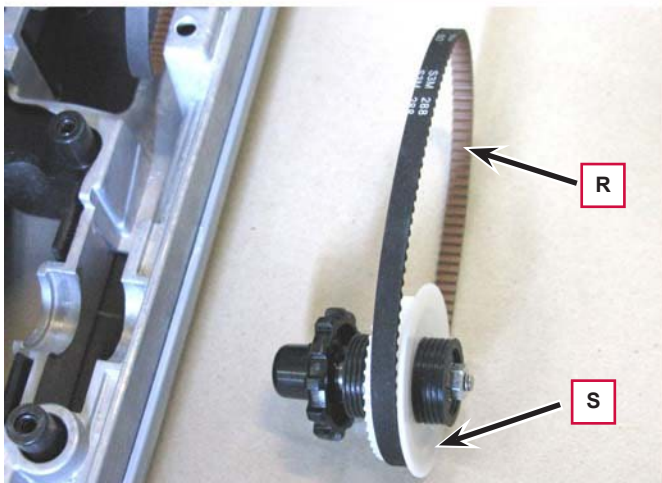
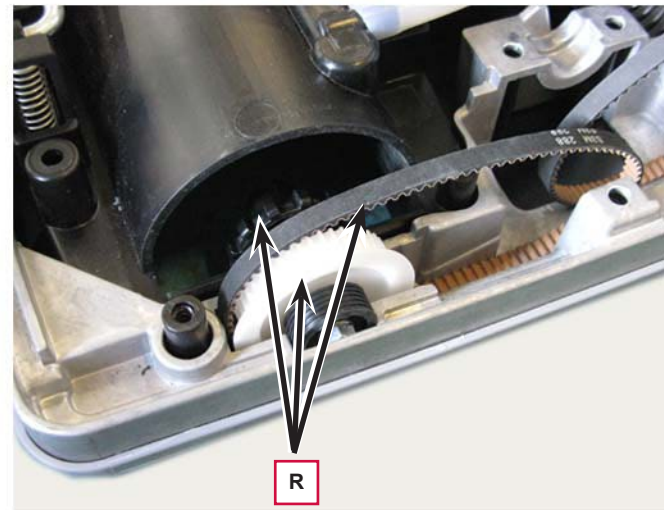
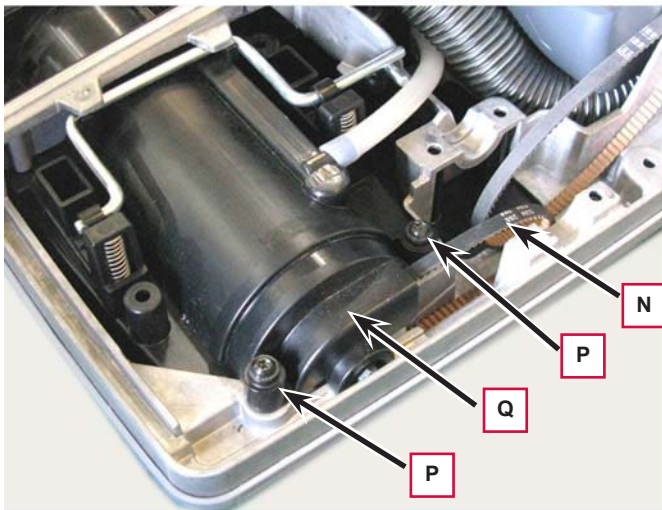
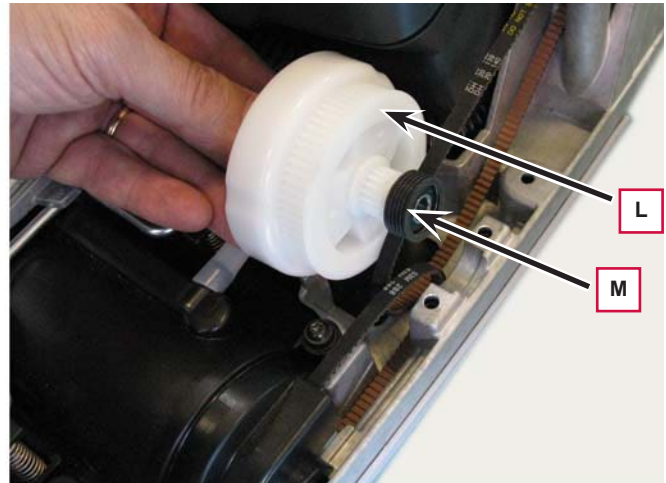
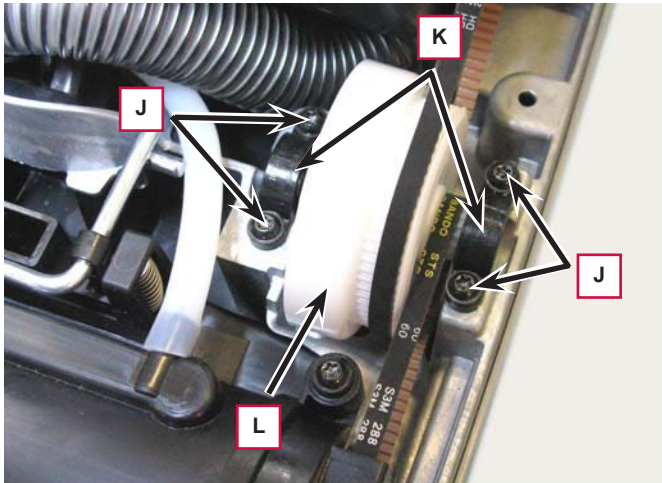
Belt and Pulley Disassembly/Assembly (Continues)

9. With a screwdriver slightly separate the trigger lever (E) from the track (F), then lift the front side (G) of the cover (H) as shown in the figure.
10. Remove the cover (H) by disengaging its ends (I) from the machine.



Belt and Pulley Disassembly/Assembly (Continues)

11. Loosen the screws (J) and remove the collars (K) fastening the ring gear (L).
12. Remove the ring gear (L) by disengaging it from the belt.
13. Retrieve the bearing (M).
14. To remove the belt (N), on the brush side, perform the following procedures:
 - Remove the screws (P).
 - Remove the guard (Q).
 - Remove the ring gear assembly with brush hub and belt (R).
 - Disengage the belt (R) from the ring gear (S) and retrieve it.



Belt and Pulley Disassembly/Assembly (Continues)

15. To remove the belt (T), on the motor side, perform the following procedures:
 - Remove the belt (T) from the ring gear (U), with a screwdriver, then retrieve it.

Assembly

16. Assemble the components in the reverse order of disassembly.

