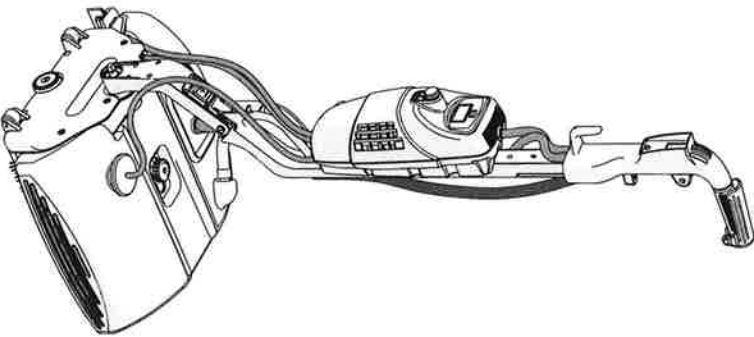


EN

Use and maintenance manual

**DUPLEX**  
*International*





• This machine is intended for commercial use: hotels, schools, hospitals, businesses, offices and for rental.

• The overall weight of the machine with the tanks full is 20 kg. The shipping weight (dry weight) is 14.5kg.

• Warning: do not use the appliance to clean surfaces that have a gradient greater than the one indicated on the plate.

• Total vibration: 1.5 m/s<sup>2</sup>.

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## 1. PURPOSE AND CONTENT OF THE MANUAL

### 1.1 Symbols

To ensure the safety of persons and property, this manual contains special symbols which draw attention to particularly dangerous situations, warnings and important information:



**DANGER!**  
Hazard with a risk of injury or even death.  
Accident prevention regulations for the operator.  
**PAY THE UTMOST ATTENTION TO ANY TEXT INDICATED BY THIS SYMBOL.**



**ELECTRICAL HAZARD!**  
Hazard with a risk of injury or even death.  
Accident prevention regulations for the operator.  
**PAY THE UTMOST ATTENTION TO ANY TEXT INDICATED BY THIS SYMBOL.**



**CAUTION!**  
Possibility to cause damage to the appliance and/or its components.  
Be careful!



**WARNING!**  
Warning or remark on key functions or useful information on the operation in progress.

### 1.2 Purpose of the manual

This user manual is an integral part of the appliance. It must remain integral and be available to the user for the entire working life of the appliance.  
The manual contains information on safety, technical aspects, operation, maintenance and spare parts. Its purpose is to provide the customer with the necessary information to use and control the appliance correctly, independently and safely.



**CAUTION**  
Read this manual carefully and observe the instructions provided before using, testing and operating the appliance.



### 1.3 Conservation

The manual must be kept with care and near the appliance, protected from liquids and other substances that could compromise its readability and it must be readily accessible at any moment.

The manual and the Declaration of conformity are integral parts of the appliance, and therefore, they must accompany it during its whole working life.

### 1.4 Updating the manual

The information, descriptions, and illustrations contained in this manual reflect the state of the art at the moment of machine sale.

The Manufacturer, committed to the constant improvement of their products and/or for market reasons, reserves the right to make technical or commercial modifications to the appliances at any given moment without prior notice.

Any additions must be retained together with the manual and are to be considered integral parts of the manual.

### 1.5 Confidentiality

The technical information (text, drawings and illustrations) provided in this manual is property of **DUPLEX INTERNATIONAL S.r.l.** and must be considered confidential.

It is strictly forbidden to disclose, reproduce or translate this document, even partially this document, unless authorised in writing by **DUPLEX INTERNATIONAL S.r.l.**

### 1.6 Recipients

This manual is intended for personnel assigned to use the appliance for cleaning floors.

#### DANGER!



The appliance must not be used by children or by persons of reduced physical, mental or sensory capacity, or lacking in experience and knowledge in the use of the appliance.

Children should be supervised to ensure that they do not play with the appliance.

## 2. GENERAL INFORMATION

### 2.1 Manufacturer Identification data

DUPLEX INTERNATIONAL S.r.l



Via Gobetti, 19-21-23  
50058 SIGNA - FLORENCE  
ITALY



Phone: +39 055 876437



Fax: +39 055 875229



Website: [www.duplexitaly.com](http://www.duplexitaly.com)



e-mail: [info@duplex@duplexitaly.com](mailto:info@duplex@duplexitaly.com)

### 2.2 Liability limitations

The manufacturer declines all liability for damage to persons or property caused by:

- Improper use of the appliance.
- Total or partial failure to comply with the given instructions.
- Appliance use not complying with the regulations in force.
- Use not complying with national laws on safety and accident prevention.
- Tampering with even one single part of the appliance.
- Incorrect installation and/or connection to the foreseen power sources.
- Use of non-original spare parts.



## 2.3 Identification plate

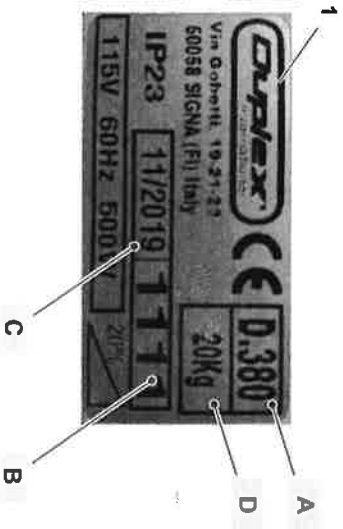
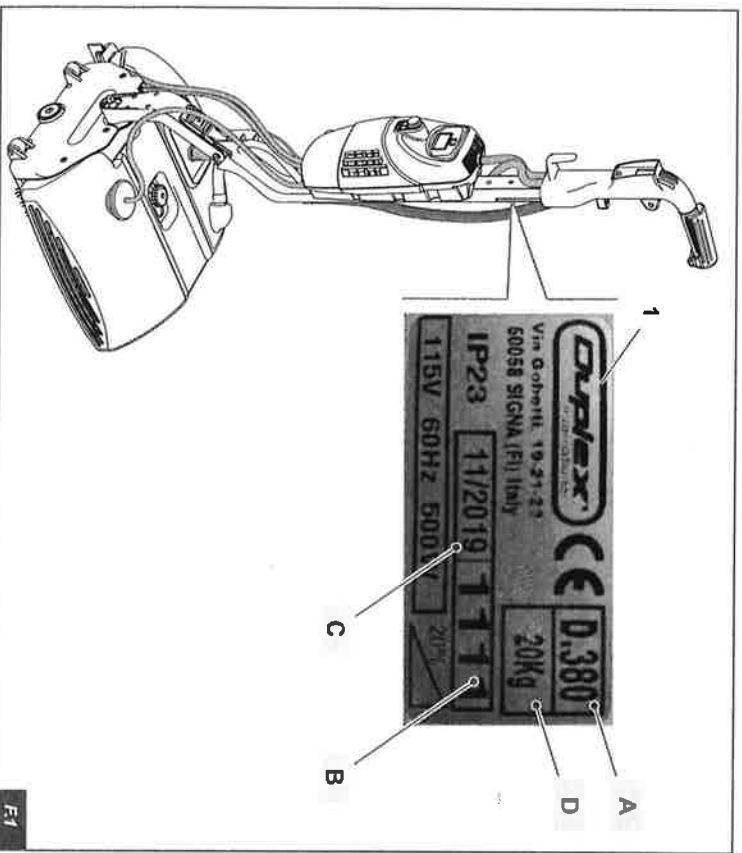
A plate **1** bearing the essential identification data for any assistance or spare parts request is applied to the appliance. The plate contains the following data:

- A) Model
- B) Serial number
- C) Year of manufacture
- D) Weight



### CAUTION

Do not remove the identification plate for any reason. Please contact the Manufacturer in the event the identification plate gets damaged.



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## 2.4 Reference standards and conformity:

The machine described in this manual complies with the following standards:

- EN 55014-1:06 + A1:09 + A2:11
- EN 55014-2:15
- EN 60335-1:12 + A11:14
- EN 60335-2-72:16
- EN 61000-3-2:14
- EN 61000-3-3:13
- EN 62233:08

It complies with the following provisions and Directives 2014/30/EC (EMC), 2006/42/EC.



### 2.4.1 Declaration of conformity

The EC Declaration of Conformity, provided together with the appliance, is the document with which the Manufacturer certifies, under his own responsibility, that he has complied with the European Directives, Standards and Technical Specifications (specified in the Declaration) necessary for the machine to be compliant with the essential requirements for sale and use in the European Union.  
The Declaration of conformity must be considered an integral part of the appliance and must always accompany the appliance until it is scrapped.



**WARNING**

If the declaration of conformity is not delivered together with the appliance or gets lost, please request a copy from the Manufacturer.



Duplex International  
20030 Bressana Bottarone  
Prato di Anagni (VT) - Italy



DUPLICATEZ VAMINISTRAREA  
DECLARAȚIEI DE CONFORMANȚĂ  
DECLARATION DE CONFORMITÉ  
DE CONFORMAZIONE DI CONFORMITÀ

Mășină de curățat  
Vierul Giroalini  
Scara de la  
1500  
1500

În baza prezentei Declarații, declar că produsul este în conformitate cu cerințele esențiale stabilite în Directivă (Calea de Curățenie), precum și în toate standardele armonizate care se aplică acestuia și sunt disponibile în prezent. În cazul în care se schimbă condițiile de aplicare a prezentei Declarații, acesta va include răspunsurile corecte la următoarele întrebări:

1. Numele și adresa fabricantului și a reprezentantului său în Uniune Europeană:  
 Duplex International, Vialele Regiole, 20030 Bressana Bottarone, Prato di Anagni (VT), Italia

2. Tipul și numărul produsului și al tehnicii de fabricație:  
 Calea de Curățenie, 1500

3. Tipul și numărul produsului și al tehnicii de fabricație:  
 Calea de Curățenie, 1500

4. Adresa și numele autorității naționale responsabile de acordarea certificatului de conformanță:  
 Autoritatea națională de notificare și evaluare tehnică a produselor, Vialele Regiole, 20030 Bressana Bottarone, Prato di Anagni (VT), Italia

5. Numărul și anul acordării certificatului de conformanță:  
 1500, 1500

6. Numărul și anul acordării certificatului de conformanță:  
 1500, 1500

7. Adresa și numele autorității naționale responsabile de acordarea certificatului de conformanță:  
 Autoritatea națională de notificare și evaluare tehnică a produselor, Vialele Regiole, 20030 Bressana Bottarone, Prato di Anagni (VT), Italia

8. Numărul și anul acordării certificatului de conformanță:  
 1500, 1500

9. Numărul și anul acordării certificatului de conformanță:  
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10. Numărul și anul acordării certificatului de conformanță:  
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11. Numărul și anul acordării certificatului de conformanță:  
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12. Numărul și anul acordării certificatului de conformanță:  
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15. Numărul și anul acordării certificatului de conformanță:  
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16. Numărul și anul acordării certificatului de conformanță:  
 1500, 1500

17. Numărul și anul acordării certificatului de conformanță:  
 1500, 1500

18. Numărul și anul acordării certificatului de conformanță:  
 1500, 1500

19. Numărul și anul acordării certificatului de conformanță:  
 1500, 1500

20. Numărul și anul acordării certificatului de conformanță:  
 1500, 1500

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### 2.5 Warranty

DUPLEX guarantees this product against any manufacturing or material defects for a period of two years since the date of purchase.

During this period DUPLEX will grant a free repair or substitution of any defective product at its discretion.

The substituted products or the repaired parts will only be guaranteed for the remaining time of warranty or for the following six months, depending on which period lasts more.

According to limits and terms provided for by the current laws, this limited warranty is not valid in the following cases:

- Improper or particularly demanding use of the machine;
- Lack of or incorrect daily maintenance;
- The use of non-original spare parts;
- Damage due to natural events such as earthquakes, floods, fires or accidents;
- Tampering with or modification of the machine;
- Damages caused by the use of unsuitable or inappropriate and/or corrosive chemical products such as highly acidic products: static dissipative detergents, hydrochloric acid, trichloroethylene, methyl ethyl ketone, acetone, pure ammonia, bleach and/or pure sodium hypochlorite or similar products;
- Damage caused by normal wear of scrapers and brushes or by exposure to unsuitable weather conditions;
- The maintenance booklet has been tampered with.

Furthermore, the terms and conditions of this warranty do not reduce nor edit what is provided for by the current laws about product sales to the customer.

In case the product is deemed defective, please contact DUPLEX International Srl to [support@duplexitaly.com](mailto:support@duplexitaly.com) or the authorised Duplex Dealers who will communicate you the procedure to ask for a repair.



### 3. GENERAL SAFETY INSTRUCTIONS

This chapter gives the necessary information on how to use the appliance fully complying with the safety regulations in force.



#### CAUTION

The manufacturer declines all responsibility for any damage to property and/or persons caused by the failure to comply with the instructions provided in the following Chapter.



#### WARNING

Being familiar with the main safety standards and regulations is an essential requirement for using the appliance accordingly.  
The operator should observe the safety regulations in force in the country in which the appliance is being used.



#### DANGER!

Follow all safety instructions indicated in this chapter for a safe use of the appliance.

#### 3.1 Residual risks

Residual risks are the risks that remain despite all safety measures were taken, as well as potential non-evident risks.

To avoid hazards to persons or damage to the appliance caused by residual risks, follow the instructions provided in this manual.

Wait for the complete stop of all moving devices and/or the complete cooling of components subject to heating before carrying out any intervention on the appliance.

Follow the indications and warnings indicated on the signs applied to the appliance and/or to its components.





### 3.2 General requirements



**CAUTION**  
Read this manual carefully and observe the instructions provided before using, testing and operating the appliance.

To avoid hazards to persons or damage to the appliance, follow the instructions and the code of conduct indicated below:

- The appliance was designed and constructed exclusively to clean floors. Any other use is considered improper.
- The appliance can be exclusively used by authorised and trained personnel.
- The appliance must not be used by children or by persons of reduced physical, mental or sensory capacity, or lacking in experience and knowledge in the use of the appliance, unless they are supervised and instructed on the safe use of the appliance by persons responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Unplug the power cord plug from the power socket or battery before performing any maintenance intervention.
- Do not use the appliance if you notice any irregularities in its operation.
- In the event of a fault, have the appliance repaired exclusively by qualified technicians.
- Use only original spare parts.
- Do not pour water or liquids directly onto the appliance.
- Do not use acid-based detergents that could damage the appliance.
- Do not mix together detergents of different types to avoid the emission of harmful gases.
- Do not use the appliance to collect hazardous dusts.
- Be careful not to hit shelves or scaffolds when using the appliance to avoid objects falling down.
- Do not use the appliance to clean uneven surfaces or surfaces with many holes.
- Do not use the appliance in potentially explosive environments or areas exposed to hazardous substances or under unsuitable microclimatic conditions.
- Do not use the appliance under inclement weather conditions.
- Do not clean surfaces contaminated by flammable liquids.
- Switch off the appliance immediately after its use.
- Ensure the appliance does not sit on the brushes when it is in its rest position, but that it is supported and raised by the tripod.
- If this not the case, the appliance weight could warp the brushes.
- Store the appliance in a closed and dry place after use.

- Do not modify or tamper with the appliance.
- Do not remove the guards.
- Use only brushes supplied with the appliance or those specified in the instruction manual.
- Use personal protective equipment (PPE) suitable for the work to perform.
- Use a powder extinguisher in case of fire. Do not use water.

### 3.3 Electrical hazards



**ELECTRICAL HAZARD!**  
Do not perform any type of intervention on live equipment (maintenance, cleaning, etc.).  
Disconnect the power supply (power cord) before carrying out work on the machine.

#### 3.3.1 Power cord

- Regularly check that the power cord is intact and does not show signs of wear, cracking or peeling.
- If the power cord is damaged, replace it before using the appliance.
- Use a cable of the same type used by the Manufacturer, certified according to European standards.
- Cable replacement must be performed by qualified personnel.
- Do not use the appliance if the power cord or plug are damaged or if the appliance fall to the ground or got damaged in any way.
- Do not immerse the appliance, its power cord or plug in water or any other liquid.
- Avoid any contact of the power cord with the brushes.
- If the power cord becomes caught under the brushes of the appliance: STOP the appliance immediately. Do not for any reason try to release the power cord while the appliance is in operation. If the power cord is damaged, replace it.
- Do not pull on the cable to unplug the plug from the power socket.



### 3.4 Safety signs

The appliance is equipped with plates and pictograms drawing the attention in a fast and easy way to objects and situations that can cause certain hazards, and in particular:

- Prevent dangerous behaviours;
- Warn the exposed persons of a risk or hazard;
- Prescribe safe behaviours;



**DANGER!**  
It is strictly prohibited to remove the safety signs or alter their characteristics.

Check that the safety signs are always perfectly legible;  
Replace damaged signs with other of the same type and make sure to apply them in their original positions.

### 3.5 Noise level

The appliance was designed and constructed in such a way to minimise the noise emitted during its normal operation.  
The sound pressure level weighted and generated by the appliance's various components is <70 dB (A). It was measured at the operator's ear during the normal work cycle and following the criteria set forth by the regulations in force.  
The sound pressure level may vary considerably according to the work environment.



**WARNING**  
Use appropriate personal protective equipment if you suffer a constant discomfort due to the noise produced by the appliance.

### 3.6 Vibration level

The appliance was designed and constructed in such a way to minimise the level of vibrations generated during its normal operation.  
The weighted whole body vibration level generated by the various components of the machine is 1.5 m/s<sup>2</sup>.

## 4. TECHNICAL CHARACTERISTICS

### 4.1 General description

The Duplex Turbo AC machine has been designed and manufactured to clean floors. During its design and construction, all necessary measures were taken to produce a high quality, reliable product that is fully compliant with the regulations in force and with particular regard to accident prevention.  
This compact machine is perfect for small and medium size rooms and is able to reach even the tightest spaces.  
This is achieved by means of its two-way handle that allows you to change the cleaning direction by simply reversing the handle.  
Constructed using aluminium casings, it ensures that each of its components is sealed and leak-tight, preventing any infiltration of water and dust. The appliance is fitted with a safety handle to switch it on and off promptly.

#### 4.1.1 Proper and improper use



**DANGER!**  
It is strictly prohibited to use the appliance under different conditions than those described in this manual. Any other different use of the appliance is not authorised and is dangerous (improper use).

The choice of materials used to make the appliance was made according to the specific use, to which the appliance will be put. Improper use can result in injury to persons and / or damage to property and affect the operation of the appliance.  
The observance of the use, repair and maintenance instructions described in this manual, is an essential requirement to use the appliance correctly.  
The use of the machine for activities not envisaged during its design phase and not listed in this manual shall release the Manufacturer from all direct or indirect liability.  
Any arbitrary alteration made to the appliance shall relieve the Manufacturer of any liability for damage or personal injuries, even serious, caused to operators, third parties and/or property.  
The correct use of the appliance, the careful observance of the instructions indicated in this manual and the strict application of all requirements to avoid hazardous situations, accidents or injuries, will contribute to making the appliance work better and longer, minimising faults and failures.

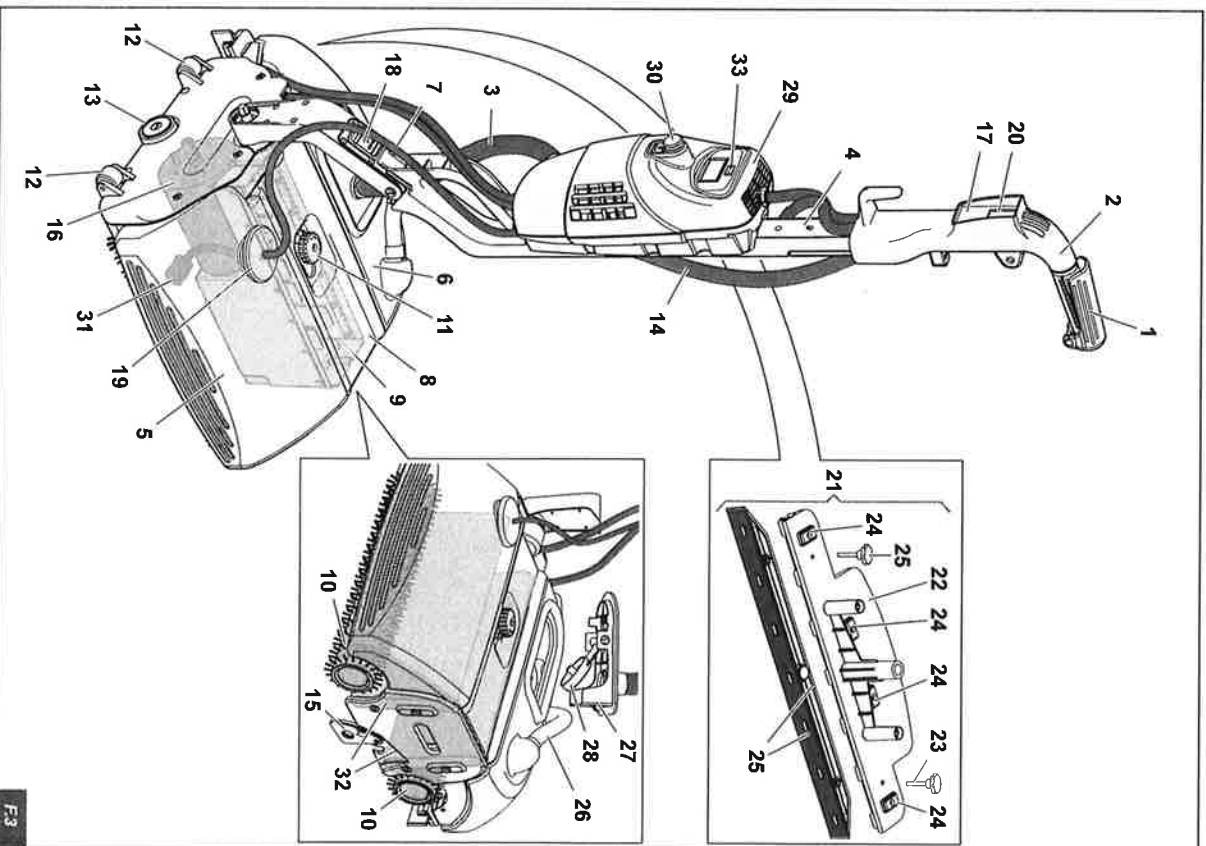


**CAUTION**  
The Manufacturer declines any responsibility for any damage to property and/or persons deriving from failure to observe the warnings indicated in this manual.



### 4.2 Description of the components

1	Safety handle (Start & Stop)	18	Handle release lever
2	Handle	19	Tank cap
3	Suction hose	20	ON/OFF button
4	Handle with suction unit	21	Squeegee assembly
5	Detergent solution tank	22	Squeegee holder
6	Suction recovery tank	23	Squeegee fastening knob
7	Detergent solution hose	24	Squeegee fastening magnets
8	Cover	25	Squeegee
9	Recovery tank	26	Suction recovery hose
10	Brushes	27	Recovery tank cap
11	Tank knob	28	Float
12	Transport rubber wheels	29	Suction unit
13	Anti-scratch and non-marking rubber wheel	30	VACUUM ON/OFF button
14	Power cord with plug	31	Water filter
15	Support tripod	32	Conveyors
16	Motor	33	WATER ON/OFF switch
17	Motor Protector		





#### 4.2.1 Technical specifications

	DUPLEX TURBO AC
Dimensions: Length - Width - Height	490 x 410 x 1120
Brush diameter	mm 85
Brush length	mm 320
Tank capacity	l 3.5
Recovery tank capacity	l 6
Number of brushes	no. 2
Brushes pressure on flooring	kPa 25.2 33.3 (min/max)
Brush speed on floor	m/s 3.75
Washed trackwidth	mm 320
Theoretical working surface	m <sup>2</sup> 1500
Degree of protection	class IP23
Vibration value	m/s <sup>2</sup> 1.5
Sound intensity	dB(A) < 70
Voltage	Volt 115V @60Hz
Motor power	Watt 500
Brush rpm	rev./'1 650
Electrical isolation	Class I <sup>o</sup>
Dry weight	kg 14.5
Weight when full	kg 20



#### 4.3 Brushes

The original DUPLEX brushes are tested and balanced individually with special electronic instruments and guarantee the absence of vibrations that could generate mechanical stress for the appliance and the floors.

The brushes can have different colours according to their use characteristics:

Brush colour	Use
GREY (supplied)	All-purpose for light dirt of all types of flooring, smooth or embossed.
BLACK (optional)	Cleaning of very dirty flooring and short pile carpets.

#### 4.4 Squeegee

The original DUPLEX squeegees have different colours according to their use:

Squeegee colour	Use
WHITE	For smooth floors.
BROWN	For floors with irregular surfaces.



#### 4.5 Type of detergents

The appliance can be used with detergents intended for this type of appliance. When using detergents, follow the detergent manufacturer's instructions regarding dilution.

Do not use unsuitable detergents or aggressive and strong acid-based chemicals like:

- Caustic soda
- Acids
- Diluents
- Solvents

#### DANGER!

Read the labels on the detergent bottle carefully.

Detergents can have harmful impacts on the environment and the human body in case of inhalation, ingestion or contact with skin and mucous membrane. If necessary, use personal protective equipment (PPE) while using detergents.



#### CAUTION

Static dissipative detergents can damage the brushes and plastic parts of the appliance.

The manufacturer declines any liability for damage caused to the appliance, flooring of any kind, including carpets and rugs, deriving from the use of non conforming detergents or products.



#### 5. ASSEMBLING THE APPLIANCE

For packing and transport purposes, the appliance is delivered disassembled.

Check the contents of the package, making sure that all the components of the appliance are all present and in good condition.

#### WARNING

Contact the Customer Service Centre if some components are missing or damaged.



#### CAUTION

Follow the instructions contained in this chapter carefully in order to assemble the appliance correctly.

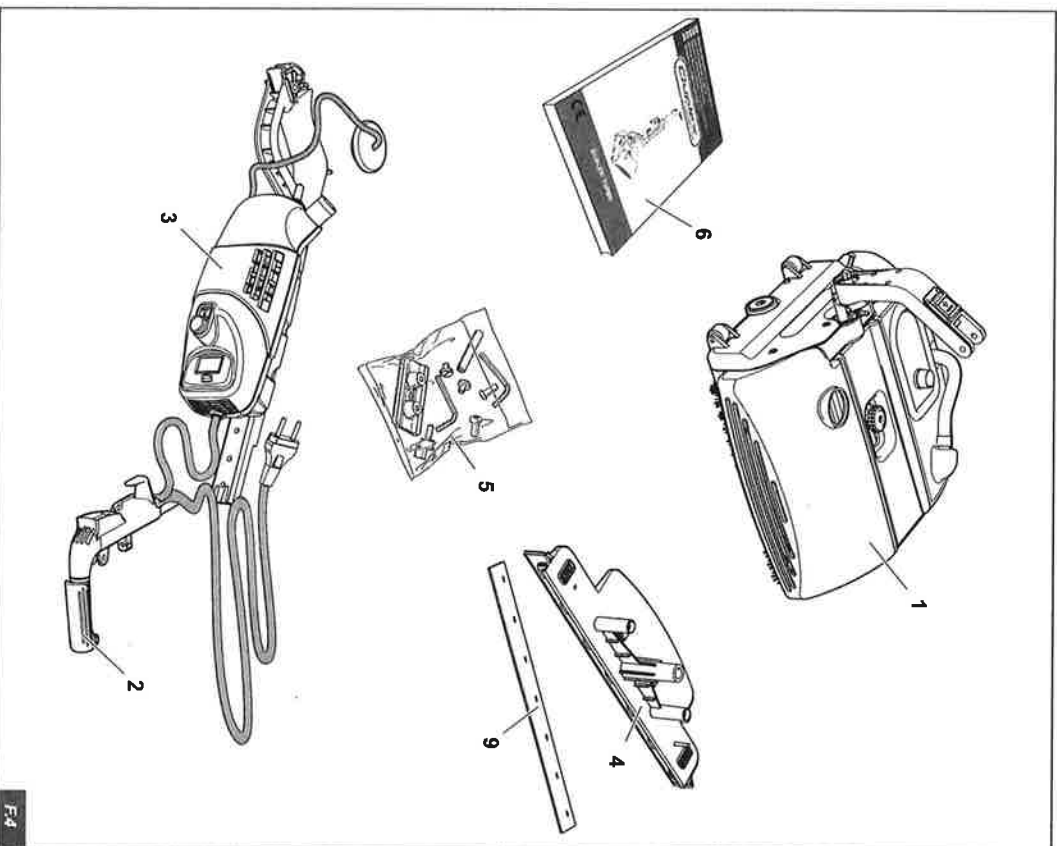




### 5.1 Packing contents

Make sure that the components of the appliance contained in the package are the same as those indicated in the table below:

PACKING CONTENTS	
1	Machine with standard grey brushes
2	Handle with power cord.
3	Handle with suction unit
4	Squeegee assembly
5	<ul style="list-style-type: none"><li>• 1 fixing plate</li><li>• 2 screws (fixing plate)</li><li>• 2 Allen keys</li></ul>
6	Instruction Manual and test sheet
7	Spare squeegee



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## 5.2 Assembling the machine

### WARNING

Use the supplied hex wrench to assemble the handle as follows:



To assemble the handle, proceed as follows:

- 1) Insert the handgrip 1 into the handle 2 and fasten it using the plate 3 and the screws 4.
- 2) Insert the handle 2 into the support 5
- 3) Insert the pin 6 into the support 5
- 4) fasten the handle 2 using the screws 7 by tightening them firmly.
- 5) Place the cap 8 into its seat on the tank 9.
- 6) Connect the suction hose 10 to the suction recovery tank 11.
- 7) Insert the suction recovery hose 12 into the hole 13 in the suction recovery tank 11.

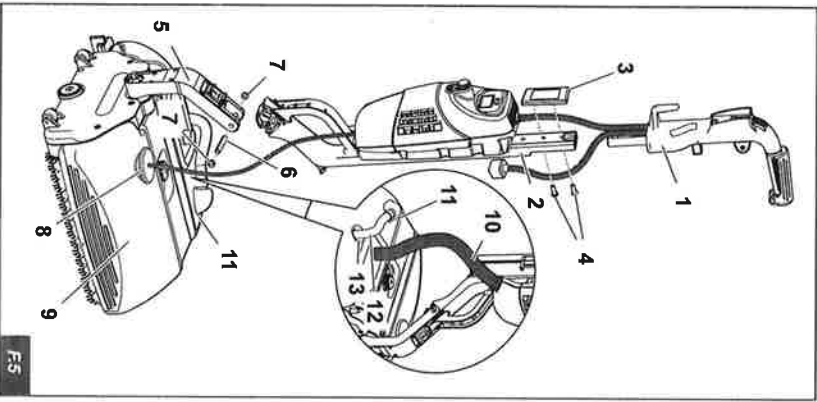
### 5.2.1 Disassembling the handle

### DANGER!



Make sure that the appliance has been disconnected from the battery before disassembling the handle.

To disassemble the handle, follow the assembly instructions in the reverse order.



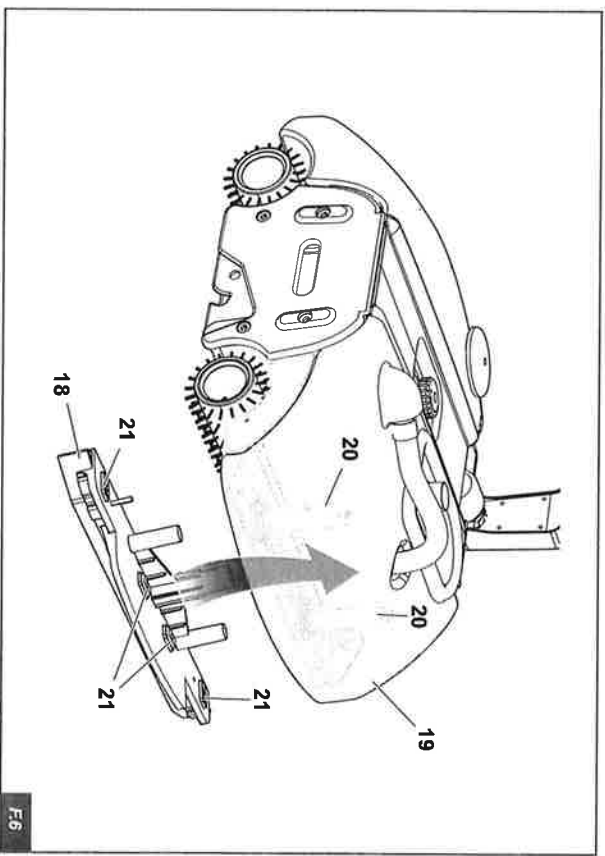
F5

## 5.3 Installing the squeegee

The squeegee has to be installed before the appliance is used for the first time.

- 1) Insert the squeegee 18 under the suction recovery tank 19.
- 2) Connect the squeegee 18 to the springs 20 by pressing them slightly upwards to attach the magnets 21 to the appliance.

To remove the squeegee 16, follow the assembly instructions in reverse.



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## 6. OPERATION AND USE

### DANGER!

Before starting the appliance the operator must have read and understood the instruction manual.



### CAUTION

Before starting to clean floors, choose the most suitable brushes and detergents (see chapter "4. TECHNICAL CHARACTERISTICS").



### 6.1 How to use

#### ELECTRICAL HAZARD!

Always make sure that the appliance is disconnected from the battery when preparing the machine for use.



#### 6.1.1 Filling the tank

The removable tank 1 makes the filling up and emptying operations at the end of the job easier.

#### CAUTION

Use the detergents indicated in section "4.5 Type of detergents" to avoid damaging the surfaces and the appliance.







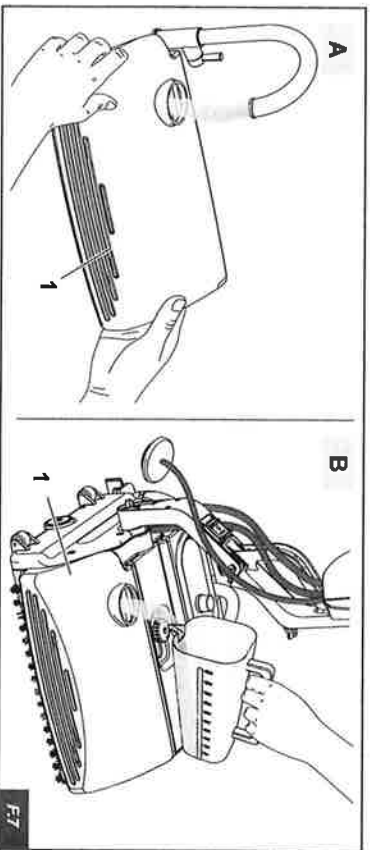
The tank 1 can be filled in the following ways:

**A) With the tank removed from the appliance:**

- 1) Remove the tank 1 and refill under a water tap.
- 2) Add a non-foaming detergent.
- 3) Stir the solution and re-insert the tank 1 into its housing.

**B) With the tank fitted to the appliance:**

- 1) Mix the detergent with water in a recipient.
- 2) Pour the liquid obtained into the tank 1.



**6.1.2 Recovery tank**

The dirty liquid recovery is achieved by means of the rotation of the brushes 2, which attack the dirt, trapping it and centrifuging it toward the two conveyors 3. The dirt accumulated on the active surfaces of the conveyors 3 is collected by the scrapers 4 and deposited into the recovery tank 5.



**WARNING**

We recommend that you lubricate the rubber conveyors (3) regularly using an ordinary silicone spray available in retail outlets.

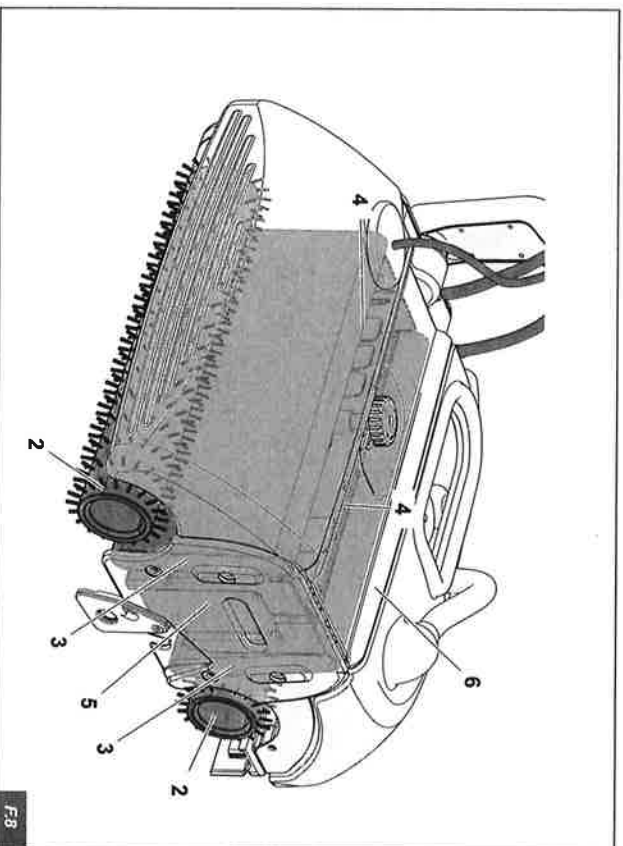


**CAUTION**

The disposal of the dirty water must be carried out in compliance with the regulations in force.

Once full, the recovery tank 5 must be emptied by removing it from its seat.

- 1) Remove cover 6.
- 2) Lift and remove the recovery tank 5 and empty it.





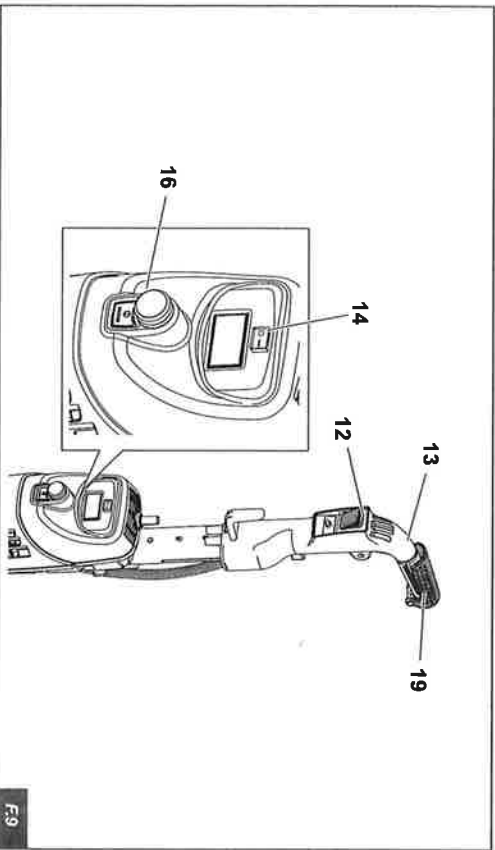
### 6.2 Switching on the machine

- 1) Press the ON/OFF switch **12** on the handle **13**.
- 1) Press the ON/OFF WATER switch **14** to start dispensing water.
- 2) Press the VACUUM ON/OFF button **16** to enable the vacuum.
- 3) Take hold of the handle and press the yellow safety lever **19** to start the appliance.
- 4) Release the yellow safety lever **19** to stop the appliance's motion.



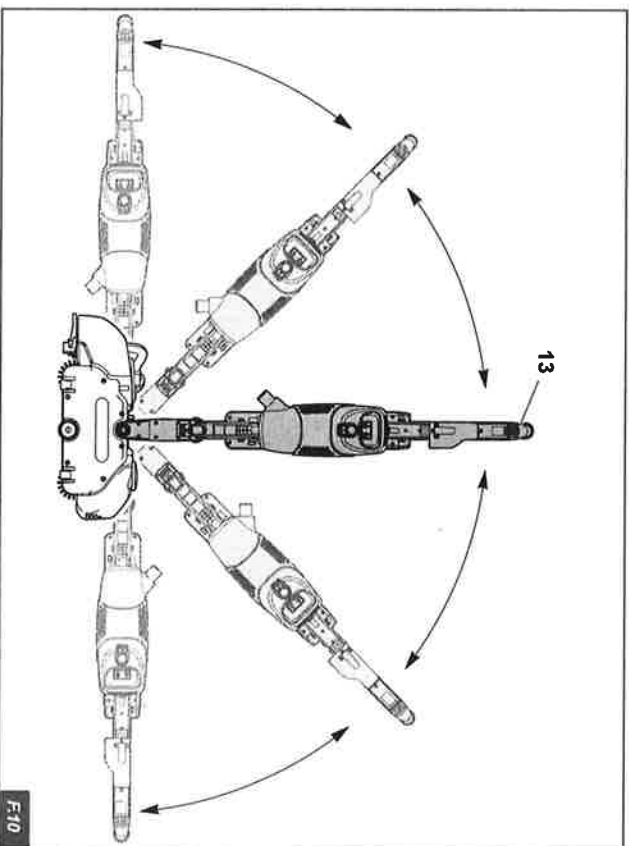
#### CAUTION

In the event of interruptions or short work breaks, stop the power flow by turning off the ON/OFF switch (**12**) to avoid discharging the battery.



### 6.3 Bi-directional cleaning system

This system allows the work position to be reversed thanks to the two-way handle **13**. Reversing the handle **13** from right to left and vice versa, allows you to work in both directions and reach the opposite ends of every room, without having to move the appliance.





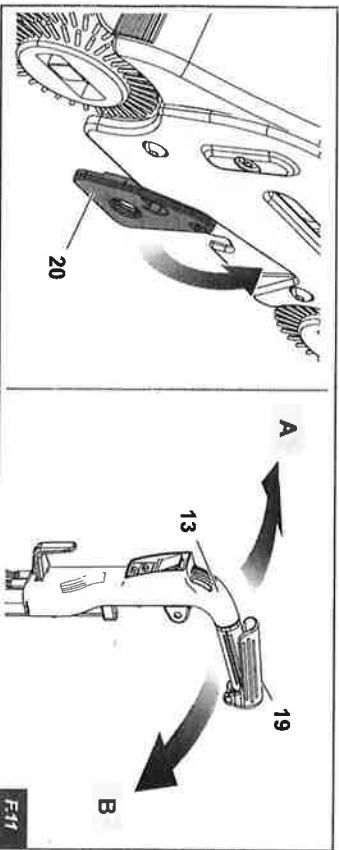
## 6.4 Starting up the appliance

- 1) Remove the support foot 20 before starting the appliance.
- 2) Grab the two-way handle 13 and lower it in one of the two possible directions (A or B).
- 3) Start the appliance by pressing the yellow safety lever 19.



### CAUTION

Make sure that you have removed the support tripod (20) before use to avoid damaging the appliance.



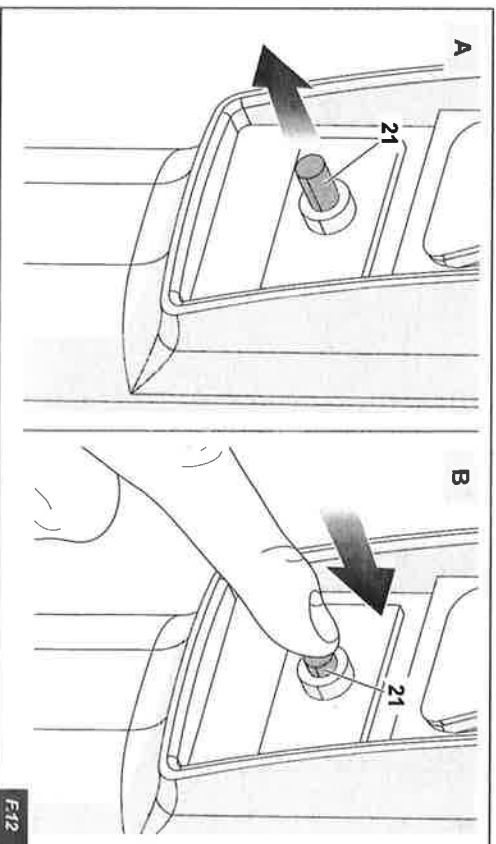
## 6.5 Motor Protector

The "Motor Protector" 21, is a safety device which stops the appliance in case conditions occur that overload the motor (e.g. foreign bodies caught in the brushes which can prevent their rotation, locking of the brushes for failed start-up due to great friction with the floor, mechanical fault, electric motor fault, poor supply of power, overheating, etc.).

As a sudden stop occurs, the button 21 comes out of its seat and the appliance stops working (figure A).

To reset the appliance, proceed as follows:

- 1) Disconnect the appliance from the mains or battery.
- 2) Remove possible foreign bodies stuck in the brushes.
- 3) Connect the appliance to the mains or battery.
- 4) To restart the appliance, press the button 21 two minutes after the occurrence of the stop (figure B).





### 6.6 Instructions on how to clean surfaces

Check that the handle is in the rest position (perfectly vertical).  
Switch on the appliance.



**DANGER!**  
Carry out the procedures with utmost care to prevent any risk of falling, slipping or collisions. Use personal protective equipment (PPE) if deemed necessary.



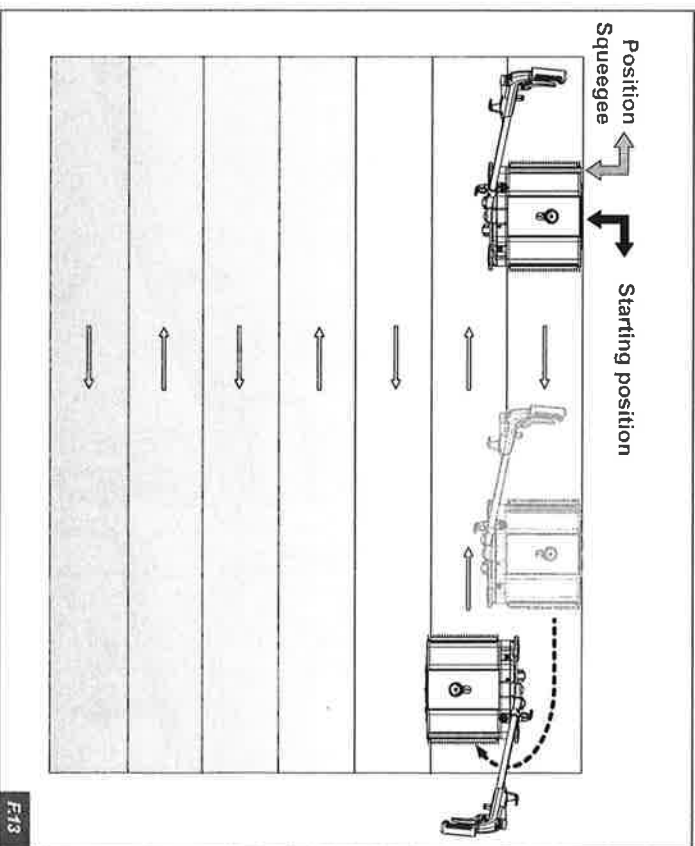
**CAUTION**  
Do not use products that are: "Static dissipative detergents" as can damage the brushes and plastic parts of the appliance.



#### 6.6.1 Work stages

**Procedure:**

- 1) From the starting position, move forward towards the corner as indicated in the figure.
- 2) Once you have reached the corner, turn the machine around and move onto the second strip to wash, slightly overlapping the area that you have cleaned before.
- 3) Repeat this operation until you have finished cleaning the floor.
- 4) Clean the outer edge on the opposite side of the cleaning area, reversing the appliance.



FT13



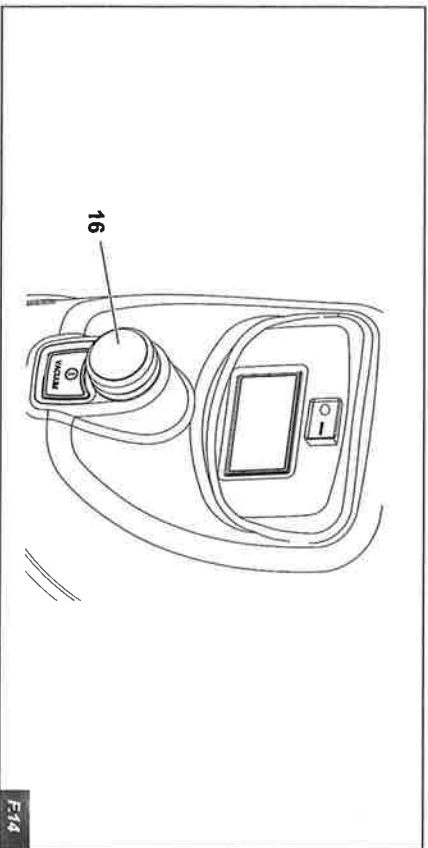
### 6.6.2 Cleaning flooring

- Install the supplied grey brushes.
- Use a non-foaming and non-acid all-purpose cleaner (pH max. 9).
- Start the appliance ("6.2 Switching on the machine") and start cleaning the floor.

### 6.6.3 Cleaning of heavily dirty, hard or dingy flooring

To clean very dirty or caked flooring, proceed as follows:

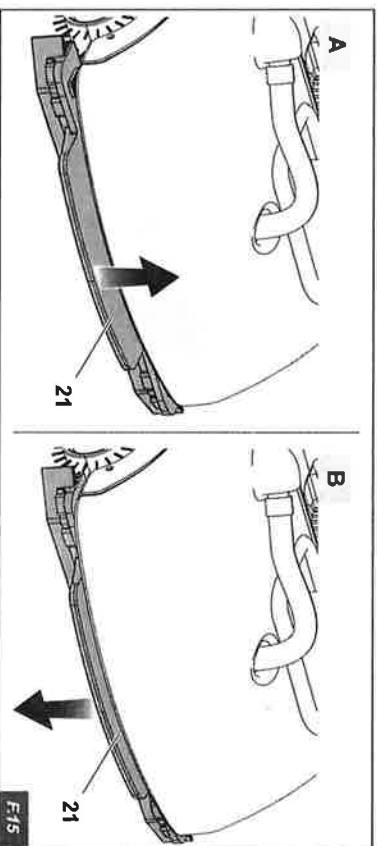
- 1) Use an all-purpose concentrated non-foaming and non-acid detergent (pH max. 9).
- 2) Fit the supplied grey brushes for medium dirt or the black brushes (option) for heavy dirt.
- 3) Stop the suction motor (VACUUM ON/OFF button 16)



- 4) Raise **A** the squeegee holder 21 and carry out the pre-washing operations.
- 5) When pre-washing has been completed, lower **B** the squeegee holder 21, switch on the suction motor (VACUUM ON/OFF button 16) and carry out the normal floor cleaning operations.



**CAUTION**  
After cleaning heavily dirty flooring, clean the appliance and brushes very accurately.





### 6.6.4 How to clean Parquet floors



#### CAUTION

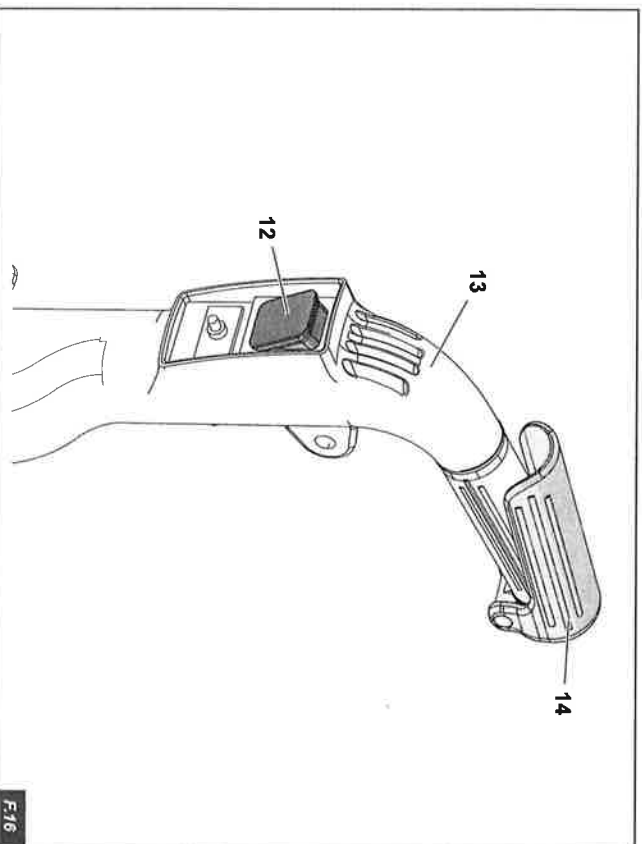
Be very careful and carry out a few tests before starting to clean. Avoid wetting the floor too much, especially if you need to clean non-painted parquet floors.

- Fit the grey brushes provided.
- Use a non-foaming detergent appropriate for parquet flooring.
- Avoid wetting the floor too much, especially in the case of non-painted parquet flooring, which absorbs more moisture.
- Be careful when cleaning this type of floor. Carry out a few tests before washing the entire surface.

### 6.7 Stopping the appliance

To stop the appliance, proceed as follows:

- 1) Release the yellow safety lever 14;
- 2) Move the handle to the vertical position (rest position);
- 3) Press the switch 12 located on the handle 13;





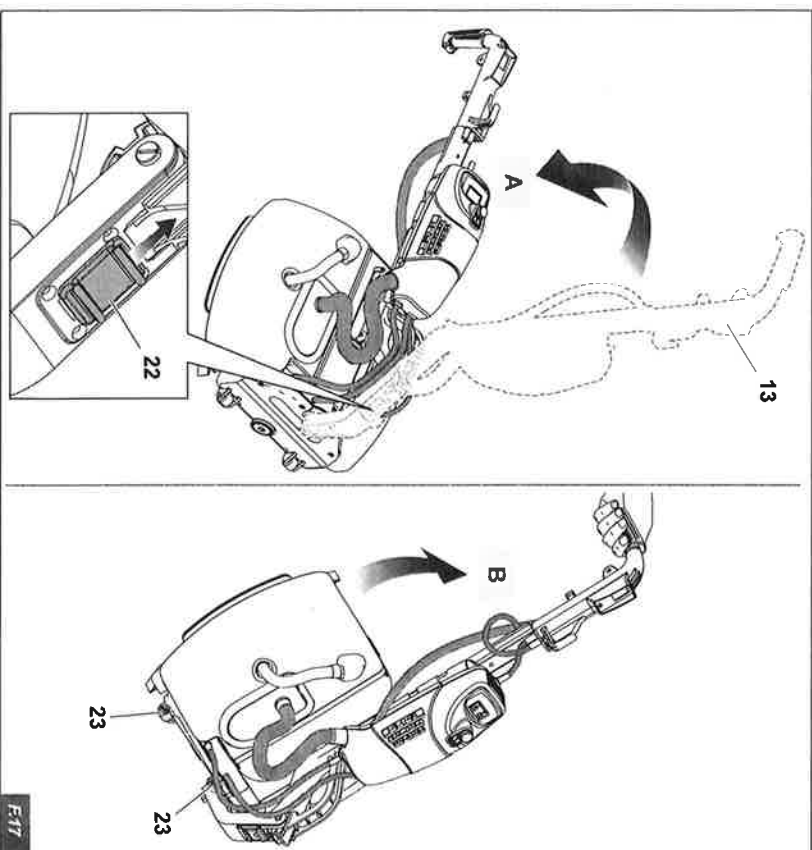
## 6.8 Transport

To transport the appliance:

- 1) move the lever **22** upwards
- 2) lower **A** the handle **13**
- 3) lift **B** the appliance and slide it along on the two small rubber wheels **23**



**DANGER!**  
If you have to lift the appliance and you deem it necessary, equip yourself with personal protective equipment (PPE).



## 7. MAINTENANCE

We recommend carrying out routine maintenance interventions to keep the appliance in good working order.



**ELECTRICAL HAZARD!**  
It is absolutely necessary to unplug and disconnect the appliance from the mains or battery before carrying out maintenance, replacement or cleaning operations.

### 7.1 Cleaning

#### CAUTION

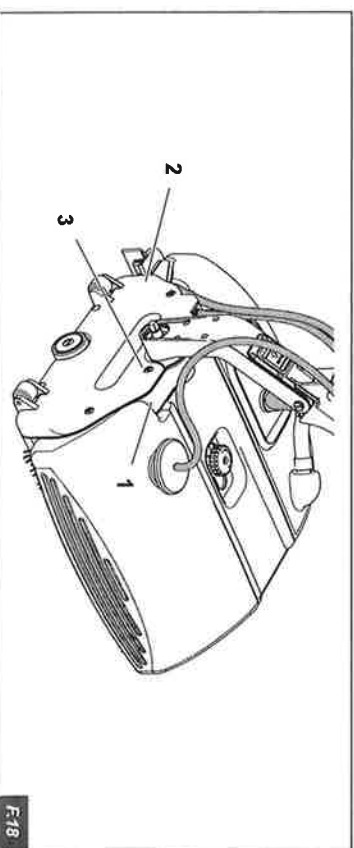
- Do not use steam jets to clean the appliance.
- Do not use pressurised water jets.
- Do not use corrosive substances.
- Do not use rough materials, abrasives or sharp metal scrapers.

#### WARNING

Cleaning operations require just a few minutes and are essential to keep the appliance in good working order at all times.



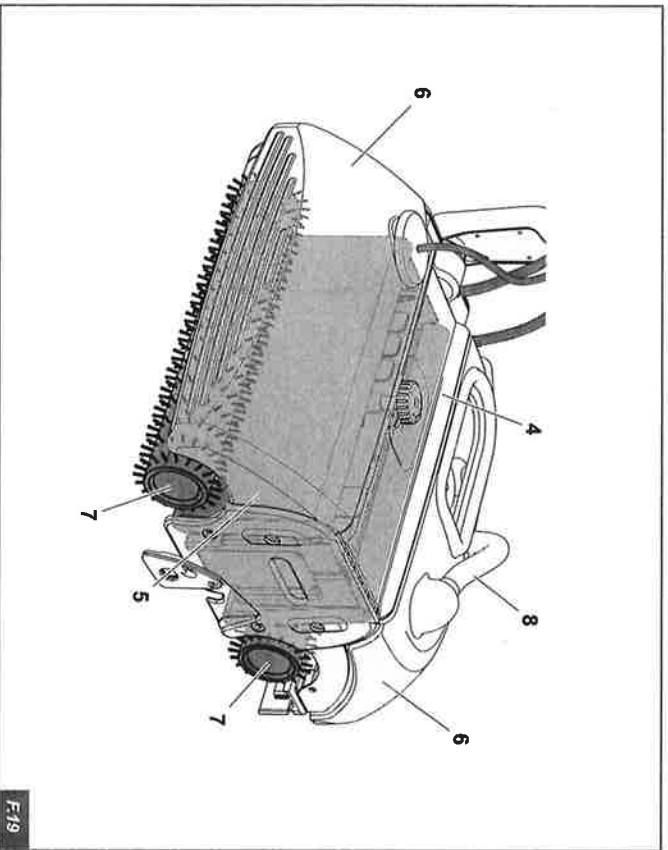
All mechanical and electrical parts of the appliance are sealed and enclosed in a light alloy casing **1** and do not require maintenance. The cover **2** fitted with a gasket is fastened with six screws **3**.





To clean the appliance, proceed as follows:

- 1) Remove the cover 4.
- 2) Remove the recovery tank 5.
- 3) Remove the two tanks 6 that cover the brushes 7 and wash under running water, preferably using a flat brush. Clean thoroughly all corners and dry.
- 4) Remove the suction recovery hose 8 and wash it under running water.
- 5) Remove the brushes 7 and clean them (see section "7.2.2 Cleaning the brushes").
- 6) Carefully clean the rest of the appliance including the motor using a damp sponge and plenty of water. Dry.
- 7) Once they have dried, refit all the components removed previously.

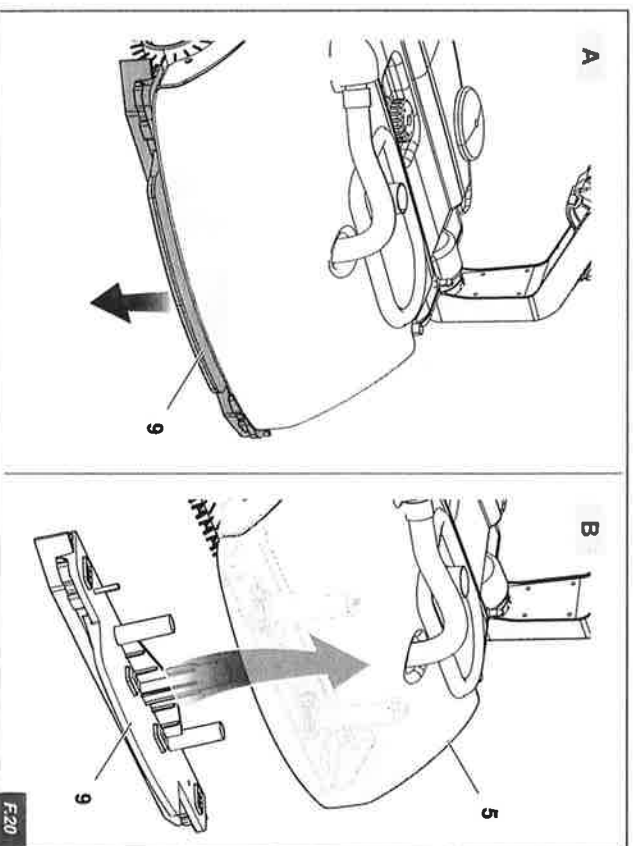


F19

### 7.1.1 Cleaning the squeegee

To clean the squeegee 9:

- 1) remove the squeegee 9 by pulling it downwards A.
- 2) wash the squeegee 9 under running water.
- 3) replace B the squeegee 9 by inserting it under the suction recovery tank 5.



F20





## 7.2 Brush maintenance

Brushes require little routine maintenance. The high rotation speed during cleaning manages to centrifuge dirt and keep them clean and efficient at all times. At the end of each use, check the status of the brushes 7 and clean or replace them, if necessary.



**CAUTION**  
When the appliance is not being operating, use the support tripod 1 to prevent the brushes from warping while sitting on floor.



**DANGER!**  
Do not use the appliance with worn or warped brushes. They can cause the machine to judder or vibrate excessively. Replace the brushes to avoid damaging the appliance.

### 7.2.1 Replacing the brushes

The appliance is fitted with a patented "trigger fitting" which enables the brushes to be removed and replaced in a few seconds.

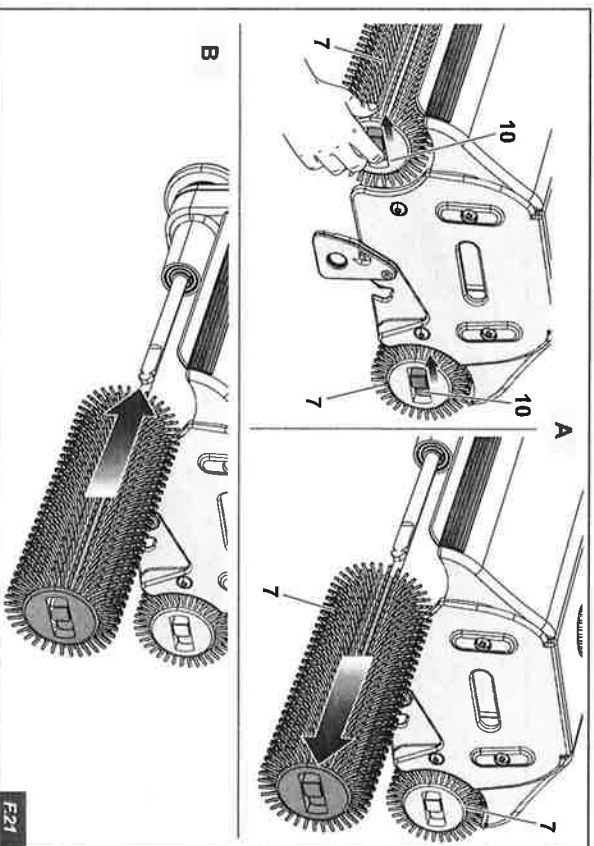
In case of wearing, warping or simply for replacement of the brushes with brushes more suitable for the type of cleaning required, proceed as follows:

- 1) Remove the brushes 7 pressing the release device 10 (figure A).
- 2) Fit the new or optional brushes (figure B).

### 7.2.2 Cleaning the brushes

Check the condition of the brushes 7, and if necessary, proceed as follows:

- 1) Remove the brushes 7 pressing the release device 10 (figure A).
- 2) Immerse them in a container of cold or lukewarm water and let them soak for a few hours.
- 3) Stir and rinse well.
- 4) Refit the brushes reversing their original position. This is necessary as the bristles tend to bend when the brushes always rotate in the same direction.





### 7.3 Replacing the scrapers

Keep the two recovery tank scrapers (11) clean at all times. Replace them approximately every 150 work hours or when they are visibly worn. To replace the scrapers 11, proceed as follows:

- 1) Remove the cover 4.
- 2) Remove the recovery tank 5.
- 3) Unscrew the screws 12 and remove the worn scrapers 11.
- 4) Replace the scrapers 4 and tighten the screws.

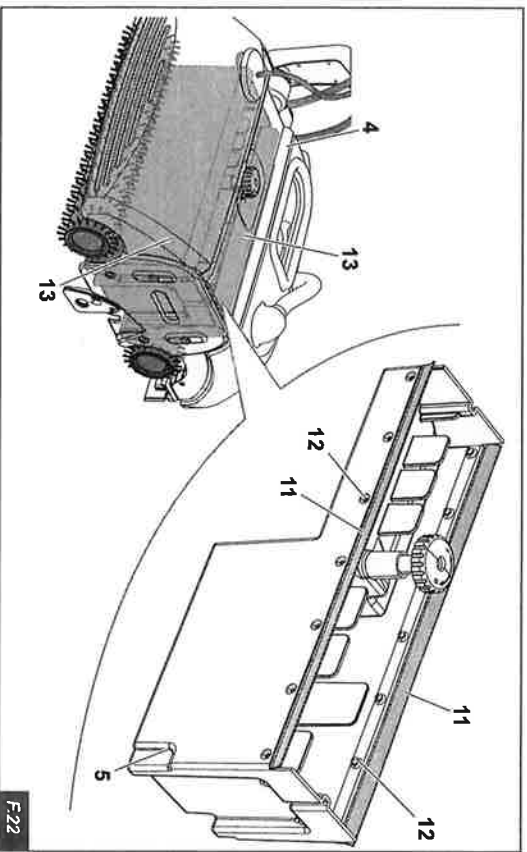
### 7.4 Conveyors

The conveyors 13 have an unlimited lifespan.



**CAUTION**  
Do not use the appliance to collect sharp object that could cut through the rubber.

In order to always keep the belts 13 in good working order, we recommend cleaning them periodically and lubricating them with a silicone spray.



### 7.5 Power cord



**DANGER!**  
Cable replacement must be performed by qualified personnel.



**ELECTRICAL HAZARD!**  
Do not use the appliance if the power cord or plug are damaged.

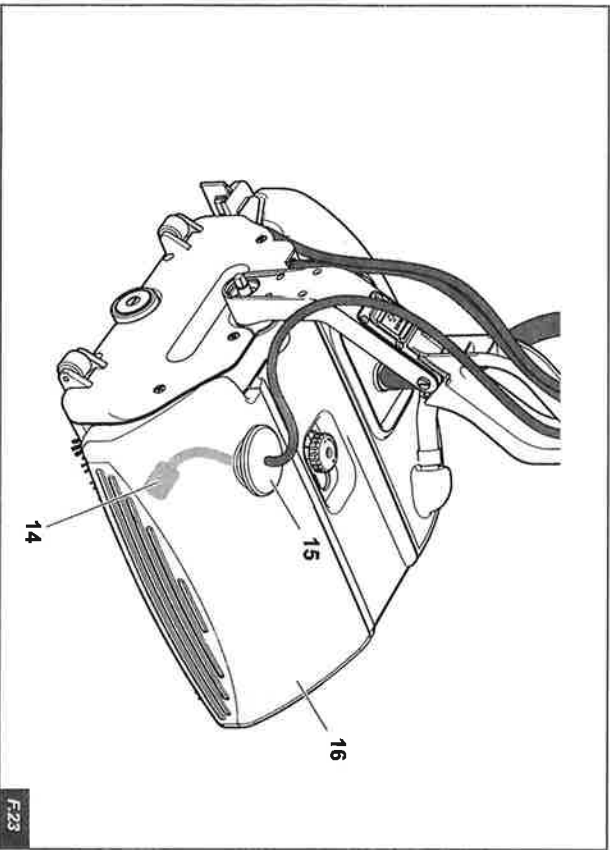
- Check the power cord regularly to see if there is any sign of damage: cracking, peeling, ageing.
- If the power cord is damaged, replace it before using the appliance.
- Use a cable of the same type used by the Manufacturer, certified according to European standards.
- If the power cord becomes caught under the brushes of the appliance: STOP the appliance immediately. Do not for any reason try to release the power cord while the appliance is in operation. If the power cord is damaged, replace it.



### 7.6 Water filter maintenance

The water filter 14 should be checked periodically. Replace the filter if it is dirty.

- 1) Remove the cap 15
- 2) remove the filter from the tank 16
- 3) replace the water filter 14 and reposition it in the tank 16.



### 7.7 Routine maintenance table

OPERATION	COMPONENT	FREQUENCY
Cleaning	Tank	After each use.
	Scrapers	After each use.
	Recovery tank	After each use.
	Appliance cleaning	After each use.
	Brushes	After each use.
Checks	Squeegee	After each use.
	Suction recovery hose	After each use.
	Water filter	After each use.
Replacement	Mechanical and drive elements	24 months / around 500 work hours.
	Scrapers	Around 150 work hours.
	Standard grey brushes	Around 250 work hours.



## 7.8 Disposal

This product falls within the scope of Directive 2012/19/EU regarding the management of waste electrical and electronic equipment (WEEE).

The appliance must not be disposed of together with domestic waste as it is made of different materials that can be recycled at appropriate facilities. Ask your local council where the recycling facilities are located that can take the product for disposal and its subsequent recycling.

It should also be remembered that when you purchase of an equivalent appliance, the distributor must collect the old product for disposal free of charge.

The product is not potentially hazardous for human health or the environment as it does not contain harmful substances as indicated in Directive 2011/65/EU (RoHS), but if improperly disposed of it can have a negative impact on the ecosystem.

Read the instructions carefully before using the appliance for the first time. Do not use the product for any purpose other than that for which it is intended, as there is a risk of an electric shock if it is used improperly.



The crossed out wheeled bin symbol on the label attached to the appliance indicates that the product complies with the regulations regarding waste electrical and electronic equipment.

The equipment must be disposed of carefully; incorrect or illegal disposal is punishable by law.

### 7.8.1 Differentiation and sorting of the materials

#### Electrical components:

Material that can be disposed of with the urban waste collection, in compliance with the legal provisions in force in the country of use.

#### Mechanical components:

The appliance is built with aluminium, steel and plastic materials.

Steel and aluminium will not damage the environment if recycled by qualified and authorised companies.

The plastic materials may cause environmental damage, therefore they should be handed over to specialised companies authorised for disposal.

The disposal of the packaging must be carried out in accordance with the regulations in force.

## 8. TROUBLESHOOTING

The maintenance work authorised by Duplex International S.r.l. is indicated in section "7. MAINTENANCE".

The content of this chapter is not exhaustive. Instead, it aims to provide information on the most common problems in order to help specialised technicians to find the fault in question.



#### CAUTION

The indications under the term "SOLUTION" in the tables below DO NOT AUTHORISE interventions that could jeopardise safety.

PROBLEM	PROBABLE CAUSE	SOLUTION
Wet stripes on the sides	Irregular paths are covered. Recovery tank scrapers dirty or worn.	Follow the instructions in chapter "7. MAINTENANCE". Clean or replace the scrapers.
The floor remains wet	The squeegees are dirty or worn. The suction recovery hose is clogged.	Clean or replace the squeegees. Clean or replace the suction hose.
The dirt is not picked up	The cap of the suction tank is positioned incorrectly. Recovery tank with dirty or worn scrapers. Worn brushes.	Check and position the suction tank cap correctly. Clean or replace. Replace.
	Cleaning liquid not coming out.	Check the water filter.



Does not start up	Sometimes the appliance does not start given the strong friction of the brushes.	Lift slightly by tilting the handle.
	Scrapers left resting on and stuck to the conveyors by the dry residual dirt deposited from the previous cleaning operation.	Lift the recovery tank and clean the scrapers (see section "7.3 Replacing the scrapers").
	"Motor Protector" tripped	Reset the appliance and re-activate it by pressing the MP button on the handle. Reactivation occurs approx. after 2 minutes.
Does not start up	Faulty motor.	Contact the Manufacturer.
	"Start&stop" button switch tripped.	Replace.
Vibrations during the work stages	Power cord plug not correctly inserted.	Check for electrical plug connection.
	Warped brushes.	Replace.