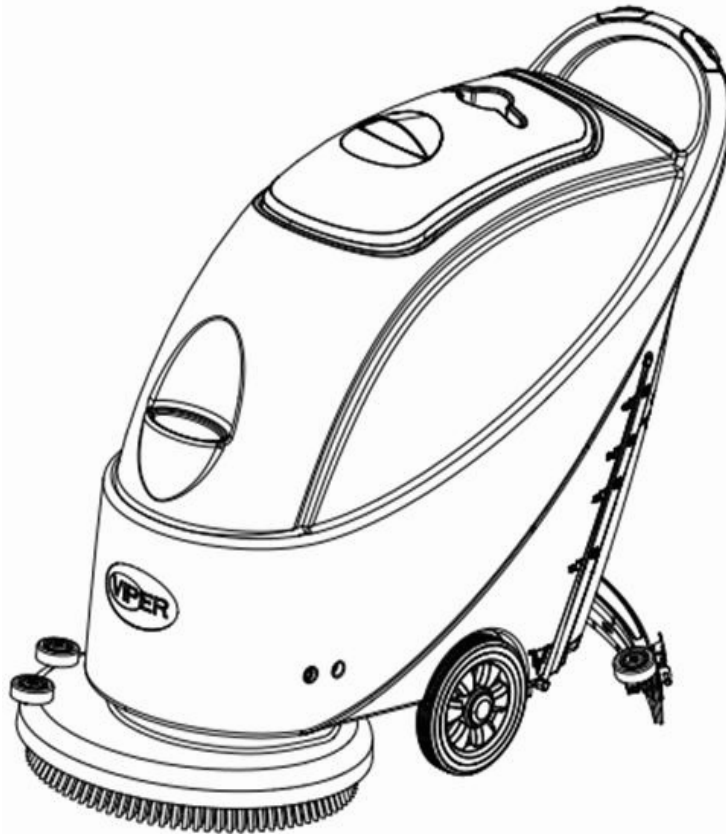




Scrubber User Manual

AS430C & AS510C



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VF90015-UK
Rev.03



EU / UE / EL / EC / EE / ES / EÚ / AB

Declaration of Conformity

Prohlášení o shodě
Konformitátsklärung
Overensstemmelseserklæring
Declaración de conformidad
Vastavusdeklaratsioon
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Vaatimustenmukaisuusvakuutus

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Megfelelősségi nyilatkozat
Izjava o skladnosti
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Manufacturer / Výrobce / Hersteller / Fabrikant / Fabricante / Κατασκευαστής / Gyártó / Proizvođač / Fabbicante / Gamintojas / Ražotājs / Producent / 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 / Produkta / Produkts / Artikel / Produtos / Produs / Izdelek / Ürün

AS430C, AS510C

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
220-240V 50/60Hz, IP24**

- | | | |
|---|---|---|
| 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.. |
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| 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 Ми, Нилфиск овим изјављујем под пуном одговорношћу, да наведеног производ је у складу са следећим директивама и стандардима. |
| 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 järgmistega direktiivide ja | LT Mes, "Nilfisk pareiškiu vienašališkos atsakomybės, kad pirmiau minėtas produkta 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 ovennævnte 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
EN 60335-2-72:2012**

2014/30/EU

**EN 55014-1:2017
EN 55014-2:2015
EN 61000-3-2:2014
EN 61000-3-3:2013**

Authorized signatory: Lars Gjødssbøl, Executive Vice President Global Products & Services

Oct 23, 2018

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INTRODUCTION



NOTE

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

MANUAL CONTENTS

This manual is to provide the operator with the necessary information to use this machine properly and safely. The information includes the technical data, safety, operation, storage, maintenance and disposal of the machine. The operator and technicians with related qualifications must study this manual carefully before commencing the operation and maintenance of this machine. Please contact VIPER for any queries on the explanation of this manual or when further related information is needed.

PURPOSE

The intention of this manual is to enable the operator and qualified technicians to accomplish the maintenance of this machine.

The operator must not perform those operations that should only be performed by technicians. VIPER will not be responsible for any damages caused by the violation of this rule.

SPARE PARTS AND MAINTENANCE

All necessary operation, maintenance, and repair procedures must be performed by qualified personnel or by the service centers of VIPER

Only Authorised spare parts and accessories should be used.

If service and ordering of spare parts or accessories are needed, please contact VIPER with the model number of the machine and serial numbers.

CHANGES AND IMPROVEMENTS

VIPER makes continuous improvements on its products. VIPER reserves the right of changing and improving the machines, and also the right of deciding by itself whether the benefits brought about by the changes are applicable to the products already sold. All changes or extra accessories must be agreed by VIPER and must be performed by the company.

SCOPE OF APPLICATION

This scrubber is used in a domestic and industrial environment, and is suitable for the cleaning of smooth and hard floors (scrubbing and waste water collection). It must be used by qualified operators and in a safe environment. This scrubber can not be used for cleaning outdoors, on carpets, and on relatively coarse floors.

IDENTIFICATION DATA

The machine model and serial number are marked on the plate (4).

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

MACHINE mode.....
MACHINE serial number.....

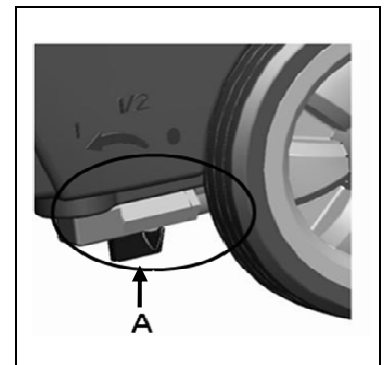
UNPACKING/TRANSPORT

Please follow carefully the instructions on the package when unpacking. On delivery, please inspect the packing and the machine to ensure no damage has been done during transport. If there is any visible damage, please keep the original form, and ask the carrier to confirm and fill out a list of damages for compensation.



— CAUTION

When unpacking and unloading, or during moving the machine across ground with steps, please take care to avoid hitting the on/off switch regulating the water flow, Part A in the figure on the right.



Check if the machine is equipped with the following items:

Technical documents

- Scrubber User Manual

GENERAL SAFETY GUIDES

The following are special warnings and notices on potential damages (personnel and machine):



WARNING!

- Machine may only be operated under the guidance of this manual. Only accessories approved by VIPER should be used.
- This machine must be only used by duly trained or authorised personnel. Children or inappropriate persons must not use this machine.
- When working near electrical parts, please do not wear any jewelry. Please take all precautionary measures to avoid the hair, jewelry, and loose fitting clothes from being caught by any moving parts of the machine.
- Please do not use this machine in particularly dirty areas. Do not wash the machine directly with water. Do not let the machine come in touch with corrosive liquids.
- The temperature for storage and for working environment of the machine must be between 0 - 40°C.
- The humidity of air must be between 30% - 105%.
- Please do not use the machine on a slope with a gradient of more than 2%.
- In case of fire, please use dry powder fire extinguishers. Do not use liquid fire extinguishers.
- Particular attention should be paid when the machine is transported below 0°C. The water tank and the water in the hoses may freeze and cause serious damages to the machine.
- Use brushes and pads supplied with the machine and those specified in the User Manual. Using other brushes or pads could reduce safety.
- In case of machine malfunction, please make sure that it is not caused by lack of maintenance. If it is caused by other conditions, please seek the assistance of authorised personnel or the service center.
- If it is confirmed that the spare parts must be replaced, please secure the genuine parts from authorised dealers or agents.
- In order to ensure the safe and proper operation of the machine, please let authorised personnel or the service center perform the scheduled maintenance according to the maintenance schedules in the related sections of the manual.
- This machine must be properly disposed of because there may exist poisonous and hazardous matters, and these matters must be disposed of by special centers in accordance with related laws and regulations (please refer to machine disposal section).

TECHNICAL DATA

Model	AS430C	AS510C
Machine Height	980mm	
Solution tank capacity	50 litre	
Recovery tank capacity	50 litre	
Diameter of transport wheel	200mm	
Diameter of guide wheel	63.5mm	
Power of vacuum system motor	400w	
Maximum gradient when working	2%(Max)	
Sound pressure level at workstation	72dB(A) ±3dB(A)	
Cable length	20m	
Vacuum system circuit capacity	1200 mm H ₂ O	
Cleaning width	430mm	510mm
Squeegee width	730mm	790mm
machine maximum length	1060mm	1100mm
Machine width without squeegee	480mm	540mm
Brush diameter	430mm	510mm
Weight with empty tanks	70kg	74kg
Gross weight of the machine ready for use	120kg	124kg
Brush motor power	750W	
Brush speed	160rpm	
Brush /pad-holder Maximum pressure	32kg (Max)	35kg(Max)
Packing size (Lx W x H)	1200 x 610 x 1170mm	

MACHINE DESCRIPTION**MACHINE STRUCTURE**

- | | |
|--|--|
| 1. Safety switch button | 20. Squeegee adjusting handwheel |
| 2. Handlebar | 21. Squeegee rear support frame |
| 3. Control panel | 22. Squeegee front support frame |
| 4. Serial number plate/Technical data / Conformity certification | 23. Cup holder |
| 5. Control cover | 24. Recovery tank cover handle |
| 6. N/A | 25. Recovery tank cover |
| 7. N/A | 26. Tank body |
| 8. Reset switch | 27. Water inlet cover |
| 9. Power cable | 28. Brush deck |
| 10. Battery cover | 29. Brush / pad-holder |
| 11. Vacuum tube for waste | 30. Vacuum system motor |
| 12. Squeegee drawing cord | 31. Brush motor |
| 13. N/A | 32. 8" wheel |
| 14. Squeegee lifting handle | 33. N/A |
| 15. Draining hose | 34. Vacuum tube |
| 16. Squeegee fixed knob | 35. Electric box |
| 17. Squeegee clip | 36. Float filter |
| 18. Squeegee blade | 37. Water level tube (to indicate amount of water in Solution tank) |
| 19. Squeegee support frame | |

FIGURES OF MACHINE STRUCTURE

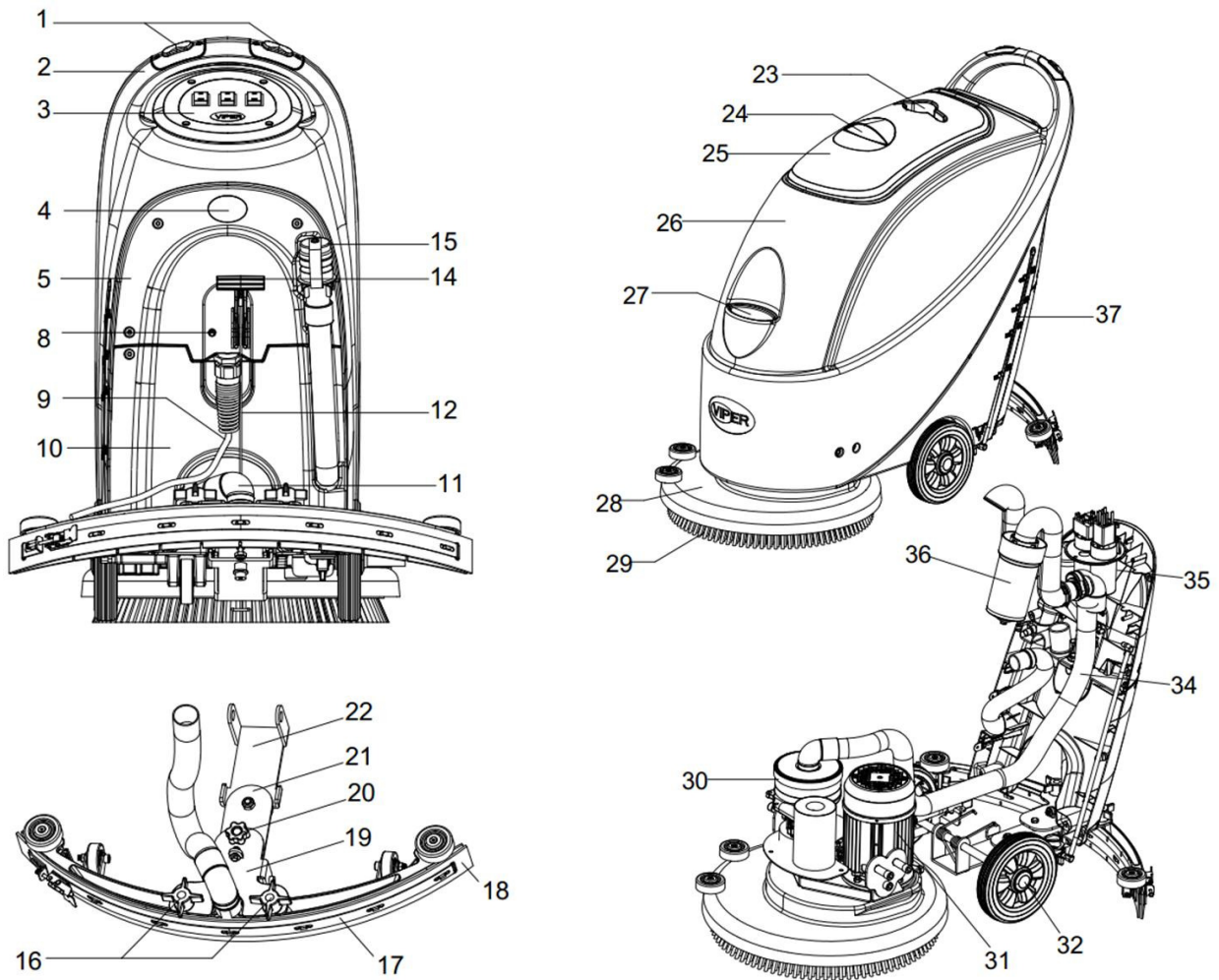


Figure 1

CONTROL PANEL (Figure2)

- 38. Power switch
- 39. Vacuum switch
- 40. Solenoid valve switch

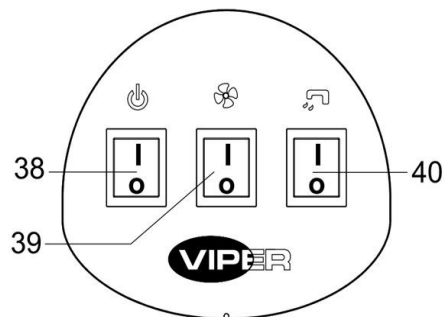


Figure 2

GUIDE FOR USE



WARNING

On certain parts of the machine are pasted some indicative signs:

- DANGER
- WARNING
- CAUTION
- CONSULTATION

When reading this manual, the operator must pay particular attentions to the symbols on these signs. Under no circumstances shall these signs be covered. If they are damaged, please replace immediately.

BEFORE MACHINE START-UP

INSTALLING AND UNLOADING THE BRUSH / PAD-HOLDER



NOTE

According to the type of floor to be cleaned, the machine may be installed with brush (Figure3, A), or a pad-holder (Figure 3, B and C).



CAUTION !

When manually installing or unloading the brush/pad-holder, first check if all the switches are in the off position and lift the squeegee off the floor, only after which can the brush or pad-holder be worked on. Furthermore, please put on protective gloves to avoid being cut by fragments.

1. (Only applicable to **AS430C** and **AS510C**): make sure the power cable (9) disconnecting the power supply and the power switch (38) is at the disconnecting (O) condition.
2. Press down the handlebar (2) to lift the tank body (26).
3. Put the brush (A) or the pad-holder (B – C) under the case.
4. Use the handlebar (2) to lower the tank body (26) to come into contact with the brush or pad-holder.
5. To install the brush/pad-holder automatically, turn the power switch (38) to the "I" position and press down the safety switch (1). Gently push the machine forward so as to allow the belt wheel at the bottom of the tank body to align with the brush or pad-holder which can then be installed. Then release the safety switch. If necessary, repeat this procedure until the brush/pad-holder is installed.
6. If Step 5 above proves to be difficult, use the manual method by following the arrow head (D) to install the brush/pad-holder (as shown in **Figure 3**).
7. To automatically unload the brush/pad-holder, turn the power switch (38) to the "O" position. Use the hand to hold the handlebar, and press the machine downwards until the guide wheel touches the floor and the brush/pad-holder hangs in the air. Turn the power switch (38) to the "I" position, and press down the safety switch to let the brush or pad-holder turn until the brush/pad-holder drops to the floor.
8. If Step No. 7 above proves to be difficult, use the manual method by turning the brush/pad-holder in the direction opposite to the normal turning direction, and it can be taken off. (as shown in **Figure 3**)

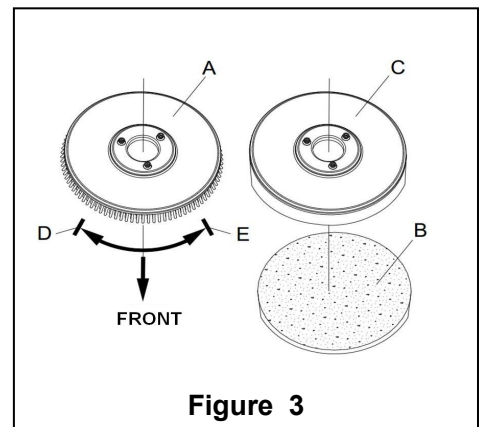


Figure 3

ADJUSTING THE BALANCE OF THE SQUEEGEE

9. Install the squeegee and turn it tight with the handle (16). Then connect the vacuum tube (11) for waste to the squeegee.
10. Adjust the squeegee through the adjusting handle (A) of the squeegee (see **Figure 4**).

- 1) If the mid-section of the rear squeegee strip, section B, has a gap with the floor or the downward pressure is relatively light, adjust the handle in an anti-clockwise direction until the whole length of the rear squeegee strip touches well with the floor. The front squeegee strip should lightly touch the floor.
- 2) If the two ends of the rear squeegee strip, sections C and D, have a gap with the floor or the downward pressure is relatively light, adjust the handle in a clockwise direction until the whole length of the rear squeegee strip touches well with the floor. The front squeegee strip should lightly touch the floor.

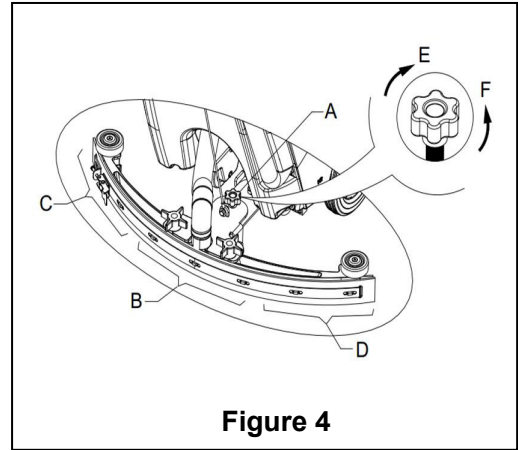


Figure 4

Solution tank filling



CAUTION!

Only low foam, nonflammable detergents may be used. These detergents must be suitable for the use of scrubbers.

11. Open the water inlet cover (27) and add water to solution tank. Do not overfill the tank. Filling up to near the edge of the filter holder of the water inlet will suffice. When preparing the cleaning solutions, please follow the dilution rates supplied by the chemical manufacture and the water temperature must not exceed 40⁰ C.

REGULATING THE VOLUME OF WATER FLOW



WARNING !

Regulating the ball valve handle (A, Figure 5) must be done under the condition when the power switch (38) is in the "O" position.

12. The volume of the water flow may be adjusted through the ball valve handle (A, Figure 5) according to the amount of water practically required for scrubbing the floor.

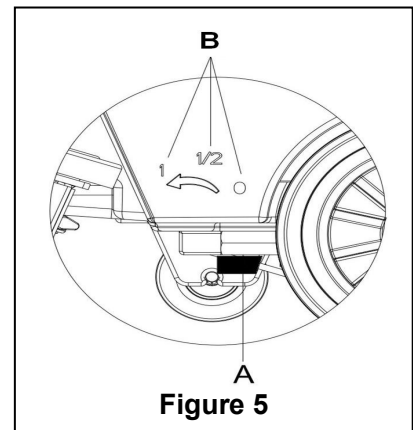


Figure 5

MACHINE START AND STOP

Starting the machine

1. Complete the preparatory steps as related above.
2. Connect the power cable (9) to a corresponding voltage power supply, and press the power switch (38) to the "I" position.
3. Use the squeegee handle (14) to lower the squeegee.
4. Press the Vacuum switch (39) to the "I" position.
5. Press the water flow volume control switch (40) to the "1" position. (Work simultaneously with the safety switch (1) to control the work of solenoid valve.)
6. Hold the safety switch (1) and push to move the machine. The brush (29) starts to rotate, and the machine starts its cleaning job.



CONSULTATION: The way to push the machine

One of the characteristics of the machine is the Installation of two safety switches on both sides of handlebar. Each safety switch is capable of controlling independently the operation of the brush. In use, it facilitates the control of the operation of the machine.

By experience, the method to move the machine shown on right Figure 6 is more suitable, the users feel more comfortable on hands, it reduces work fatigue. So the users are recommended to move the machine in this way.

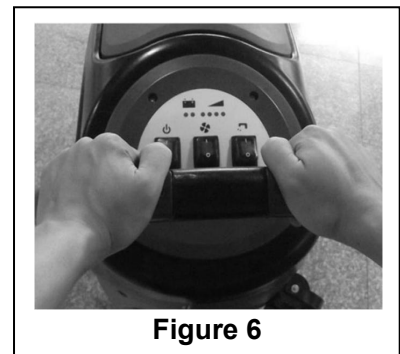
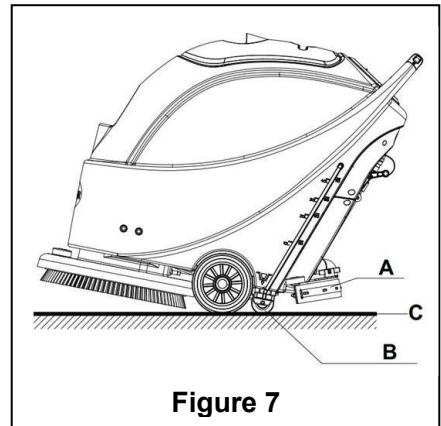


Figure 6

Turning off the machine

7. When you have finished using the machine, first unload the brush/pad-holder (refer to the steps related in the section on brush/pad-holder installation and unloading)
8. Release the safety switch (1) to turn off the brush/pad-holder and solenoid valve.
9. 9. Press the Vacuum pump switch (39) to the “O” position, and the Vacuum pump will delay for 5 seconds before stopping work.
10. 10. Press the water flow volume control switch (40) to the “O” position to completely turn off the work of solenoid valve.
11. Press the power switch (38) to the “O” position. And disconnecting the power cable (9) from the power supply.
12. Use the squeegee lifting handle (14) to lift the squeegee.
13. Grasp the handlebar (2) and gently tilt the machine backward until the guide wheel (B) touches the floor. See **Figure 7**.

**Figure 7****MACHINE OPERATION (SCRUBBING AND DRYING)**

1. Start the machine according to the description above.
2. Hold the safety switch (1) (according to the way shown in **Figure 6**), push to move the machine, and start the cleaning job.
3. If necessary, turn off the machine, and adjust the regulating handle of the squeegee. (Refer to the steps for adjusting the balance of the squeegee)
4. If necessary, turn off the machine, and adjust the volume of water flow with the ball valve handle. (Refer to the steps of adjusting volume of water flow.)

**CAUTION!**

In order to avoid damaging the floor, when the machine stays in one place without moving, please turn off the power switch (38).

TANK EMPTYING

When recovery tank is full, a float in the automatic float turn-off device (36) will block the inlet connecting to the vacuum pump. Through a sudden increase of noise from the vacuum pump, it can be considered that the vacuum pump is already overloaded and an immediate draining of the wastewater is needed.

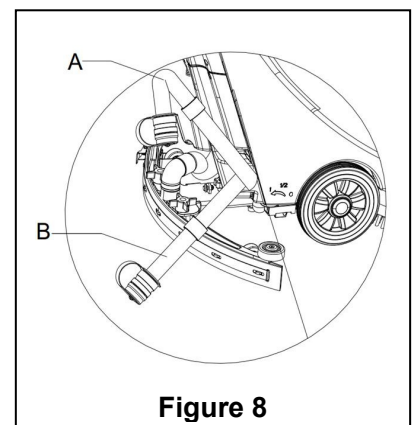
**CAUTION!**

If the vacuum motor is suddenly turned off (e.g. because the machine is suddenly moved resulting in an activation of the float), and if a resumption of operation is needed, please perform the following steps: press the power switch (38 and 39) to turn off the power and the vacuum motor, and open the recovery tank cover (25) to check if the float in the float filter has returned to the water surface. Then close recovery tank cover (25), and press the power switch (38 and 39) to turn on the power and the vacuum motor.

When the recovery tank is fully filled with wastewater, follow the following steps to drain it all.

Recovery tank emptying

1. Turn off the machine.
2. By using the squeegee handle (14), lift the squeegee.
3. Move the machine to a dedicated dump site.
4. Grasp the handlebar (2) and gently incline the machine backward until the guide wheel touches the floor. (For docking of the machine please refer to the procedures in the stopping of the machine section.)
5. Take off the draining hose from the fixation clip, bend the top end of draining hose (as shown in **A, Figure 8**), and then open the cover of draining hose, lower draining hose to a low level or on

**Figure 8**

the ground to drain the water. Alternatively, directly place draining hose to a low position or on the ground to make the water outlet face downward (as show in **B, Figure 8**), and then twist open the water draining lid to drain off the wastewater in the tank. After draining is completed, use pure water to cleanse the inside of recovery tank.



CAUTION!

When draining the wastewater, the vacuum tube for waste must be folded or lowered to a lower position (as shown in Figure 8 A or B), 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.

Solution tank emptying

6. Complete Steps 1 to 4.
7. As shown in **Figure 9**, turn open the lid of Solution tank (A) anticlockwise along direction C, and drain Solution tank completely. Use pure water to cleanse the inside of Solution tank. When work is completed, turn tight the lid of Solution tank (A) clockwise in direction B.

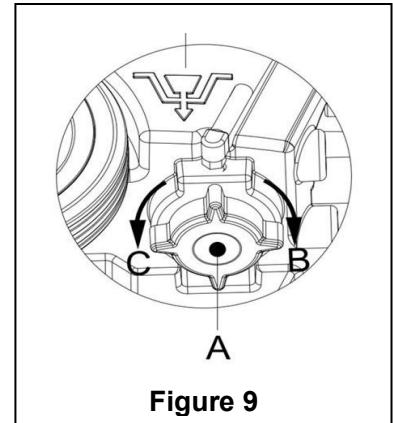


Figure 9

AFTER USING THE MACHINE

When work is done and before leaving the machine, completes the following steps:

1. Follow the procedure as described in aforementioned section about installing and unloading the brush/pad-holder, and take off the brush/pad-holder.
2. Following the procedures described in related sections, drain the water completely in Solution tank and recovery tank.
3. Complete the daily maintenance procedures (refer to the section on maintenance).
4. Store the machine, including the brush/pad-holder and squeegee, in a clean and dry place. The squeegee should be lifted or taken off.

USING FOR THE FIRST TIME

After using for the first 9 hours, please check all parts to make sure nothing has become loose or damaged during operation, and check if there are any visible damages or leakage.

MAINTENANCE AND CARE

The service life and the maximum operation safety of the machine are assured by proper and timely maintenance and care.

The following table provides a general maintenance plan for the machine. The time intervals of maintenance are determined to a large extent by the working conditions of the machine. These time intervals should be formulated by the personnel responsible for the maintenance.



WARNING!

Only after the power of the machine is disconnected should these procedures be performed. Before proceeding with any of the maintenance procedures, please study carefully the related safety sections.

All maintenance in the plan or all additional maintenance must be done by qualified personnel or authorised service centers.

This manual only relates the simplest and the most common maintenance procedures.

For any maintenance procedures other than those stated in this table of planned maintenance, please refer to the maintenance manual of the service center.

SCHEDULED MAINTENANCE TABLE

Procedure	Daily, Machine after use	Weekly	Every 6 months	Annually
Clean squeegee				
Clean brush/pad-holder				
Clean water tank and float filter, inspect the sealing strips of the water tank				
Inspect and change the squeegee strip				
Clean Solution filter				
Clean Vacuum motor filter				
Inspect tightness of nuts and bolts			(1)	
Inspect or change motor carbon brush of brush/pad-holder				(2)
Inspect or change carbon brush of Vacuum motor				(2)

(1) It should be done 9 hours after the machine starts working.

(2) These maintenance procedures must be done by an authorized VIPER Service Center.

SQUEEGEE CLEANING



NOTE

In order to maintain the optimal effect of water Vacuum, the squeegee must be kept clean, and the squeegee strip must remain in a good condition.



CAUTION !

When cleaning the squeegee, it is recommended to put on protective gloves because the squeegee may contain sharp fragments.

1. Move the machine to a flat and smooth surface.
2. Press the power switch (38) to the "O" position to turn off the machine.
3. Unscrew the fixed handle (16) of the squeegee; take off the connector connecting the Recovery Vacuum tube of the squeegee, and take off the squeegee.
4. Use the squeegee lifting handle (14) to lift the squeegee support frame.
5. Clean the squeegee (**Figure 10**). Clean in particular the groove (**A, Figure 10**) and the dirt and fragments on the Vacuum tube. Check if the front squeegee blade (C) and the rear squeegee blade (D) are intact, and if there are broken edges and cracks. Change them if necessary (refer to the steps in the following section).
6. Re-install the squeegee in the reverse order of the above.

SQUEEGEE BLADE CHECK AND REPLACEMENT

1. Following the methods related in the previous section clean the squeegee (**Figure 10**)
2. Check the edge (**E, Figure 10**) of the front squeegee blade and the edge (F) of the rear squeegee blade (D). On the whole length, they should be on the same level. Otherwise, adjust their heights through the following procedure.
 - Loosen the clip (G) to let the rear squeegee blade (D) separate from the bracket (M) for the adjustment of the position of the squeegee. After the adjustment, lock the clip once again.
 - Loosen the screw on the handle (I) to adjust the front squeegee blade (C); tighten the handle screw after adjustment.
3. Check if the front squeegee blade (C) and the rear squeegee blade (D) is intact and if there are broken edges and cracks. If necessary, change them according to the following ways. Check the front edge of the rear squeegee blade (J) whether it has been worn. If worn, it can be installed upside down (the top edge is required to be intact). If the top edge is also worn, change it by following the procedure below:
 - Loosen the clip (G) to let the pressure blade separate from the bracket (M), take off the clip bar (K), and then change or turn the rear squeegee blade (D) upside down. Re-install the rear squeegee blade in the reverse order of taking it off.
 - Loosen the handle screw (I) and take off the front clip bar (L), and then change the front squeegee (C).

Re-install the front squeegee blade in the reverse order of taking it off.

After changing the squeegee blade (or installing upside down), adjust the level of the front and rear squeegee blades in the procedures as described above.

4. Connect the Vacuum tube (11) to the squeegee.
5. Install the squeegee and use the knob (16) to tighten it, and then connect the Vacuum tube to the squeegee.
6. If necessary, adjust the squeegee through the adjusting handwheel (20) (refer to the procedures for adjusting the balance of the squeegee).

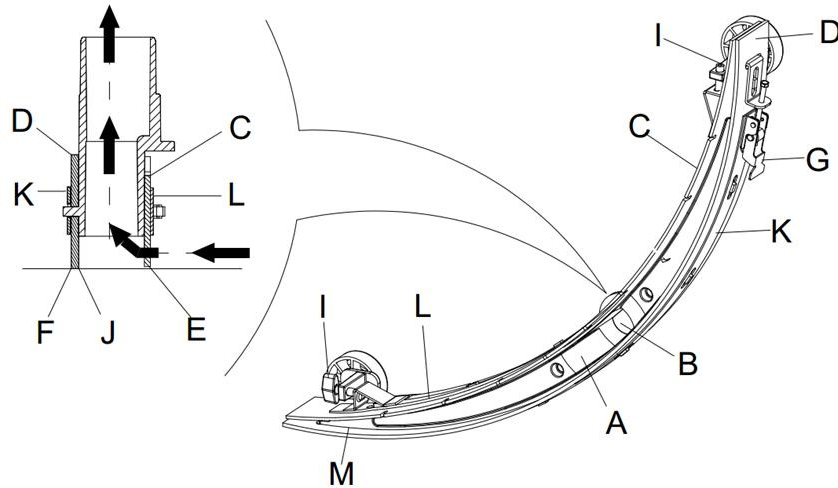


Figure 10

BRUSH/POLISHING PAD CLEANING



CAUTION!

When cleaning the brush/pad-holder, the wearing of protective gloves is recommended because they may contain sharp fragments.

1. In the way as related in previous sections, take off the brush/pad-holder.
2. With the use of water and detergents, clean the brush/pad-holder.
3. Check the completeness and wearing condition of the bristles on the brush and, if necessary, change the brush.
4. Check the wearing condition of the pad-holder and, if necessary, change the pad-holder.

WATER TANK AND FLOAT FILTER MESH CLEANING

1. Move the machine to a dedicated dumping site.
2. Press the power switch (38) to the position "O" to turn off the machine.
3. Open recovery tank lid (A, Figure 11), and take off the float device (36) from recovery tank.
4. Use pure water to clean recovery tank lid (A), the tank (B and C), and the float filter support frame (E). Through the Recovery tube (15), drain all the water from the water tank.
5. If necessary, following the symbols "Open" and "Close" as shown in Figure 11, open the bottom lid (F) of the float filter and clean the float (D), float filter support frame (E), and the filter sponge (I). After cleaning, fix the float onto the float filter support frame (E), and then align the mark groove (L) of the bottom lid (F) of the float filter with the mark groove (L) of the float filter support frame (E). Turn the bottom lid (F) of the float filter tight, and fix the filter sponge (I) onto the float filter support frame (E), and then onto the Vacuum tube (M).
6. Check the soundness of the sealing ring (G) of the water tank lid.



NOTE

The sealing strip (G) of the water tank makes the water tank create a vacuum. It must be completely sealed to be able to effectively suck the wastewater from the floor.

If necessary, the sealing strip of the water tank (G) may be taken out from the groove (H) and changed. When assembling a new water tank sealing strip, as shown in Figure 11 below, install the connector to the middle section of the rear part.

7. Check if the receiving surface of the sealing strip (G) is intact and seals adequately.
8. Close recovery tank lid (A).

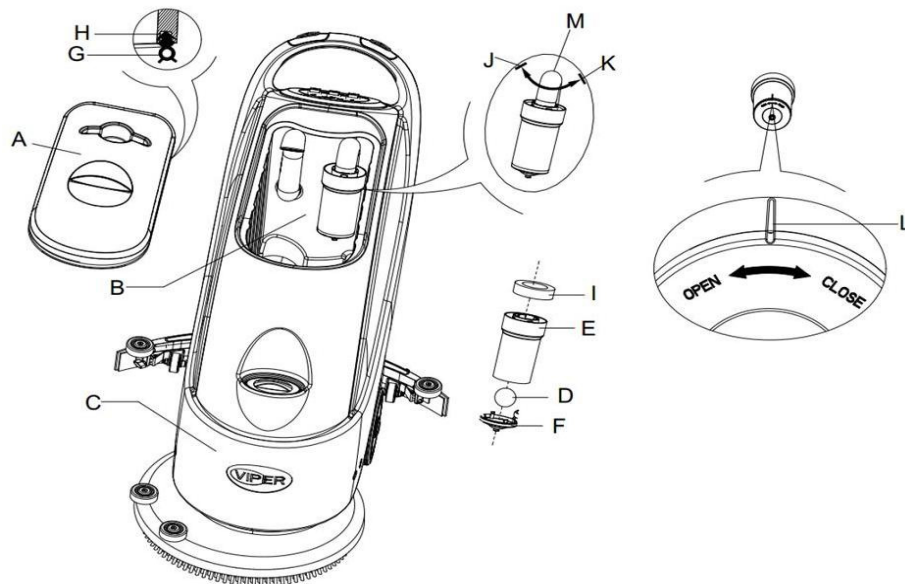


Figure 11

SOLUTION FILTER CLEANING

1. Drain all the water from Solution tank in the way as introduced in related sections.
2. Move the machine to a flat and smooth ground.
3. Press the power switch (38) to the "O" position to turn off the machine.
4. Turn off the draining ball valve (A, Figure 12) (located at the bottom of the machine, behind the wheels). Position B ball valve open, and position C ball valve closed.
5. Take off the transparent lid (D), and then take off the filter (E), and install them onto the filter box (F) after cleaning.



NOTE

The filter (E) must be accurately installed onto the position of the projection (G).

6. Open the draining ball valve (A)

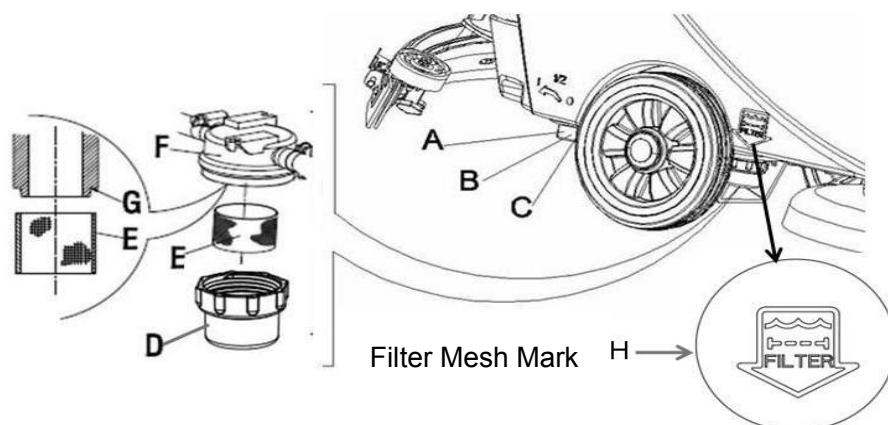
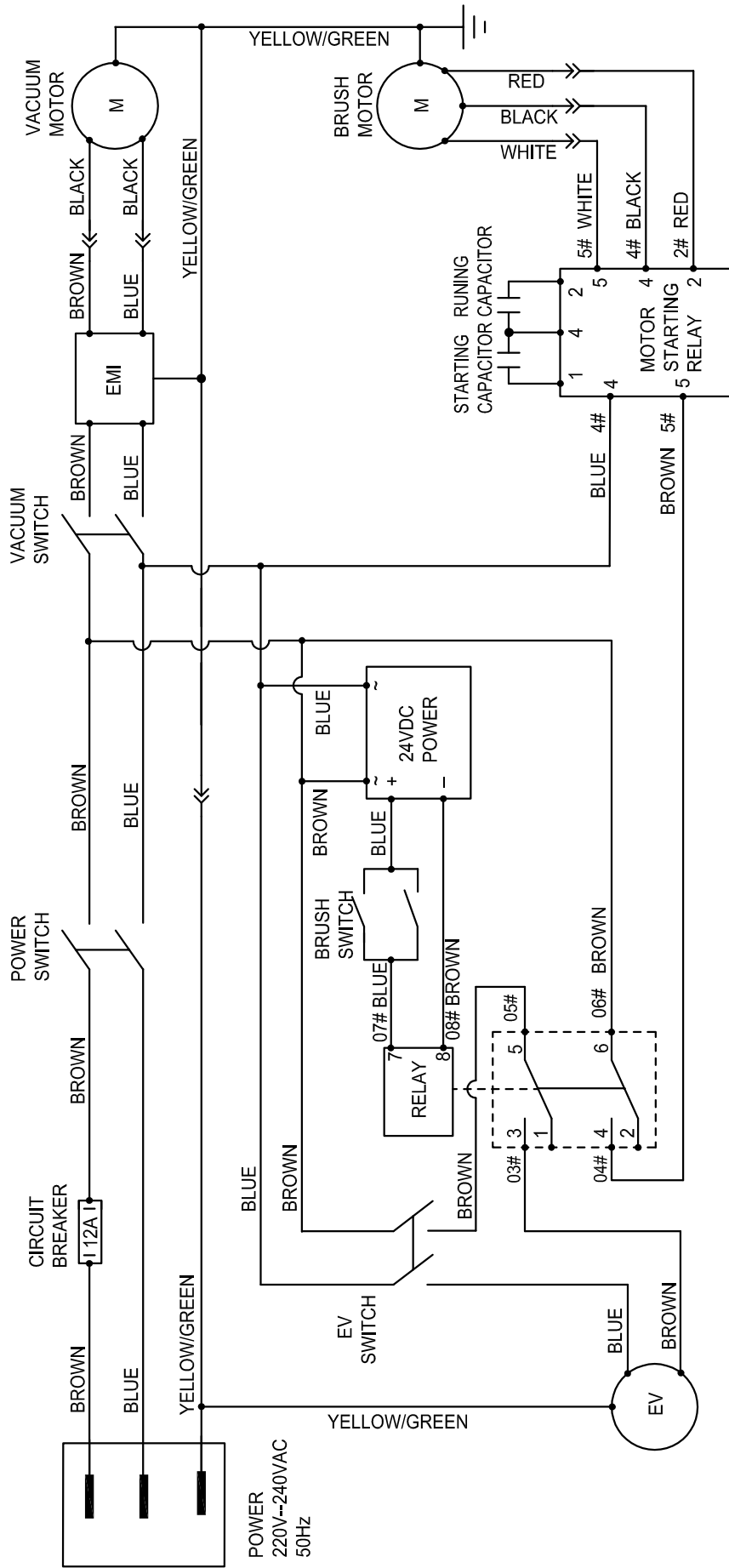


Figure 12

CIRCUIT FIGURE OF AS430C AND AS510C



TROUBLESHOOTING

Breakdown	Probable Causes	Remedies
Machine not working	The wiring not connected correctly or bad wiring	Check the wiring or contact Viper Distributor
	Bad brush motor	Contact Viper Distributor
	Carbon brush worn out	Contact Viper Distributor
Vacuum motor not working	The wiring not connected correctly or bad wiring	Check the wiring or contact Viper Distributor
	Bad vacuum motor	Contact Viper Distributor
	Carbon brushes worn out	Contact Viper Distributor
Little or no solution flow	Bad ball valve	Contact Viper Distributor
	Bad solution valve	Contact Viper Distributor
	Ball valve position in need of adjustment	When ball valve is in horizontal position, the amount of solution flow is maximum
	Filter dirty.	Clean the filter
Inadequate Vacuum	Wastewater tank is full.	Drain the water tank
	Vacuum tube for waste and squeegee not properly connected	Connect the Vacuum tube for waste and the squeegee
	Float filter blocked or inlet blocked	Clean the float filter, check the float ball
	Squeegee dirty or squeegee blade worn and damaged	Clean and check the squeegee
	Recovery tank lid not properly turned on, or the sealing strip of the water tank damaged	Refit on the lid properly, or change the water tank sealing strip
Squeegee leaving marks	Debris like fragments under the squeegee blade	Remove the fragments
	Squeegee blade already worn, cracked, brittle.	Change the squeegee blade
	Balance of squeegee not adjusted	Adjust the balance

MACHINE DISPOSAL

Use qualified crushing machine to destroy this machine.

Before destroying this machine, please take away and segregate the following materials which, according to related laws and regulations, must be properly processed.

- Brush/pad-holder
- Plastic hoses and plastic components
- Electrical and electronic components (*)

(*): Please contact the nearest VIPER Center (especially when scrapping of electrical and electronic components is required).



Viper Cleaning Equipment Co., Ltd

EC Declaration of Conformity



The undersigned, representing the following:

Manufacturer and	the authorised representative established within the European Economic Area:
Company name: Viper Cleaning Equipment Co., Ltd Address: Liang Bian village, Liao Bu town, Dongguan City, Guangdong Province, China	Nilfisk A/S Kornmarksvej 1 DK-2605 Brøndby Denmark
Business name: Viper Cleaning Equipment Co., Ltd	
Name and address of person/Company authorised to compile the technical file established in the EU Community:	

herewith declare that the following machinery:

Description of machinery
Generic denomination: Walk Behind Scrubber
Function: The machines are available for foam generating and floor cleaning for industrial and commercial use
Model/s: AS430C, AS510C;


Fulfill the relevant provisions of European Directive 2006/42/EC (MD) .
The harmonized standards used in order to obtain compliance to 2006/42/EC (MD) are the following:

- EN 60335-1 Safety of household and similar electrical appliances
- EN 60335-2-69 Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use
- EN 60335-2-72 Particular requirements for automatic machines for floor treatment for commercial use

Place: Dongguan, China

Date: 2013-12-26

Identity and Signature:


Sinan Biltekin
Global Product Manager



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