# USE AND MAINTENANCE MANUAL

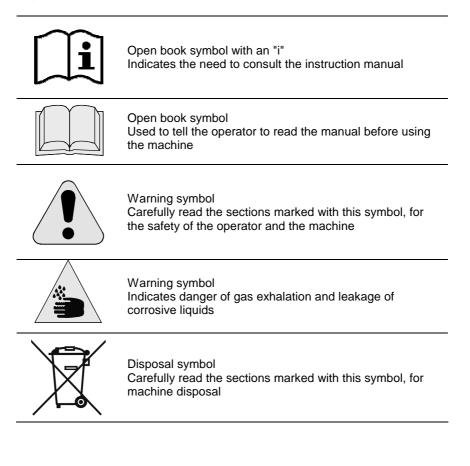




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#### Symbols used in the manual





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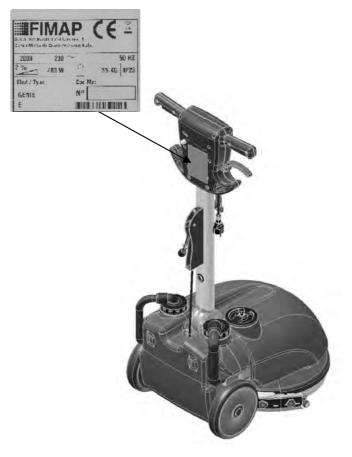
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#### On consignment of the machine

When the machine is delivered to the customer, an immediate check must be performed to ensure all the material mentioned in the shipping documents has been received, and also to check the machine has not been damaged during transportation. If this is the case, the carrier must ascertain the extent of the damage at once, informing our customer service office. It is only by prompt action of this type that the missing material can be obtained, and compensation for damage successfully claimed.

Serial number plate



#### Introductory comment

**GENIE E** is a floor scrubbing machine which, via the mechanical action of the rotating brush and the chemical action of a water/detergent solution, can clean any type of flooring. As it advances, it also collects the dirt removed and the detergent solution not absorbed by the floor.

The machine must be used only for this purpose. Even the best machines will only work well if used correctly and kept in good working order. We therefore suggest you read this instruction booklet carefully and read it again whenever difficulties arise while using the machine. If necessary, remember that our assistance service (organised in collaboration with our dealers) is always available for advice or direct intervention.

#### Intended use

The scrubbing machine is designed exclusively for the professional cleaning of surfaces and floors in industrial, commercial and public environments. The machine is only suitable for use in closed (or at least covered) places.

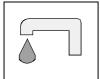
The machine is not suitable for use in the rain, or under water jets. It is FORBIDDEN to use the machine in places with a potentially explosive atmosphere, for picking up dangerous dusts or inflammable liquids. In addition, it is not suitable as a means of transport for people or objects.

TECHNICAL DESCRIPTION	UM	Genie E
Rated power	W	540
Working width	mm	350
Width of rear squeegee	mm	440
Work capacity	m²/h	1050
Water consumption	g/m <sup>2</sup>	-
Brushes (diameter or length)	Ømm	350
Brush rotations	rpm	140
Pressure on the brushes	Kg	17.7
Brush motor – Rated voltage	V/Hz	230/50
Brush motor – Max. absorbed power	W	320
Type of advance		semi-aut.
Forward movement speed	km/h	3
Maximum gradient		2%
Suction motor – Rated voltage	V/Hz	230/50
Suction motor – Max. absorbed power	W	220
Suction vacuum	mbar	722
Solution tank PE	I	7.5
Recovery tank PE	I	9.3
Weight of empty machine (including brush and tanks)	Kg	35.2
Weight of empty machine (without brush and recovery tank)	Kg	31.1
Gross weight of the machine ready for use	kg	42,7
Dimensions of the open machine (Length / Height / Width)	mm / mm / mm	620 / 1050 / 44
Dimensions of the closed machine (Length / Height / Width)	mm / mm / mm	885 / 425 / 440
Noise level (in compliance with IEC 704/1)	dB (A)	66,1
Vibration level	m/s <sup>2</sup>	1.18

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# SYMBOLS USED ON THE MACHINE



Tap symbol Used to indicate the solenoid valve switch



Voltage symbol Warning high voltage 110-220 Volt



Symbol denoting suction motor Used to indicate the suction motor switch



Indicates the maximum temperature of the detergent solution Located near the solution tank inlet



Indicates the earth connection point of the electric system of the machine



Indicates the maximum gradient



# **GENERAL SAFETY REGULATIONS**

#### The regulations below must be carefully followed in order to avoid harm to the operator and damage to the machine.

- Read the labels on the machine carefully. Do not cover them for any reason and replace them immediately if they become damaged.
- The machine must be used exclusively by authorised, trained personnel.
- During the working of the machine, pay attention to other people and especially to children.
- The machine is not suitable for cleaning carpets.
- The socket for the machine power cable must have a prescribed earth connection.
- Avoid damaging the machine power cable by crushing or bending it, or applying stress.
- Do not let the power cable come into contact with the rotating brush.
- If the power supply cable is damaged, do not use the machine and contact an authorised service centre immediately.
- Do not mix different types of detergent as this may produce harmful gases.
- Do not place any liquid containers on the machine.
- The machine is designed for dry use only and should not be used or kept outdoors in wet conditions
- The storage temperature must be between -25°C and +55°C; do not store outdoors in damp conditions.
- Conditions of use: room temperature between 0°C and 40°C with relative humidity between 30 and 95%.
- Only use the machine in closed areas and do not expose it directly to rain.
- Do not use the machine in an explosive atmosphere.
- Do not use the machine as a means of transport.
- Do not use acid solutions, which may damage the machine.
- Avoid working with the brushes when the machine is standing still, so as not to damage the floor.
- Do not vacuum inflammable liquids.
- Do not use the device to collect dangerous powders.
- In the event of a fire, use a powder extinguisher. Do not use water.
- If you use the machine where there is a risk of falling objects, the machine must be equipped with protection devices against falling objects
- Do not knock against shelving or scaffolding, where there is a danger of falling objects. The operator must always be equipped with the appropriate safety device (gloves, shoes, helmet, glasses, etc.)
- Do not use the machine on surfaces with an inclination greater than the one shown on the plate.
- The machine is designed to carry out the washing and drying operations simultaneously. Different operations should only be carried out in areas where the passage of unauthorised persons is prohibited. Signal the presence of damp floors with suitable signs.
- If the machine does not work properly, check this is not caused by failure to carry out routine maintenance. Otherwise, ask for intervention of the authorised technical assistance centre.
- If you need to replace any components, request the ORIGINAL spare parts from an Authorised dealer and/or Retailer.
- For all maintenance interventions, switch off the machine and disconnect the power cable from the socket.
- Do not remove any protection devices which require the use of tools in order to be removed.
- Do not wash the machine with direct water jets or pressurised water, nor with corrosive substances.
- Have the machine checked by an authorised technical assistance centre every year.
- To prevent scaling in the solution tank filter, do not fill the tank with detergent solution many hours before using the machine.
- Before using the machine, check that all the hatches and covers are positioned as shown in this Use and Maintenance Manual.
- When disposing of consumption materials, observe the laws and regulations in force.
- When your machine has reached the end of its long working life, dispose of the materials it contains (especially oils and electronic components) in an appropriate manner, and bearing in mind that the machine itself was constructed using 100% recyclable materials.
- Only use the brushes supplied with the device, or those specified in the Use and Maintenance Manual (page 19). The use of other brushes could compromise safety levels.
- The machine is not suitable for use by children or people with reduced physical, mental and sensorial capacities, or people lacking experience and knowledge, unless supervised and instructed in the use of the machine by a person responsible for their safety.
- Children must be supervised to ensure they do not play with the device.



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# **MACHINE PREPARATION**

### 1. HANDLING THE PACKED MACHINE

The machine is contained in specific packaging. Every pallet consists of four machines arranged on two levels. It is not possible to place more than two packages on top of each other. The overall mass for a single package is 42 kg. The overall dimensions of the package are: **A** : 500 mm

- **B** : 500 mm
- **C** : 1150 mm

#### 2. HOW TO UNPACK THE MACHINE

- 1. Open the packaging on the side indicated.
- 2. Take the machine out of its packaging.

#### 3. HANDLING AND TRANSPORTATION OF THE UNPACKED MACHINE

Genie E is a machine that can be managed in all situations and transported without effort, even in small vehicles.

Just lift the front part, using the machine handlebars as a lever. The big rear wheels mean it can be towed anywhere and loaded on a truck by means of a simple ramp. Genie E is easy to transport even by car. Exploiting the full flexibility of the handlebars, you can fold it up (see the handlebars fixing section) and, with the help of a colleague, place it in the boot of the car without disassembling any components.

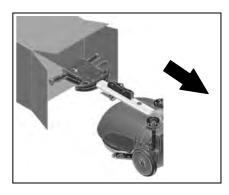
#### 4. CONNECTING THE MACHINE

For the connection, you must:

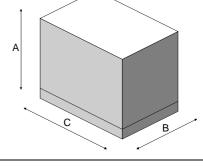
- 1. Connect the extension lead (not supplied) to the plug on the handlebar.
- 2. block the extension lead to the cable-holder handle (2) in front of the handlebars
- 3. connect the extension lead to the wall socket



**WARNING**: before connecting the extension lead to the socket, check the switches are in the off ("0") position!









# **MACHINE PREPARATION**

#### 5. INSTRUMENT PANEL COMPONENTS

The instrument panel components are identified as follows:

- 1. Main switch (1)
- 2. Suction switch (2)
- 3. Solenoid valve switch (3)

#### 6. FIXING THE HANDLEBARS

For packaging purposes the handlebars are supplied folded; they must now be put in the working position. Proceed as follows:

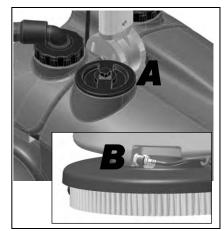
The recovery tank must be completely empty each time the solution tank is filled.

- 1. raise the handlebars by pulling upwards the lever indicated by the arrow
- 2. put the machine in the working position

Check the cap is correctly inserted in its housing (A). Check the quick connection is correctly connected (B).









7. SOLUTION TANK

# 8. DETERGENT SOLUTION

Proceed as follows to fill the solution tank:

- 1. Make sure that the recovery tank is empty
- 2. Make sure the main switch is off
- 3. Remove the inlet cap located on the rear right side of the machine.
- 4. Fill it with clean water at a temperature not exceeding 50°C.

Add the liquid detergent to the tank in the concentration and manner indicated on the detergent manufacturer's label. The formation of excess foam could damage the suction motor, so use only the minimum amount of detergent necessary.



# **MACHINE PREPARATION**



**ATTENTION:** Acid or alkaline detergents can be used with pH values between 4 and 10 and that do not contain: oxidising agents, chlorine or bromine, formaldehyde, mineral solvents.



**ATTENTION:** always use detergents whose manufacturer's label indicates their suitability for scrubbing machines. Do not use acid or alkaline products or solvents without this indication. always use low foam detergent. To avoid the production of foam, before starting to clean, put a minimum quantity of antifoam liquid into the recovery tank. Do not use pure acids.



**ATTENTION:** you are advised to always wear protective gloves, to avoid the risk of serious injury to your hands

# 9. RECOVERY TANK

Make sure the recovery tank is empty, otherwise empty it completely.

Check the recovery tank is correctly inserted in its housing, and that the tubes are correctly inserted in the tank elbows. Check the caps are correctly closed.



#### **10. ASSEMBLING THE BRUSH**

To insert the brush:

- 1. Connect the machine to the mains power supply
- 2. Place the brush in front of the base body
- 3. Raise the base using the handlebars as a lever
- 4. Place the base above the brush
- 5. Activate the handlebar tilt lever
- 6. Press the main switch to turn on the machine
- 7. Pulse press the man present lever to engage the brush to the base



# WORK

# 1. PREPARING TO WORK

- Certain operations must be carried out before starting work:
- 1. Check that the tanks are properly inserted in the housings and connected.
- 2. check the switches are in the off ("0") position
- 3. connect the cable to the socket

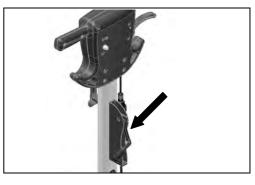


**ATTENTION:** Check the electricity socket has a protective conductor (or an earth conductor). **ATTENTION:** Check the power supply voltage and frequency

comply with the nominal values required by the machine. **ATTENTION:** Check the power supply cable is in perfect condition.

- 4. carry out the operations to prepare the machine
- 5. lower the squeegee command lever in order to start working







## 2. OVERFLOW DEVICE

press the suction switch (2)
press the solenoid valve switch (3)

The machine is fitted with a ball filter which intervenes when the recovery tank is full, causing the suction tube to close.

In this case, you must switch off the machine and empty the recovery tank.

4. press the main switch (1) and check the green indicator light comes on

At this point, the machine can work efficiently until the detergent solution

runs out; use the operating lever that activates the brushes (4)



**WARNING:** this operation must be carried out wearing gloves to protect against contact with dangerous solutions.





# WORK

# 3. FORWARD MOVEMENTS

The traction of these machines is obtained by means of the brush which, working slightly inclined, is able to drag the machine forwards.



**ATTENTION:** Ensure that the moving brush never comes into contact with the power supply cable.



**WARNING:** when making even brief reverse movements, check the squeegee is raised.



# AT THE END OF THE WORK

At the end of the work, and before carrying out any type of maintenance, perform the following operations:

- 1. Turn off the solenoid valve switch (3)
- 2. Raise the squeegee by means of the rear handle
- 3. Turn off the suction switch (2)

Disconnect the suction pipes

9. Remove the recovery tank

- 4. Turn off the main switch (1)
- 5. Disconnect the power cable from the mains socket.





6. Bring the machine to the place provided for draining the water

Disconnect the hook securing the recovery tank on the rear of the machine

- 10. empty the recovery tank by removing the caps and tilting it
- 11. disassemble the brush and clean it with a jet of water (to disassemble the brush, see "DISASSEMBLING THE BRUSH" below)



7.

8.

**WARNING:** this operation must be carried out wearing gloves to protect against contact with dangerous solutions.





# DAILY MAINTENANCE

# PERFORM ALL MAINTENANCE OPERATIONS IN SEQUENCE

# 1. CLEANING THE RECOVERY TANK

- 1. Make sure that the power cable of the machine is unplugged from the mains socket
- 2. Disconnect the suction pipes from the recovery tank
- 3. Disconnect the hook securing the recovery tank on the rear of the machine
- 4. Remove the recovery tank





**ATTENTION:** this operation must be carried out wearing gloves to protect against contact with dangerous solutions.



**WARNING:** Before carrying out any type of maintenance, disconnect the machine's power supply cable.

- 5. Remove the caps to open the tank.
- 6. Clean the filter under running water.
- 7. Rinse the tank and clean with a jet of water.



**WARNING:** this operation must be carried out wearing gloves to protect against contact with dangerous solutions.



# 2. EMPTYING OF THE SOLUTION TANK

Proceed as follows to empty the solution tank:

- 1. Switch off the solenoid valve switch
- 2. Switch off the suction switch
- 3. Switch off the main switch
- 4. Disconnect the power cable from the socket
- 5. Disconnect the quick connector on the front of the solution tank
- 6. Insert the Genie E solution tank discharge pipe kit (optional)





**WARNING:** this operation must be carried out wearing gloves to protect against contact with dangerous solutions.

# DAILY MAINTENANCE

### 3. CLEANING THE SQUEEGEE

Check the squeegee rubbers are always clean, for a better drying action. To clean them you must:

- 1. Raise the machine
- 2. Carefully clean inside
- 3. Carefully clean the squeegee rubbers





**ATTENTION:** this operation must be carried out wearing gloves to protect against contact with dangerous solutions.

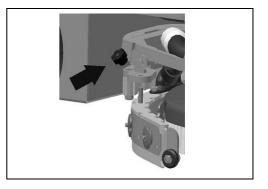


**WARNING:** Before carrying out any type of maintenance, disconnect the machine's power supply cable.

# 4. REPLACING THE SQUEEGEE RUBBERS

Check the state of wear and tear of the squeegee rubbers and, if necessary, replace them. To replace them you must:

- 1. raise the squeegee
- 2. remove the two knobs
- 3. disassemble the squeegee from its support
- 4. remove the tube from the squeegee nozzle, so the squeegee can be removed





**ATTENTION:** this operation must be carried out wearing gloves to protect against contact with dangerous solutions.



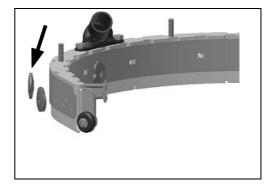
**WARNING:** Before carrying out any type of maintenance, disconnect the machine's power supply cable.



# DAILY MAINTENANCE

5. unscrew the knobs on the squeegee that block the rubber-pressing blades, and remove them

- 6. remove the rubber-pressing blades
- 7. replace the rubbers
- 8. reassemble everything, carrying out the above-mentioned operations in
- the reverse order

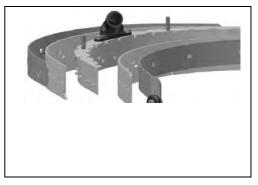




**ATTENTION:** this operation must be carried out wearing gloves to protect against contact with dangerous solutions.



**WARNING:** Before carrying out any type of maintenance, disconnect the machine's power supply cable.



# 5. DISASSEMBLING THE BRUSH

- 1. Raise the squeegee
- 2. Raise the machine by using the handlebars as a lever and position it with the recovery tank on the ground.
- 3. With the base raised, remove the brush manually by rotating it clockwise.



**WARNING:** during this operation, check there are no people or objects near the brush.



**WARNING:** Before carrying out any type of maintenance, disconnect the machine's power supply cable.



# PERIODIC MAINTENANCE

#### 1. CLEANING THE SQUEEGEE TUBE

Periodically, or whenever suction seems to be unsatisfactory, check the squeegee tube is not obstructed. To clean it, proceed as follows:

- 1. Disconnect the machine's power supply cable
- 2. Remove the tube from the sleeve on the squeegee
- 3. remove the other end from the recovery tank
- 4. wash the inside of the tube with a water jet introduced from the side where it is connected to the tank
- 5. reassemble the tube

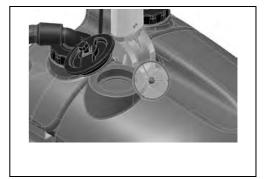


**WARNING:** do not wash the tube running between the suction unit and the suction cap.

#### 2. CLEANING THE SOLUTION TANK AND FILTER

Cleaning is required as follows periodically or if inadequate water is emitted:

- 1. Disconnect the machine from the mains power supply
- 2. Disconnect the suction pipes
- 3. Remove the recovery tank retainer
- 4. Remove the recovery tank
- 5. Detach the quick connection to avoid breaking the connection itself.
- 6. Insert the Genie E solution tank discharge pipe kit (optional)
- 7. Loosen the solution tank cap.



- 8. Remove the filter and clean it.
- 9. Rinse the tank and clean with a jet of water.
- 10. Reassemble the filter and cap.
- 11. Remove the discharge kit and reassemble the quick connector
- 12. Reassemble the recovery tank



**WARNING**: this operation must be carried out wearing gloves to protect against contact with dangerous solutions.



**WARNING**: In case of clogging of the quick connector on the front of the solution tank, contact a **FIMAP** engineer.

# TROUBLESHOOTING

# 1. ELECTRICAL SAFETY

The machine is fitted with a thermal trip unit with manual reset. The brush motor is reset by resetting the thermal trip unit located behind the handlebars.

If the machine stops repeatedly in a short space of time, you must contact the technical assistance centre.

# 2. INSUFFICIENT WATER ON THE BRUSHES

- 1. Check the solution tank filter is clean
- 2. Check the solenoid valve switch is on
- 3. Check the guick connection is correctly inserted
- 4. Check the cock regulation screw on the water outlet
- 5. Check the vent pin on the solution tank cap is lowered.

#### 3. THE MACHINE DOES NOT CLEAN WELL

1. Check the state of wear and tear of the brushes and, if necessary, replace them. The brushes should be changed when the bristles are about 15mm long.

#### 4. THE SQUEEGEE DOES NOT DRY PERFECTLY

- 1. Check the squeegee rubbers are clean
- 2. Check the suction tubes are correctly inserted in their housing on the
- squeegee 3. Check the distributor is clean
- 4. Replace the rubbers, if worn



#### 5. EXCESSIVE FOAM PRODUCTION

Check that a low foam detergent has been used. If necessary, add a small quantity of antifoam liquid to the recovery tank.

Remember that, when the floor is not very dirty, more foam is generated. In this case the detergent solution should be more diluted.

# CHOOSING AND USING THE BRUSHES

# POLYPROPYLENE BRUSH (PPL)

Used on all types of floors. Good resistance to wear and tear, and hot water (no greater than 60°C). The Polypropylene brush is non-hygroscopic and therefore retains its characteristics even when working in wet conditions.

#### PAD HOLDER

The pad holder is recommended for cleaning shiny surfaces.

There are two types of pad holders of the CENTRE LOCK type, equipped with a snap-type central locking system in plastic that allows the abrasive floor pads to be perfectly centred and held without any risk of them becoming detached:

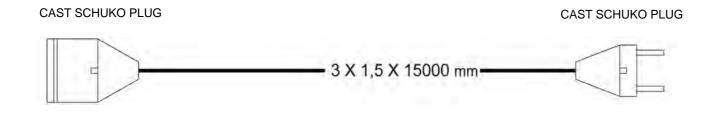
1. fitted with a series of anchor points that allow the abrasive floor pad to be held and dragged while working

2. fitted with a series of groups of bristles that allow the abrasive floor pad to be held and dragged while working

# TABLE FOR CHOOSING THE BRUSHES

Machine	No.° of brushes	Code	Type of bristles	ØBristl	Ø Brush	Notes
GENIE E	1	421701 422213 422001	PPL Pad holder – anchor points Pad holder – bristles	0.6 0.9	355 355 355	

# SUGGESTED POWER CABLE EXTENSION



# **MACHINE DISPOSAL**

To dispose of the machine, take it to a demolition centre or an authorised collection centre.

Before scrapping the machine it is necessary to remove and separate the following materials and send them to the appropriate collection centres in accordance with the environmental hygiene regulations currently in force:

- brush
- felt
- electric and electronic parts\*

 $(\ensuremath{^*})$  In particular, to scrap the electric and electronic parts, contact your area distributor.





# EC DECLARATION OF CONFORMITY

The undersigned company: FIMAP S.p.A. Via Invalidi del Lavoro no.1 37050 Santa Maria di Zevio (VR)

declares under its sole responsibility that the

# FLOOR SCRUBBING MACHINE mod. GENIE E

complies with the requirements of the following Directives:

- 2006/42/EC: Machinery Directive
- 2006/95/EC: Low Voltage Directive
- 2004/108/EC: Electromagnetic Compatibility Directive and subsequent amendments.

It also complies with the following standards:

- EN 60335-1: Household and similar electrical appliances Safety. Part 1: Generic standards
- EN 60335-2-72: Household and similar electrical appliances. Part 2: Generic standards for automatic machines for floor treatment for commercial and industrial use
- EN 12100-1: Safety of Machinery Basic concepts, general principles for design Part 1: Basic terminology and methodology
- EN 12100-2: Machine safety Fundamental concepts, fundamental principles of design Part 2: Technical principles
- EN 55014-1: Electromagnetic compatibility Regulations for household appliances, electrical devices and similar equipment. Part 1: Emission Regulation for product family.
- EN 55014-2: Electromagnetic compatibility Regulations for household appliances, electrical devices and similar equipment. Part 2: Immunity Regulation for product family.
- EN 61000-3-2: Electromagnetic compatibility (EMC) Part 3-2: Limits Limits for harmonic current emissions (Equipment with input current ≤ 16 A per phase).
- EN 61000-3-3: Electromagnetic compatibility (EMC) Part 3-3: Limits Restriction of voltage variations and flicker in low voltage power supply systems for devices with a rated current ≤ 16 A.
- EN 62233: Household and similar electrical appliances Electromagnetic fields Methods for evaluation and measurement

The technical documentation is kept by Mr. Giancarlo Ruffo, via Cà Nova Zampieri, n.5 – 37057 San Giovanni Lupatoto (VR) - Italy

Santa Maria di Zevio, 01/10/2010

FIMAP S.p.A. Legal representative Giancarlo Ruffo