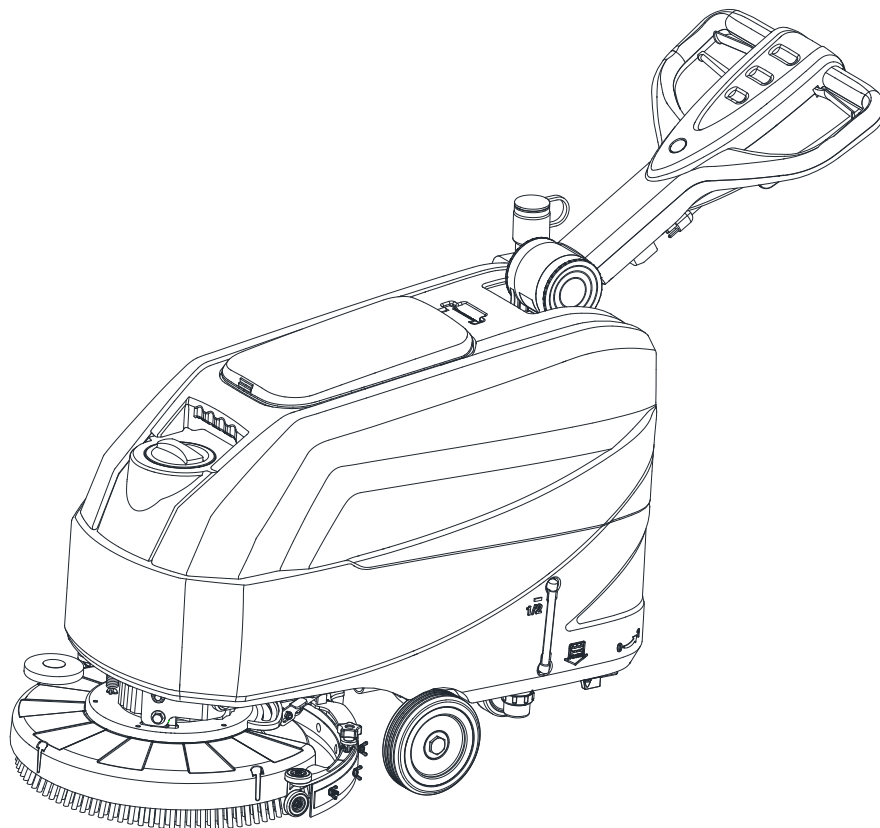


AS4335C

INSTRUCTION FOR USE



Model No.: 50000583 / 50000585 / 50000587

VS15360 Rev. C 2021-08

Translation of Original instructions





EU / UE / EL / EC / EE / ES / EÚ / AB

Declaration of Conformity

Prohlášení o shodě
Konformitätserklärung
Overensstemmelseserklæring
Declaración de conformidad
Vastavusdeklaratsioon
Déclaration de conformité
Vaatimustenmukaisuusvakuutus

Декларация за съответствие
Δήλωση συμμόρφωσης
Megfelelősségi nyilatkozat
Izjava o skladnosti
Dichiarazione di conformità
Atitikties deklaracija
Atbilstības deklarācija
Samsvarserklæring
Conformiteitsverklaring

Declaração de conformidade
Declaracja zgodności
Declaratie de conformitate
Декларация о соответствии
Försäkran om överensstämmelse
Vyhlásenie o zhode
Izjava o skladnosti
Uygunluk beyanı

Manufacturer / Výrobce / Hersteller / Fabrikant / Fabricante / Κατασκευαστής /
Gyártó / Proizvođač / Fabbicante / Gamintojas / Ražotājs / Produzent / Fabrikant /
Fabricante / Producent / Producător / производитель / Tillverkaren / Výrobca /
Proizvajalec / Üretici firma:

**Nilfisk A/S, Kornmarksvej 1
DK-2605 Broendby, DENMARK**

Product / Produkt / Producto, Toode, Produit, Tuote / Продукт /
Προϊόν / Termék / Proizvod / Prodotto / Produktas / Produkts /
Artikel / Produtos / Produs / Izdelek / Ürün

AS4325B, AS4335C

Description / Popis / Beschreibung / Beskrivelse / Descripción /
Kirjeldus / La description / Kuvaus / Описание / Περιγραφή / Leirás /
Opis / Descrizione / Aprašymas / Apraksts / Beschrijving / Descrição /
Descriere / Beskrivning / Popis / Açıklama

**FC - Floor Scrubber/Sweeper – Battery; FC - Floor
Scrubber/Sweeper
Working mode: 24VDC, Charging mode: 100-240V
50-60Hz; 220-240V 50-60Hz, IPX24**

- | | | |
|---|---|---|
| EN We, Nilfisk hereby declare under our sole responsibility, that the above mentioned product(s) is/are in conformity with the following directives and standards. | BG Ние, Nilfisk С настоящото декларираме на своя лична отговорност, че посочените по-горе продуктът е в съответствие със следните директиви и стандарти. | PT Nós, a Nilfisk declaramos, sob nossa exclusiva responsabilidade, que o produto acima mencionado está em conformidade com as diretrizes e normas a seguir. |
| CS My, Nilfisk prohlašujeme na svou výlučnou odpovědnost, že výše uvedený výrobek je ve shodě s následujícími směrnici a normami. | EL Εμείς, Nilfisk δηλώνουμε με αποκλειστική μας ευθύνη, ότι το προαναφερόμενο προϊόν συμμορφώνεται με τις ακόλουθες οδηγίες και πρότυπα. | PL My, Nilfisk Niniejszym oświadczamy z pełną odpowiedzialnością, że wyżej wymieniony produkt jest zgodny z następującymi dyrektywami i normami.. |
| DE Wir, Nilfisk erklären in alleiniger Verantwortung, dass das oben genannte Produkt den folgenden Richtlinien und Normen entspricht. | HU Mi, Nilfisk Kijelentjük, egyedüli felelősséggel, hogy a fent említett termék megfelel az alábbi irányelveknek és szabványoknak | RO Noi, Nilfisk Prin prezenta declarăm pe propria răspundere, că produsul mai sus menționat este în conformitate cu următoarele standarde și directive. |
| DA Vi, Nilfisk erklærer hermed under eget ansvar at ovennævnte produkt(er) er i overensstemmelse med følgende direktiver og standarder. | HR Mi, Nilfisk Izjavljujemo pod punom odgovornošću, da gore navedeni proizvod u skladu sa sljedećim direktivama i standardima. | RU Мы, Nilfisk настоящим заявляем под нашу полную ответственность, что вышеперечисленные продукция соответствует следующими директивам и стандартам. |
| ES Nosotros, Nilfisk declaramos bajo nuestra única responsabilidad que el producto antes mencionado está en conformidad con las siguientes directivas y normas | IT Noi, Nilfisk dichiara sotto la propria responsabilità, che il prodotto di cui sopra è conforme alle seguenti direttive e norme. | SV Vi Nilfisk förklarar härmed under eget ansvar att ovan nämnda produkt överensstämmer med följande direktiv och normer. |
| ET Meie, Nilfisk Käesolevaga kinnitame ja kanname ainuisikulist vastutust, et eespool nimetatud toode on kooskõlas järgmiste direktiivide ja | LT Mes, "Nilfisk pareiškiu vienašališkos atsakomybės, kad pirmiau minėtas produkto atitinka šias direktyvas ir standartus | SK My, Nilfisk prehlasujeme na svoju výlučnú zodpovednosť, že vyššie uvedený výrobok je v zhode s nasledujúcimi smernicami a normami. |
| FR Nilfisk déclare sous notre seule responsabilité que le produit mentionné ci-dessus est conforme aux directives et normes suivantes. | LV Mēs, Nilfisk šo apliecinu ar pilnu atbildību, ka iepriekš minētais produkts atbilst šādām direktīvām un standartiem | SL Mi, Nilfisk izjavljamo s polno odgovornostjo, da je zgoraj omenjeni izdelek v skladu z naslednjimi smernicami in standardi. |
| FI Me, Nilfisk täten vakuutamme omalla vastuulla, että edellä mainittu tuote on yhdenmukainen seuraavien direktiivien ja standardien mukaisesti | NO Vi, Nilfisk erklærer herved under eget ansvar, at det ovennevnte produktet er i samsvar med følgende direktiver og standarder | TR Nilfisk, burada yer alan tüm sorumluluklarımızı göze, yukarıda belirtilen ürünün aşağıdaki direktifler ve standartlara uygun olduğunu beyan ederiz. |
| NL We verklaren Nilfisk hierbij op eigen verantwoordelijkheid, dat het bovengenoemde product voldoet aan de volgende richtlijnen en normen | | |

2006/42/EC

EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A2:2019+A14:2019
EN 60335-2-72:2012

2014/30/EU

EN 55014-1:2017
EN 55014-2:2015
EN 61000-3-2:2019
EN 61000-3-3:2013+A1:2019

Authorized signatory: Pierre Mikaelsson, Executive Vice President, Global Products & Services, Nilfisk NLT

Jan 17, 2020



UK Declaration of Conformity

We,
Nilfisk Ltd
Nilfisk House, Bowerbank Way Gilwilly Industrial Estate
Penrith Cumbria
CA11 9BQ UK

Hereby declare under our sole responsibility that the

Product: FC - Floor Scrubber/Sweeper - Battery; FC - Floor Scrubber/Sweeper
Description: Charging mode: 100-240V 50/60Hz; Working mode: 24V DC; 220-240V 50-60Hz, IP24
Type: AS4325B, AS4335C

Is in compliance with the following standards:

EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A2:2019+A14:2019
EN 60335-2-72:2012
EN 55014-1:2017+A11:2020
EN 55014-2:2015
EN 61000-3-2:2019
EN 61000-3-3:2013+A1:2019

Following the provisions of:

Supply of Machinery (Safety) Regulations 2008/1597
Electromagnetic Compatibility Regulations 2016/1091

Penrith, 25-1-2021

A handwritten signature in black ink, appearing to read "Stewart Dennett".

Stewart Dennett
GM/MD

TABLE OF CONTENTS

INTRODUCTION	1
GUIDE PURPOSE AND CONTENTS	1
HOW TO KEEP THIS INSTRUCTION FOR USE	1
DECLARATION OF CONFORMITY	1
ACCESSORIES AND MAINTENANCE	1
CHANGE AND IMPROVEMENT	1
SCOPE OF APPLICATION	1
MACHINE IDENTIFICATION DATA	1
TRANSPORT AND UNPACKING	2
SAFETY	2
VISIBLE SYMBOLS ON THE MACHINE	2
SYMBOLS THAT APPEAR ON THE INSTRUCTION FOR USE	2
GENERAL SAFETY INSTRUCTION	3
MACHINE DESCRIPTION	5
MACHINE STRUCTURE (as shown in Figure 1)	5
CONTROL PANEL (as shown in Figure 2)	6
MACHINE SIZE	6
TECHNICAL PARAMETERS.....	7
WIRING DIAGRAM (220VAC).....	8
OPERATING GUIDE	9
BRUSH/PAD-HOLDER INSTALLATION AND REMOVAL.....	9
SQUEEGEE ASSEMBLY INSTALLATION AND REMOVAL	10
SOLUTION OR WASHING WATER TANK FILLING	11
REGULATING WATER FLOW	11
MACHINE START AND STOP	11
MACHINE OPERATION (SCRUBBING AND DRYING).....	12
TANK EMPTYING	13
AFTER USING THE MACHINE	14
MACHINE LONG INACTIVITY	14
FIRST PERIOD OF USE.....	14
MAINTENANCE	14
SCHEDULED MAINTENANCE TABLE	15
BRUSH/PAD CLEANING.....	15
SOLUTION FILTER CLEANING.....	15
SQUEEGEE CLEANING.....	16
SQUEEGEE BLADE CHECK AND REPLACEMENT	17
TANK AND VACUUM GRID WITH FLOAT CLEANING, AND COVER GASKET CHECK	17
ACCESSORIES/OPTIONS	18
TROUBLESHOOTING	19
SCRAPPING	19

INTRODUCTION



NOTE

The numbers in brackets refer to the components shown in Machine Description chapter.

GUIDE PURPOSE AND CONTENTS

The purpose of this instruction for use is to provide the operator with all basic information and technical characteristics, operation, machine inactivity, spare parts and safety conditions etc.

Before performing any procedure on the machine, the operators and qualified technicians must read the Instruction for Use manual. Contact our company in case of doubts concerning the interpretation of the instructions or for any further information.

HOW TO KEEP THIS INSTRUCTION FOR USE

The instruction for use must be kept near the machine, inside an adequate case, away from liquids and other substances that can cause any damage to it.

DECLARATION OF CONFORMITY

Declaration of Conformity is supplied with the machine and certifies machine conformity with the law in force.



NOTE

The copies of the original declaration of conformity are provided together with the machine documentation.

ACCESSORIES AND MAINTENANCE

All the necessary operation, maintenance and repair procedures must be made by qualified personnel, our company appointed repair center. ONLY original or approved spare parts and accessories can be used.

Contact our company customer service for any service or purchase of accessories or spare parts if necessary.

CHANGE AND IMPROVEMENT

We are committed to continuous improvement of our products, and the company reserves the right to machine changes and improvements without additional information.

SCOPE OF APPLICATION

The scrubber applies to commercial and industrial use. It is suitable for cleaning smooth and solid floor, operated by a qualified person in safe circumstances. It is not suitable for outdoor use or on carpet or rough floor cleaning.

MACHINE IDENTIFICATION DATA

The machine serial number and model name are marked on the serial label.

This information is useful. Use the following table to write down the machine identification data when requiring spare parts for the machine.

MACHINE MODEL
MACHINE SERIAL NUMBER.....

TRANSPORT AND UNPACKING

When the carrier delivers the machine, make sure the packaging and machine are both whole and undamaged. If there is any damage, inform the carrier before accepting the goods, and reserve the right to compensation for the damage.

Follow the instructions on packaging strictly when unpacking the machine.

Check the package to ensure following items are included:

1. Technical documentation including instruction for use, and Parts list.

SAFETY

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

VISIBLE SYMBOLS ON THE MACHINE**WARNING!**

Read all the instructions carefully before performing any operation on the machine.

**WARNING!**

Do not wash the machine with direct or pressurized water jets.

**WARNING!**

Do not use the machine on slopes with a gradient exceeding that is defined in the specifications section.

SYMBOLS THAT APPEAR ON THE INSTRUCTION FOR USE**DANGER!**

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

**WARNING!**

It indicates a potential risk of injury for people.

**CAUTION!**

It indicates a caution, or a remark related to important or useful functions.

Pay attention to the paragraphs marked by this symbol.

**NOTE**

It indicates a remark related to important or useful functions.

**CONSULTATION**

It indicates the necessity to refer to the Instruction for Use manual before performing any procedure.

GENERAL SAFETY INSTRUCTION

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

**DANGER!**

- This machine must be operated by trained and authorized personnel according to guidance of the manual.
- Before performing any cleaning, maintenance, repair or replacement procedure, read all the instructions carefully, ensure to turn the machine OFF and remove the plug from receptacle.
- Do not operate the machine near toxic, dangerous, flammable and/or explosive powders, liquids or vapour. This machine is not suitable for collecting dangerous powders.
- Do not wear jewelry when working near electrical components.
- Do not work under the lifted machine without supporting it with safety stands.

**WARNING!**

- This machine is intended for **COMMERCIAL USE**, for example in hotels, schools, hospitals, factories, shops, offices and rental businesses.
- Machines left unattended shall be secured against unintentional movement.
- In order to prevent unauthorized use of the machine, the power source shall be switched off or locked, for example by removing the key of the main switch or the ignition key.
- Check the machine carefully before each use. Ensure that all the components have been well assembled before use. Loose components may cause damage to people and properties.
- Never move the machine by pulling the cable. Do not allow the cable to become damaged by a door closing, or sharp corners. Keep the cable away from heated surfaces.
- To reduce the risk of fire, electric shock, or injury, make sure machine is off before leaving.
- Use or store the machine indoors in dry conditions, it is not allowed for outdoor use.
- The machine storage and working temperature must be between 0 °C and +40 °C, the humidity of air must be between 30% - 95%.
- Do not use the machine on slopes with a gradient exceeding the specifications shown.
- When using and handling floor cleaning detergents, follow the instructions on the labels of the detergent bottles and wear suitable gloves and other protective devices.
- Use brushes and pads supplied with the machine or defined in the manual. Using other brushes or pads could reduce safety.
- In case of machine malfunctions, ensure that these are not due to lack of maintenance. If necessary, request assistance from the authorized personnel or from an authorized Service Center.
- Take all necessary precautions to prevent hair, jewelry, and loose clothes from being caught by the machine moving parts.
- Do not use the machine in particularly dusty areas.
- Do not wash the machine with direct or pressured water jets, or with corrosive substances.
- Do not bump into shelves or scaffoldings, especially where there is a risk of falling objects.
- Do not lean liquid containers on the machine, use the relevant can holder.
- To avoid damaging the floor, do not allow the brush/pad to operate while the machine is stationary.
- In case of fire, use a dry powder fire extinguisher. Do not use liquid fire extinguishers.
- Do not remove or modify the machine stickers.
- Do not tamper with the machine safety guards and follow the scheduled maintenance instructions closely.

- **Pay attention during machine transportation when temperature is below freezing point. The water in the recovery tank and in the hoses could freeze and cause serious damage to the machine.**
- **If spare parts need be replaced, order ORIGINAL spare parts from an Authorized Dealers or Retailers.**
- **Return the machine to the Service Center if it doesn't work as usual or it is in condition such as damaged, placed outdoors, dropped into water.**
- **To ensure machine proper and safe operation, the scheduled maintenance shown in the relevant chapter of this Manual, must be performed by the authorized personnel or an authorized Service Center.**
- **The machine must be properly disposed of, due to the presence of toxic-harmful materials, which are subject to standards that require disposal in special centers (see Scrapping chapter).**
- **This machine is a cleaning tool only, not for, and is not intended for any other purpose.**
- **Always keep the openings free from dust, hairs and any other foreign material which could reduce the air flow. Do not use the machine if the openings are clogged.**
- **Use the machine only where proper lighting is provided.**
- **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.**
- **Children should be supervised to ensure that they do not play with the machine.**
- **While using this machine, take care not to cause damage to people or objects.**
- **Cleaning and user maintenance shall not be made by children without supervision.**
- **Operators shall be adequately instructed on the use of these machines.**

MACHINE DESCRIPTION

MACHINE STRUCTURE (as shown in Figure 1)

- | | |
|-------------------------------|--|
| 1. Handlebar | 22. Solution filter |
| 2. Safety switch lever | 23. Front wheels |
| 3. Handlebar adjusting lever | 24. Squeegee assembly |
| 4. Recovery water drain hose | 25. Pad-holder |
| 5. Recovery tank lid | 26. Control panel |
| 6. Fresh water cover | 27. Serial number plate / technical data |
| 7. Cover retention chain | 28. Power supply cable holder |
| 8. Filling hose neck | 29. Pig tail cord |
| 9. Recovery tank | 30. Power cord 20M |
| 10. Solution tank | 31. Accessory parts box (*) |
| 11. Brush deck bumper wheel | 32. Vacuum system reset switch |
| 12. Brush/pad-holder deck | 33. Brush system reset switch |
| 13. Brush/pad-holder | 34. Reset switch label |
| 14. Brush | 35. Electrical box cover |
| 15. Skirt (*) | 36. Deck lifting/lowering pedal |
| 16. Squeegee lifting handle | a) Pedal position when deck is lowered |
| 17. Squeegee knobs | b) Pedal position when deck is lifted |
| 18. Recovery water drain hose | 37. Castor wheel |
| 19. Solution lever hose | 38. Outlet cover |
| 20. Ball valve | |
| 21. Solenoid valve | |

(*): Optional

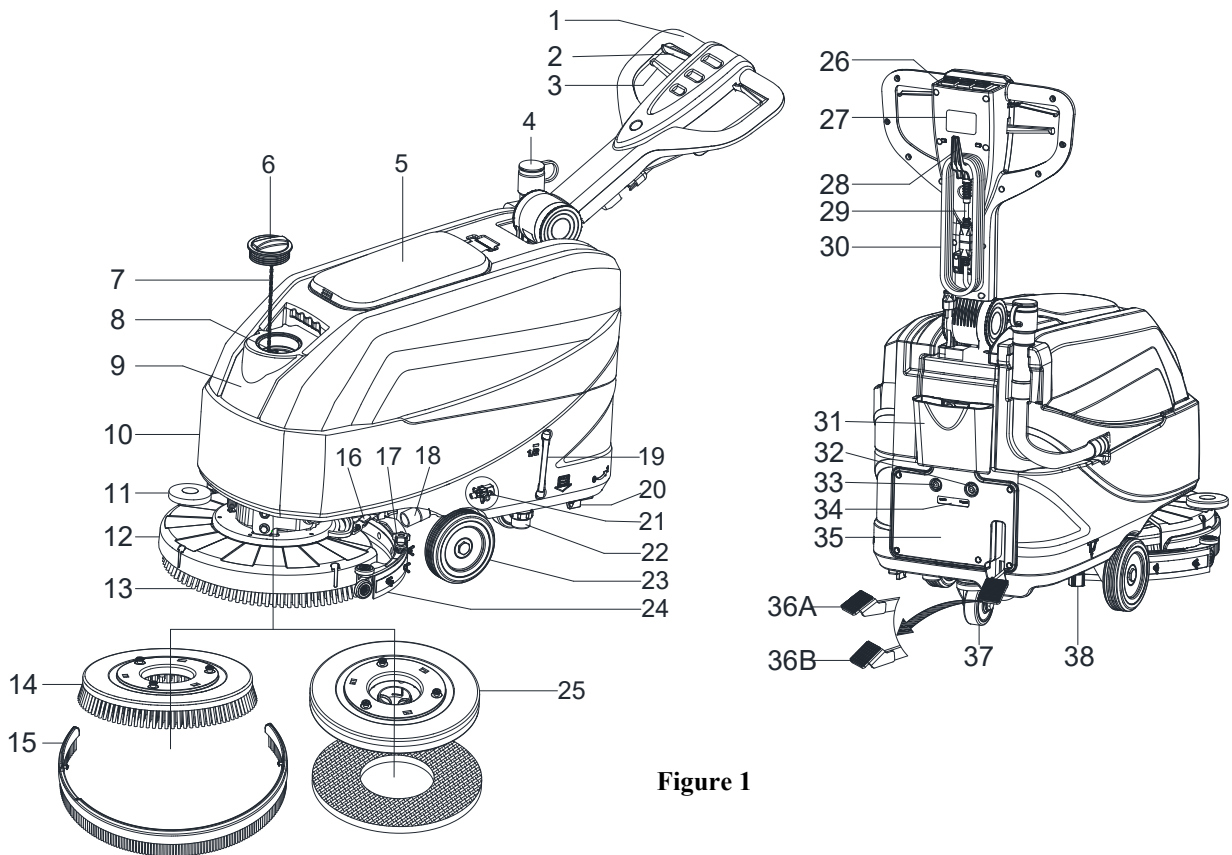
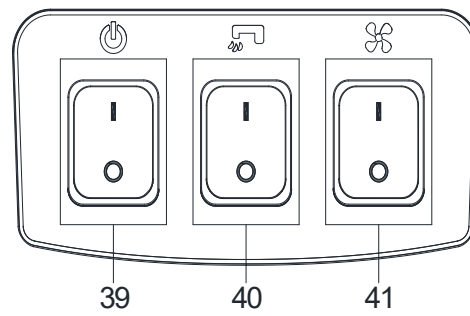
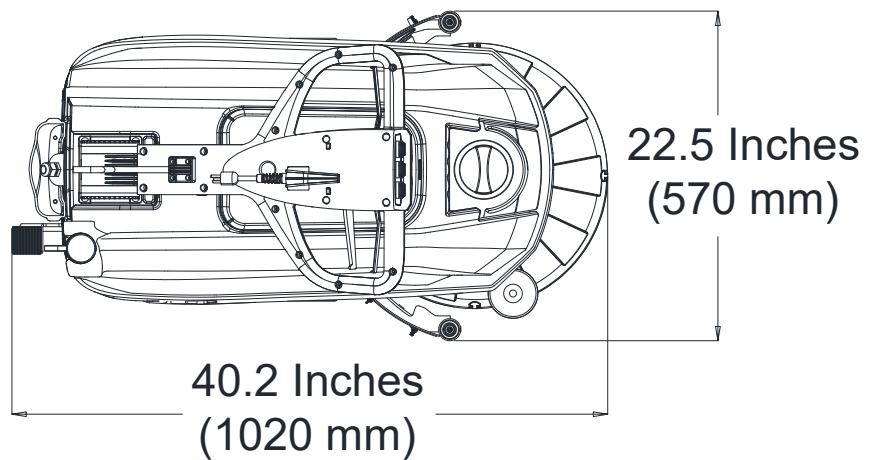
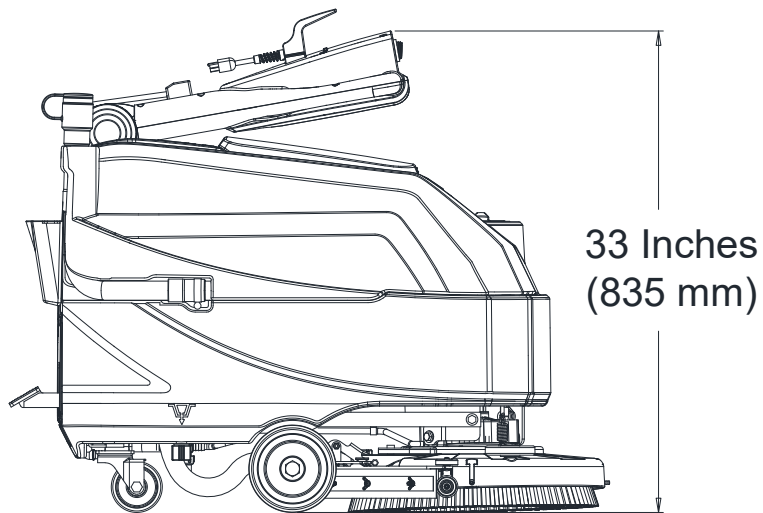
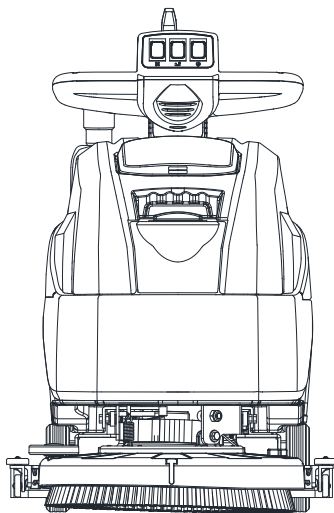


Figure 1

CONTROL PANEL (as shown in Figure 2)

1. Power switch
2. Solution switch
3. Vacuum switch

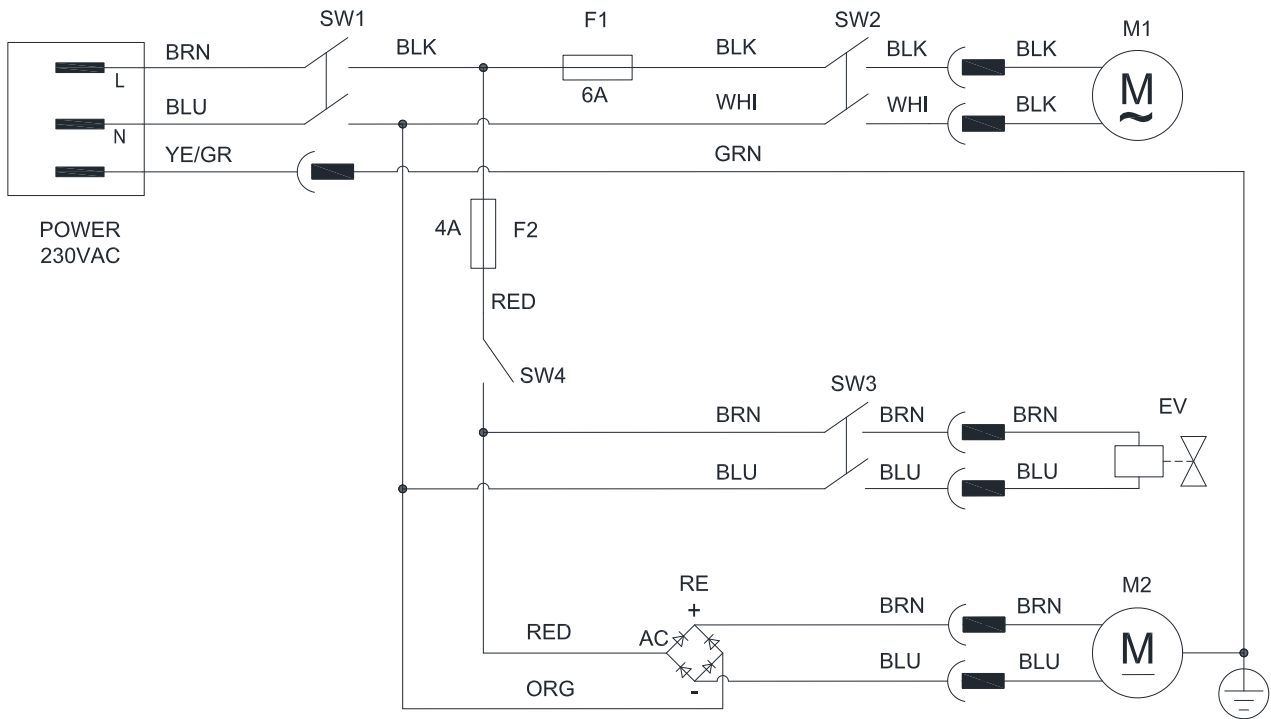
**Figure 2****MACHINE SIZE**

TECHNICAL PARAMETERS

Parameter Type	Units	Model
		AS4335C
Solution tank capacity	L / Gal	35 L / 9.25 Gal.
Recovery tank capacity	L / Gal	35 L / 9.25 Gal.
Machine Length	mm/Inches	933 mm / 36.7 Inches
Machine width with squeegee	mm/Inches	570 mm / 22.4 Inches
Machine width without squeegee	mm/Inches	485 mm / 19.1 Inches
Machine Height (without handle)	mm/Inches	647 mm / 25.5 Inches
Machine Height (with vertical handle)	mm/Inches	1182 mm / 46.5 Inches
Working width	mm/Inches	432 mm / 17 Inches
Driving wheel diameter	mm/Inches	153 mm / 6 Inches
Rear wheel diameter	mm/Inches	89 mm / 3.5 Inches
Brush/Pad diameter	mm/Inches	432 mm / 17 Inches
Brush/Pad pressure (max)	Kg/Lbs.	19 Kg / 41.8 Lbs
Solution Flow (max) per setting	L / Gal per minute	(0.59/0.69/1.11/1.68) Liters (0.16/0.18/0.29/0.44) Gallons
Sound pressure level	dB (A)	69 ± 3 dB (A)
Handle Vibration Level (max)	m/s ²	< 2.5 m/s ²
Climbing capacity (max)	% grade	2%
Vacuum motor power	Watt / H.P.	300 W / 0.4 HP
Vacuum capacity	mm/In of H ₂ O	838 mm / 33±3 In of H ₂ O
Brush motor power	Watt / H.P.	250 Watt / 0.34 HP
Brush speed in normal mode	RPM	170 RPM
IP protection class	IP	IP24
Voltage	AC	220V~240V
Productivity (max)	m ² /h	18,514 sq. ft./hr (1720 m ² /h)
Machine weight with empty tanks	Kg/Lbs.	64 Kg / 141 Lbs.
Gross Vehicle Weight (GVW)	Kg/Lbs.	99 Kg / 218 Lbs.
Shipping Weight	Kg/Lbs.	92 Kg / 203 Lbs.
Packing dimensions (L x W x H)	mm/Inches	(1130 x 730 x 1040 mm) / (44.5 x 28.7 x 41 Inches)

(*) : Optional

WIRING DIAGRAM (220VAC)



COMPONENTS		COMPONENTS	
SW1	Main Switch	F1	Circuit Breaker 6A
SW2	Vacuum Switch	F2	Circuit Breaker 4A
SW3	Water Switch	M1	Brush Motor
SW4	Handle Switch	M2	Vacuum Motor
EV	Solution Valve	RE	Rectifier

Comment	
1	RED-Red
2	BLK-Black
3	BRN-Brown
4	WHI-white
5	BLU-Blue
6	GRN-Green
7	ORG-Orange
8	YE/GR-Yellow/Green

OPERATING GUIDE

**WARNING!**

On some points of the machine there are some adhesive plates indicating:

- DANGER!
- WARNING!
- CAUTION!
- CONSULTATION

While reading this Manual, the operator must pay particular attention to the symbols shown on the plates. Do not cover these plates for any reason and immediately replace them if damaged.

BRUSH/PAD-HOLDER INSTALLATION AND REMOVAL

**NOTE**

Install either the brush (A, Figure 3) or pad-holder (B and C, Figure 3) according to the type of floor to be cleaned.

**CAUTION!**

Before installation or removal of brush or pad-holder, make sure all the switches on machine are in off position and lifting up the squeegee and the brush/pad-holder deck from the floor. The operator must be equipped with suitable personnel protection devices such as gloves to reduce the risk of accidents.

Proceed as following:

1. Shut off the power switch (39, Figure 2).
2. Lift the deck by pressing the pedal (36, Figure 1).
3. Place the brushes (A, Figure 3) or the pad-holder (B, Figure 3) under the deck (12, Figure 1).
4. Lower the deck on the brushes/pad-holders by pressing the pedal (36, Figure 1).
5. Press the start switch (39, Figure 2).
6. Press one of the Brush/forward gear safety switch lever (2, Figure 1) to engage the brush/pad-holder, then release it. If necessary, repeat the procedure until the brushes/pad-holders are engaged.
7. If Step No. 6 above proves to be difficult, use the manual method by turning the brush/pad-holder in the direction opposite to the normal turning direction (ON) to install the brush/pad-holder (as shown in Figure 3).

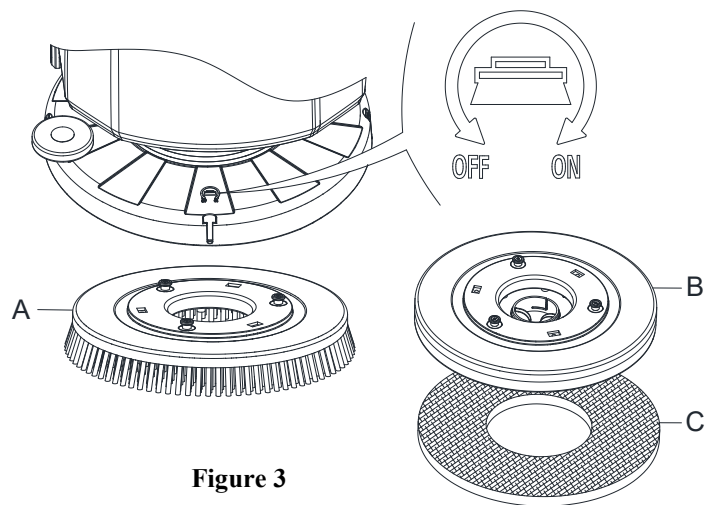


Figure 3

**WARNING!**

To engage the brush/pad-holder press the safety switch lever (2, Figure 1) which turns on the brush/pad-holder motor.

8. To remove the brush/pad-holder lift the deck by pressing the pedal (36, Figure 1), then manual method by turning the brush/pad-holders in the opposite direction (OFF), the brush/pad-holder will be removed.

SQUEEGEE ASSEMBLE INSTALLATION AND REMOVAL

**CAUTION!**

It is advisable to wear protective gloves when installation and removal the squeegee assemble because there may be sharp debris.

1. Push the machine to a level floor.
2. Ensure that the machine is off.
3. Lower the brush/pad-holder deck (12, Figure 1) by lifting the pedal (36), Brush on the floor.
4. Place squeegee in the place between brush deck and front wheel.
5. Fix stud A to the opening B, then fix another screw C to the open D, fasten squeegee knob and connect recovery water drain hose F to the connector E (Figure 4).
6. Disconnect the squeegee in the reverse order of disassembly.

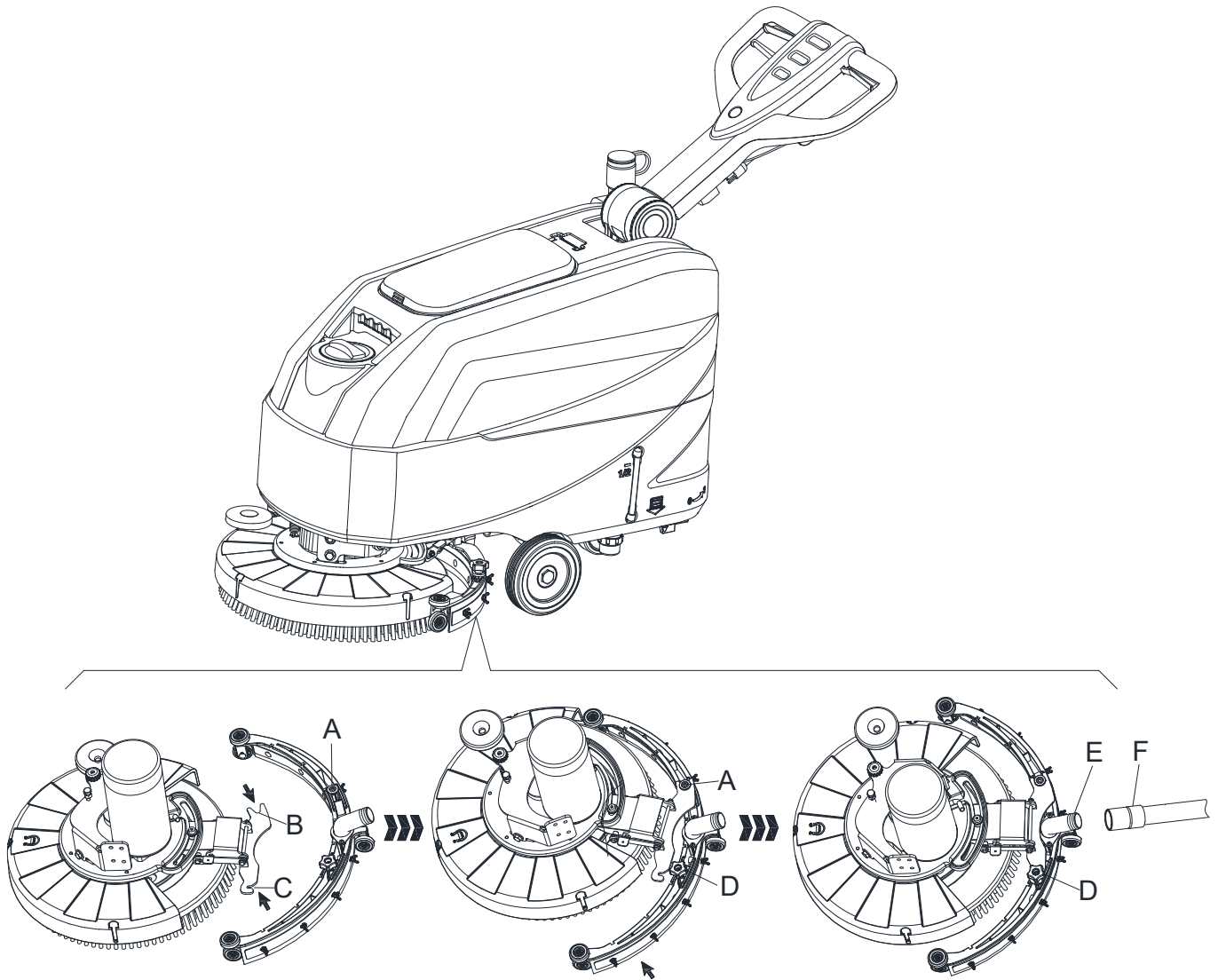


Figure 4

SOLUTION OR WASHING WATER TANK FILLING

1. Open the water inlet cover (A, Figure 5).
2. Fill with water or solution suitable for work performance.
The solution temperature must not exceed +104°F (+40°C).
3. Do not overfill the tank, refer to water level indicator (B, Figure 5) for the water volume.

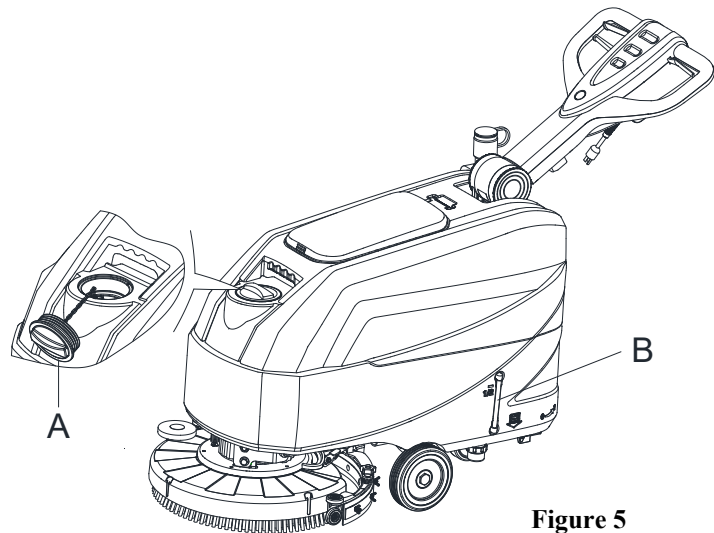


Figure 5



WARNING!

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

REGULATING WATER FLOW

The volume of the water flow may be adjusted through the ball valve handle (A, Figure 6) according to the amount of water required for your scrubbing application.

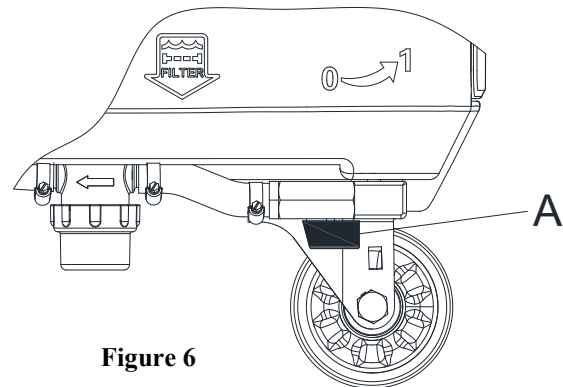


Figure 6



WARNING!

Regulating the ball valve handle (A, Figure 6) must be done under the condition when the power switch (39, Figure 2) is in the "OFF" position.

MACHINE START AND STOP

Starting the machine

1. Prepare the machine as shown in the previous paragraph.
2. Push the machine to the area to be cleaned, by pushing it with the hands on the handlebar (D, Figure 7).
3. Lower the brush/pad-holder deck (I, Figure 7) and the squeegee (H) by lifting the pedal (G).
4. Press the power switch (A, Figure 7) to the "I" position.
5. Press the solution switch (B, Figure 7) to the "I" Position. (Work simultaneously with the safety switch (E) to control the solenoid valve.)
6. Press the vacuum switch (C, Figure 7) to the "I" position.
7. Start cleaning by pushing the machine with the hands on the handlebar (D, Figure 7) and pressing the safety switch lever (E, Figure 7).

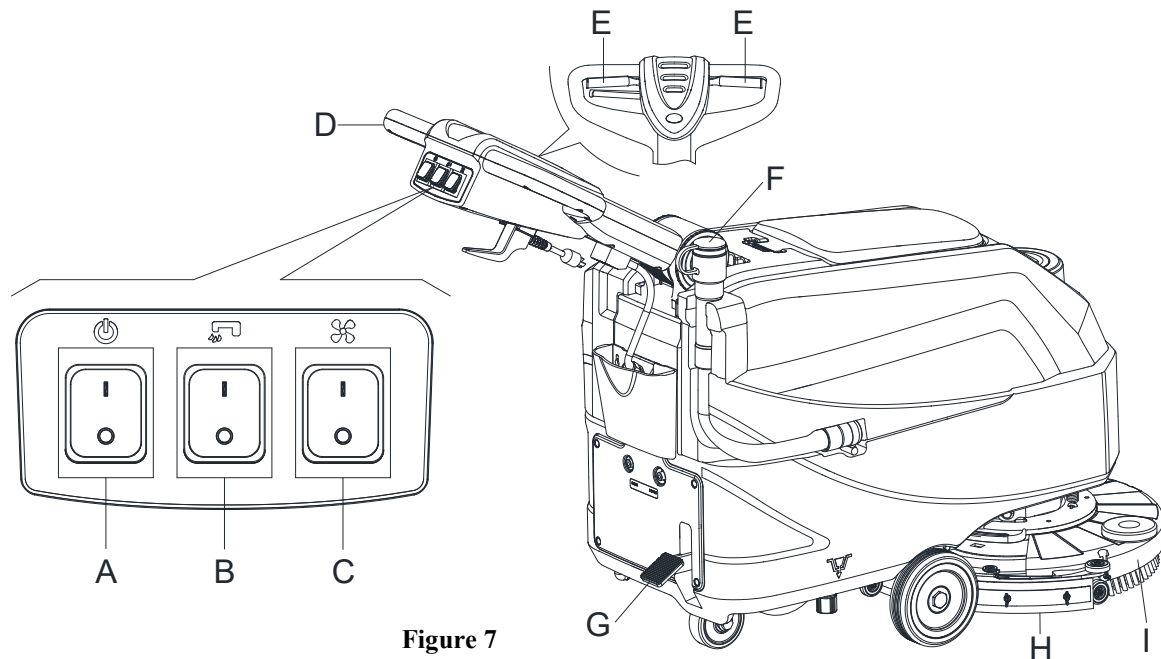


Figure 7

**NOTE**

To move the machine forward, press either the left or right safety switch lever (E, Figure 7) or both.

8. If necessary, press the handlebar adjusting lever (3, Figure 1) to adjusting the handlebar height.
9. If necessary, turn off the machine, and adjust the solution flow with the ball valve handle. (Refer to the steps for adjusting solution flow.)

**CAUTION!**

In order to avoid damaging the floor, when the machine stays in one place without moving, remove hands from switches & turn off the main power switch (A).

Stopping the machine

10. Stop the machine by using the handlebar (D, Figure 7).
11. When you have finished using the machine, release the safety switch lever (E) to turn off the brush/pad-holder and solenoid valve.
12. Press the solution control switch (B) to the "OFF" position to completely turn off the solution flow.
13. Press the Vacuum switch (C) to the "OFF" position. The vacuum system stops after a few seconds.
14. Press the power switch (A) to the "OFF" position. And disconnecting the power cord (30, Figure 1) from the power supply.
15. Lift the brush/pad-holder deck (I, Figure 7) and the squeegee (H) by pressing the pedal (G).
16. Make sure that the machine cannot move independently.

MACHINE OPERATION (SCRUBBING AND DRYING)

1. Start the machine as shown in previous paragraphs.
2. While keeping both hands on the handlebar press the safety switch lever (E, Figure 7), then maneuver the machine and start scrubbing/drying the floor.
3. If necessary, turn off the machine, and adjust the solution flow with the ball valve handle. (Refer to the steps for adjusting solution flow.)

**NOTE**

For correct scrubbing/drying of floors at the sides of the walls, it is Suggested to go near the walls with the right side of the machine (A and B, Figure 8) as shown in the figure.

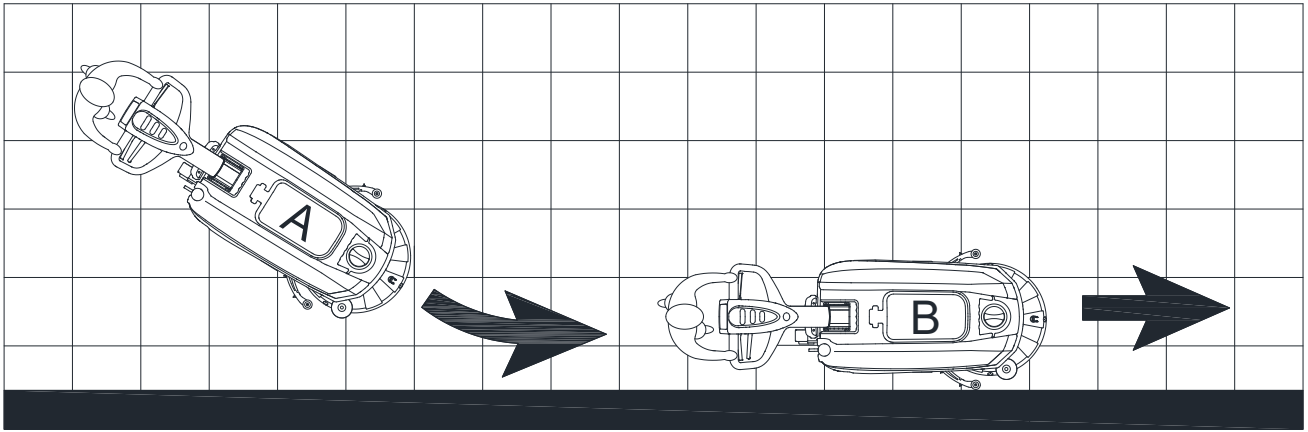


Figure 8

**CAUTION!**

To avoid any damage to the floor surface, turn off the brushes/pad-holders when the machine stops in one place.

TANK EMPTYING

An automatic float shut-off system (B, Figure 9) blocks the vacuum system when the recovery water tank (C) is full. The vacuum system deactivation is signaled by a sudden increase in the vacuum system motor noise frequency, also the floor has not dried.

**CAUTION!**

If the vacuum system turns off accidentally (for example, when the float is activated because of a sudden machine movement), to resume the operation: press the power switch (39 and 41) to turn off the power and vacuum system, then open the cover (A, Figure 9) and check that the float inside the grid (B) has gone down to the water level. Then close the cover (A) and press the power switch (39 and 41) turn on the main power and the vacuum system.

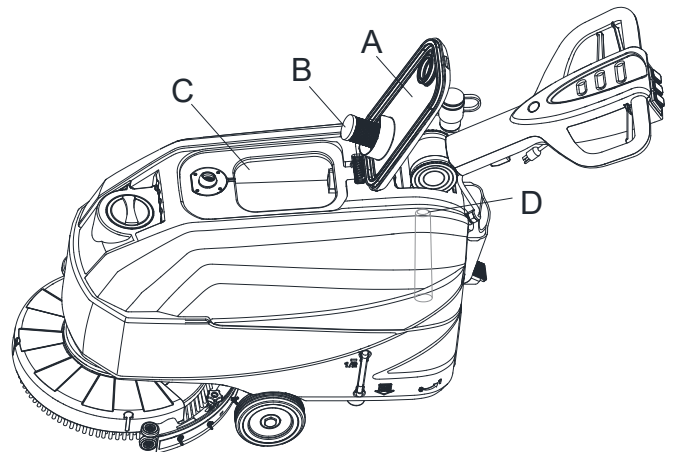


Figure 9

When the recovery water tank (C, Figure 9) is full, empty it according to the following procedure.

Recovery water tank emptying

1. Stop the machine.
2. Lift the brush/pad-holder deck (I, Figure 7) and the squeegee (H) by pressing the pedal (G).
3. Push the machine to the appointed disposal area.
4. Empty the recovery water tank with the hose (F, Figure 7). Then, rinse the recovery tank (C, Figure 9) with clean water.
5. Remove the recovery tank lid (A, Figure 9) and clean the inside of the cover and the filter floater grid (B) with clean water.
6. Check the recovery tank (D, Figure 9) whether there is foreign body jam and clean it.

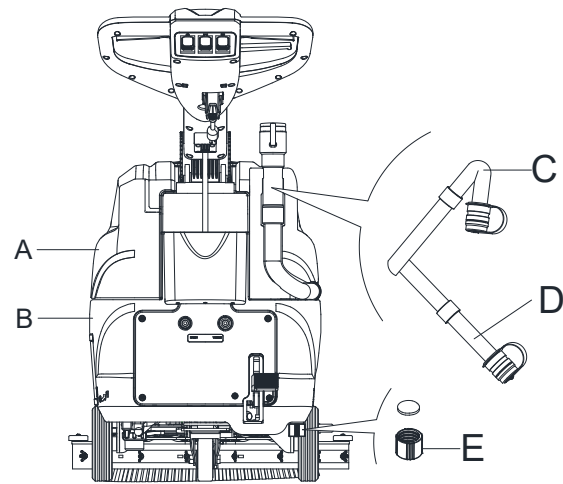


Figure 10

**CAUTION!**

When draining the wastewater, the vacuum tube for waste must be folded (C, Figure 10) and lowered to a lower position (D, Figure 10), and then open the lid of the vacuum tube for waste to drain the water. Do not make the outlet of the vacuum tube for waste face upward to drain the water vertically. This is to avoid wastewater spilling onto the operator.

7. Perform steps 1 to 4.

Solution/clean water tank emptying

8. Empty the solution tank with the outlet cover (E, Figure 10). After working, rinse the tank with clean water.

AFTER USING THE MACHINE

After working, before leaving the machine:

1. Remove the brushes/pad-holders.
2. Empty the tanks (A and B, Figure 10) as shown in the previous paragraph.
3. Perform the daily maintenance procedures (see the Maintenance chapter).
4. Store the machine in a clean and dry place, with the brushes/ pad-holders and the squeegee lifted or removed.

MACHINE LONG INACTIVITY

If the machine is not going to be used for more than 30 days, proceed as follows:

1. Perform the procedures shown in After Using the machine paragraph.
2. Disconnect the main power.

FIRST PERIOD OF USE

After the first 8 hours, check the machine fastening and connecting parts for proper tightening and check the visible parts for wear and leakage.

MAINTENANCE**WARNING!**

Maintenance procedures must be performed after the machine is turned off and the cable is disconnected. In addition, carefully read the safety chapters in the manual.

All scheduled or extraordinary maintenance procedures must be performed by qualified personnel or an authorized Service Center. This manual only describes the general and common maintenance procedures.

SCHEDULED MAINTENANCE TABLE



CAUTION!

The procedure marked with (1) must be performed when the machine is used after 9 hours for the first time. The procedure marked with (2) must be done by Service Center that is qualified by our company.

Procedure	Daily, after each use	Weekly	semiannually	Yearly
Squeegee cleaning				
Brush/Pad-holder cleaning				
Tank cleaning				
Tank sealing strip inspection				
Float ball filter cleaning				
Squeegee blade check and replacement				
Cleaning water filter cleaning				
Solution filter cleaning				
Screw and nut tightness inspection			(1)	
Brush/Pad-holder carbon brush check or replacement				(2)
Suction motor carbon brush check or replacement				(2)

BRUSH/PAD CLEANING



CAUTION!

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

1. Remove the brush/pad from the machine, as shown in the Use chapter.
2. Clean and wash the brush/pad with water and detergent.
3. Check that the brushes/pads are in working condition and not excessively worn; if necessary replace them.

SOLUTION FILTER CLEANING

1. Pushing the machine on a level floor.
2. Ensure that the machine is off.
3. Emptying the solution tank (Advice).
4. Remove the cover (D, Figure 11), then remove the filter strainer (C).
Clean and install them on the support (A).



NOTE

The filter strainer (C, Figure 11) must be correctly positioned on the housing (E) of the support (A).

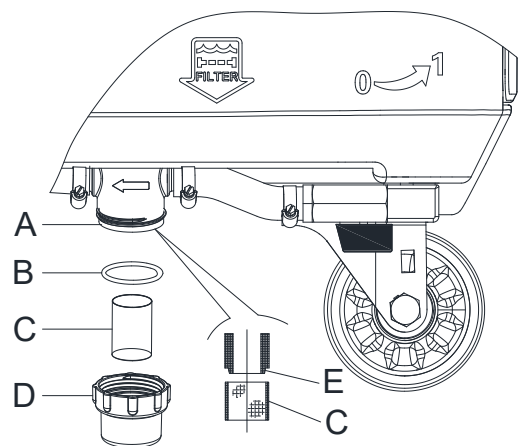


Figure 11

SQUEEGEE CLEANING

**NOTE**

The squeegee must be clean and its blades must be in good conditions in order to get a good drying.

**CAUTION!**

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

1. Push the machine to a level floor.
2. Ensure that the machine is off.
3. Lower the brush/pad-holder deck (I, Figure 7) and the squeegee (H) by lifting the pedal (G).
4. Disconnect the vacuum hose (B, Figure 12) from the squeegee connector (C).
5. Loosen the knobs (D) and remove the squeegee (E).
6. Clean the steel or the plastic squeegee (E, Figure 12). Clean the compartments (I) and the hole (H) especially. Check the front blade (F) and the rear blade (G) for integrity, cuts and tears; if necessary replace them (see the procedure in the following paragraph).
7. Assemble the squeegee in the reverse order of disassembly.

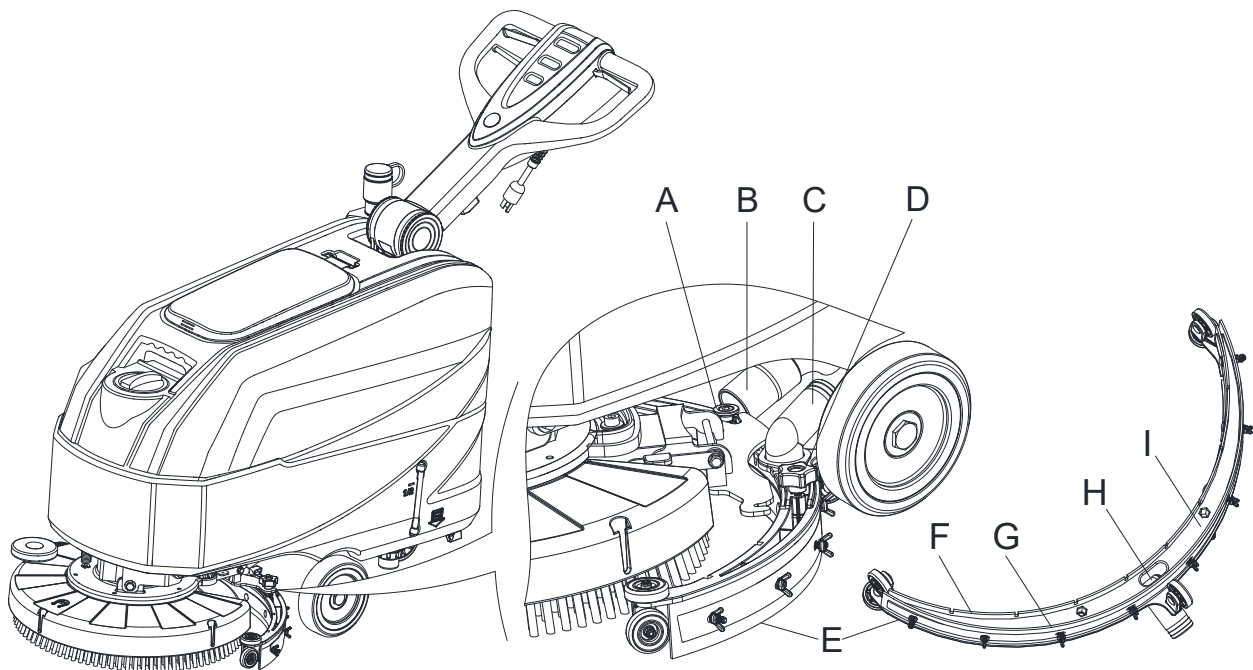
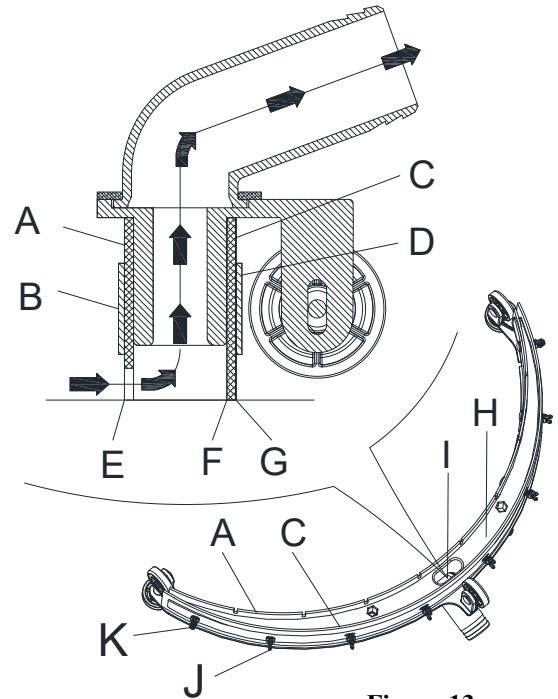


Figure 12

SQUEEGEE BLADE CHECK AND REPLACEMENT

1. Clean the steel or the plastic squeegee, as shown in the previous paragraph.
2. Check that the edges (E, Figure 13) of the front blade (A) and the edges (F) of the rear blade (C) lay down on the same level, along their length; if necessary adjust their height according to the following procedure:
 - Loosen the all wing nuts (J) and adjust the front blade (A) and rear blade (C), then tighten the all wing nuts.
3. Check the front blade (A) and rear blade C) for wear, cuts and tears; if necessary replace them according to the following procedure. Check that the front corner (E) or the rear corner (F) is not worn; if necessary, overturn the blade to replace the worn corner with an integral one. If the other corners are worn too, replace the blade according to the following procedure:
 - Remove the all wing nuts (J) and the screw (K), remove the retaining strip (B), then replace/overturn the front blade (A). Assemble the blade in the reverse order of disassembly.
 - Remove the all wing nuts (J) and the screw (K), remove the retaining strip (D), then replace/overturn the rear blade (C). Assemble the blade in the reverse order of disassembly. After the blade replacement (or overturning), assemble the squeegee as shown in the previous step.
4. Install the squeegee (E, Figure 12) and screw down the knobs (D, Figure 12), as shown in the previous paragraph.
5. Connect the vacuum hose (B, Figure 12) to the squeegee (C, Figure 12).

**Figure 13****TANK AND VACUUM GRID WITH FLOAT CLEANING, AND COVER GASKET CHECK**

1. Push the machine to a level floor.
2. Ensure that the machine is off.
3. Turn the recovery tank lid (A, Figure 14) 90-degree position where it can be taken off from the recovery tank, and then take out the float ball filter (B) from the recovery tank lid.
4. Clean the recovery tank lid (A), recovery tank (C), clean solution tank (D) and the float ball filter (B). Empty the recovery tank with the drain hose (D, Figure 10).
5. Install the float ball filter (B) and the recovery tank lid (A).
6. Inspect the integrity of the tank sealing strip.

**NOTE**

The tank sealing strip (E) produces the vacuum inside the tank when the vacuum motor works. The tank must be sealed so it can effectively absorb the water from the ground to recovery tank.

7. Check whether the contact surface of sealing strip (E) has integrity and sealing is sufficient. If necessary, take the sealing strip of the tank out of the groove (F) and replace it. Assemble the new sealing strip as shown in (Figure 14), the joint should be back in the middle area.
8. Close the recovery tank lid (A).

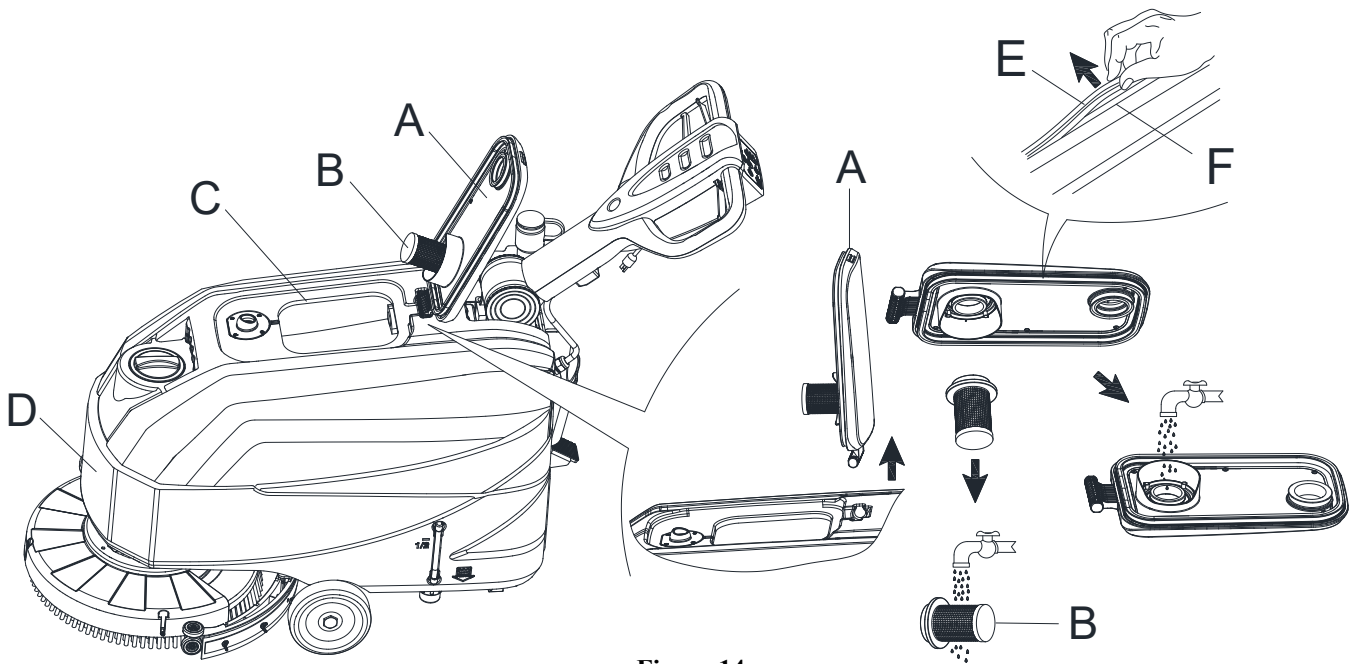


Figure 14

ACCESSORIES/OPTIONS

In addition to the standard components, the machine can be equipped with the following accessories/options, according to the machine specific use:

For further information concerning the above-mentioned optional accessories, contact an authorized Retailer.

ACCESSORIES/OPTIONS

See "Parts List" section

1. Pads of different materials.
2. Brush of different materials.
3. Squeegee blades of different materials.

TROUBLESHOOTING

Trouble	Probable causes	Remedy
Machine not working	The wiring not connected correctly or bad wiring.	Check the wiring or contact distributor.
	Carbon brush worn out.	Contact distributor.
Vacuum motor not working.	The wiring not connected correctly or bad wiring.	Check the wiring or contact distributor.
	Bad vacuum motor.	Contact distributor.
The recovery water vacuuming is insufficient.	The recovery water tank is full.	Empty the tank.
	The hose is disconnected from the squeegee.	Connect.
	The vacuum grid is clogged or the float is stuck closed.	Clean the grid or check the float.
	The squeegee is dirty or the squeegee blades are worn or damaged.	Clean and check the squeegee.
	The tank cover is not properly closed, or the gasket is damaged, or the Bend tube is clogged.	Close the cover correctly, or replace the gasket or clean the Bend tube.
	The recovery water tank is dirty.	Clean.
The solution flow to the brushes is insufficient.	The solution/clean water filter is dirty.	Clean the filter.
	The ball valve does not open.	Regulating the ball valve handle.
	Bad ball valve.	Contact distributor.
	Bad solution valve.	Contact distributor.
The squeegee leaves marks on the floor.	There are debris under the squeegee blades.	Remove the debris.
	The squeegee blades are worn, chipped or torn.	Replace the blades.

SCRAPPING

Scrap the machine by the qualified waste treatment institution.

Before the machine is scrapped, please take away and segregate below subassembly that relevant laws and regulations request must be disposed in appropriate way.

- Brush/Pad-holder.
- Plastic hose and plastic parts.
- Electrical and electronic components. (*)

(*) Please contact our company service center destroying any electrical and electronic components.

Machine material composition and recyclability

Type	Recyclable percentage	AS4335C weight percentage%
Aluminium	100%	2%
Electric motors-various	29%	23%
Ferrous materials	100%	32%
Wiring harness	80%	1%
Liquids	100%	0%
Plastic-non-recyclable material	0%	1%
Plastic-recyclable material	100%	38%
Rubber	20%	3%

Company information:
www.vipercleaning.eu
info-eu@vipercleaning.com

