# **USE AND MAINTENANCE MANUAL**



OMNIA 26-32-42

ED. 06-2011

ΕN

ORIGINAL INSTRUCTIONS Doc. 10012143 Ver. AB







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#### Symbols used in the manual



Open book symbol with an "i" Indicates that this document is an instruction manual



Open book symbol
Used to tell the operator to read the manual before using the machine



Warning symbol
Carefully read the sections marked with this symbol, for the safety of the
operator and the machine



Warning symbol Indicates danger of gas exhalation and leakage of corrosive liquids



Warning symbol Indicates the danger of fire Do not go near with free flames



Warning symbol Indicates that the packed product should be handled with suitable lifting means that comply with the legal requirements



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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.

# Introductory comment

OMNIA 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.

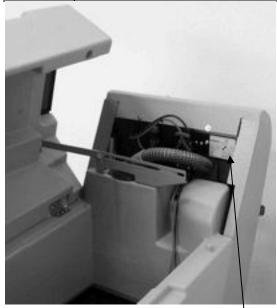
The machine must be used only for this purpose. Even the best machines will only work well if used correctly and kept in good working order. We therefore suggest you read this instruction booklet carefully and read it again whenever difficulties arise while using the machine. If necessary, remember that 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.

#### Serial number plate



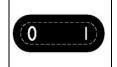




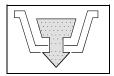
TECHNICAL DESCRIPTION	UM	Omnia 26	Omnia 32	Omnia 42
Rated power	W	-	-	-
Working width	mm	660	830	1040
Width of rear squeegee	mm	1015	1115	1315
Work capacity, up to	m²/h	2640	3320	4160
Brushes (diameter and quantity)	Ø mm	345 / 2	430 / 2	533 / 2
Brush rotations	giri/min.	220	210	170
Pressure on the brushes	Kg	80	80	80
Maximum specific pressure on the brushes	g/cm <sup>2</sup>	61	36	29
Brush motor	V/W	36/1250	36/1250	36/1250
Type of advance		aut.	aut.	aut.
Traction motor	V/W	36/300	36/450	36/450
Maximum gradient	%	10	10	10
Forward speed	km/h	0 ÷ 4	0 ÷ 4	0 ÷ 4
Suction motor	V/W	36/670	36/670	36/670
Suction vacuum	mbar	190	190	190
Solution tank PE	1	75	105	105
Recovery tank PE	I	85	115	115
Machine net weight	Kg	205	240	290
Gross weight of the machine ready for use	Kg	600	630	680
Batteries (Voltage / Maximum capacity )	V / AhC5	36/270	36/270	36/270
Maximum weight of batteries	Kg	315	315	315
Battery compartment dimensions (Length / Height / Width)	mm	1600x1120x700	1650x1120x850	1750x1120x760
Machine dimensions (Length / Height / Width)	mm	436x510x614	436x510x614	436x510x614
Noise level (in compliance with IEC 704/1)	dB (A)	<70	<70	<70
Vibration level	m/s <sup>2</sup>	1.72	1.72	1.72



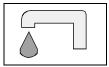
# SYMBOLS USED ON THE MACHINE



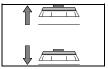
Indicates the general switch



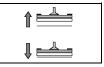
Indicates the exhaust pipe of the recovery tank



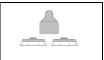
Symbol denoting cock Indicates the cock lever Indicates the solenoid valve switch



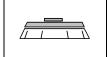
Symbol denoting up-down brushes base Indicates the lever of the brushes base lifting



Symbol denoting up - down of the squeegee Indicates the squeegee lever



Symbol denoting the brushes pressure



Symbol denoting brush Indicates the switch of the brushes control



Symbol denoting suction motor Indicates the suction motor switch



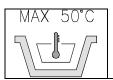
Symbol denoting charge level of the batteries



Symbol denoting brake It is used on top of the emergency and parking brake lever



Symbol denoting brake It is used to indicate the signal lamp of the hand brake



Indication of the maximum temperature of the solution detergent Placed near the charging hole of the solution tank



# SYMBOLS USED ON THE MACHINE



Symbol denoting the coupling Indicates the anchor points and the load direction



Symbol recycling Indicates the actuation control of the solution recycling system (optional)



#### **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 battery charger cable must have a prescribed earth connection.
- Avoid damaging the battery charger 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 a COMAC service centre immediately
- If you notice any damage to the battery charger cable, contact a COMAC S.p.A. technical assistance 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 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%.
- 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.
- Do not knock against shelving or scaffolding, where there is a danger of falling objects.
- If the machine is used where there is a risk of falling objects, the machine must be equipped with protections against falling objects.
- 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, request the intervention of a COMAC S.p.A. technical assistance centre.
- If you need to replace any components, request the ORIGINAL spare parts from a COMAC S.p.A. dealer and/or Authorised Retailer.
- For all maintenance interventions, switch off the machine and disconnect the battery connector or the power supply cable.
- 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 with pressurised water, nor with corrosive substances.
- Send the machine to a COMAC S.p.A. technical assistance centre for servicing at least once a year.
- To prevent the formation of scale 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 Manual.
- When disposing of consumption materials, observe the laws and regulations in force.
- When your COMAC S.P.A. machine has reached the end of its long working life, dispose of the materials it contains 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. The use of other brushes could compromise safety levels.
- The device must be disconnected from the power supply before removing the battery.
- The battery must be removed from the device before this is disposed of.
- The battery and battery charger must be disposed of in a safe manner, scrupulously respecting the laws in force.
- 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.
- The machine must be used mainly in closed environments, and never left outside, in damp areas.
- Check all covers and tanks are correctly fixed on the machine.
- The elements of the batteries used must have a cell voltage no greater than 2.7V.
- Whenever the machine is not being used, apply the emergency brake and remove the ignition key.



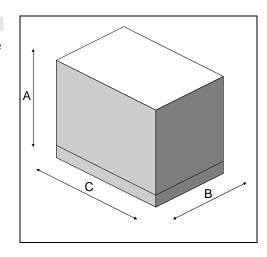
#### 1. HANDLING OF THE PACKED MACHINE

The machine is packed in a specific package provided on a pallet for the handling with fork trucks. The packages cannot be placed on top of each other. The total weight is:

- 1. 277 kg per la OMNIA26
- 2. 312 kg per la OMNIA32
- 3. 327 kg per la OMNIA42

The overall dimensions are:

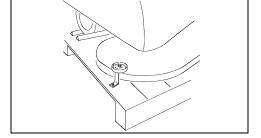
	OMNIA
Α	1260mm
В	1000mm
С	1740mm



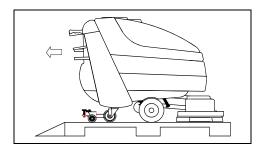
#### 2. HOW TO UNPACK THE MACHINE

- 1. Take off the outer package
- 2. The machine is fixed on the pallet with metallic brackets
- 3. Take off these brackets and possible wedges which block the wheels

**Note** Remember to reset the fastenings removed to take off the brackets



- 4. Using a chute, get the machine down from the pallet, pushing it in reverse motion. Avoid violent blows to the base
- 5. Keep the pallet and the fixing brackets for eventual transport necessities



# 3. CABLE CONNECTION TRACTION MOTOR

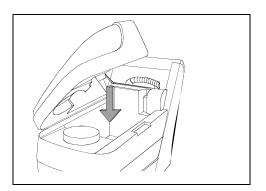
A technician of the Comac service dept. must carry out this operation.

# 4. INSTALLATION OF THE BATTERIES INTO THE MACHINE

The batteries are fitted in the appropriate compartment under the solution tank and must be handled by using appropriate lifting equipment suitable both for the weight and for the coupler system. They must moreover satisfy the requirements quoted in the Specification CEI 21-5. **Dimensions of the battery compartment**: 436 x 614 x H510 mm



**ATTTENTION!** For maintenance and daily recharge of the batteries, it is necessary to follow strictly all the indications given from the constructor or from his dealer. Specialized staff must carry out all the installation and maintenance operations.



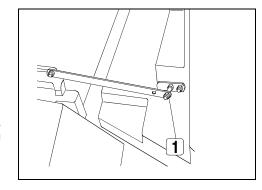


For the battery installation it is necessary to:

- 1. Make sure that the solution tank is completely empty
- 2. Lift the solution tank completely
- 3. Move the coupler prop onto the outermost hole (1) maintaining the tank in a vertical position
- 4. After the installation of the batteries hook up again the prop into its original position

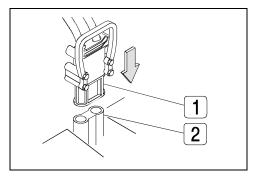


**ATTTENTION!** In order to avoid irreparable damages to the solution tank and/or to the recovery tank, keep the solution tank lifted in vertical position when the prop is being uncoupled from its support.



# 5. CONNECTION OF THE BATTERY CONNECTOR

The battery connector (2) is placed under the solution tank and has to be connected to the connector of the machine (1).



#### 6. CONNECTION OF THE BATTERY CHARGER

The coupling connector of the battery charger is delivered in the bag where this instruction booklet is found and must be assembled on the battery charger cables following the suitable instructions

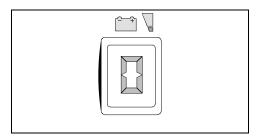


**ATTENTION!** This operation has to be carried out by specialized staff. A wrong or incomplete cable connection to the connector can cause serious damages to persons or things

#### 7. RECHARGE OF THE BATTERIES

In order not to cause permanent damages to the batteries, one should at all costs avoid their complete discharge and effect recharging within a few minutes after that the signal lamp of discharged batteries begins to blink.

<u>Note</u> Never leave the batteries completely discharged, even if the machine is not being used. When recharging the batteries, keep the solution tank open and blocked with its prop (the solution tank has to be emptied previously). Every 20 recharging operations, check the level of the electrolyte and, if necessary, top up with distilled water.





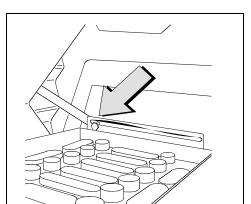
**ATTENTION!** For the daily recharge of the batteries, it is necessary to follow strictly all the indications given from the constructor or from his dealer. Specialized staff must carry out all the installation and maintenance operations.



ATTENTION! Danger of gas exhalations and emission of corrosive liquids



ATTENTION! Fire danger: do not approach with free flames





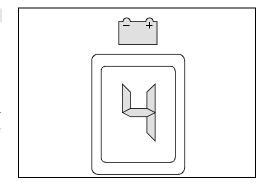
#### 8. LEVEL INDICATOR FOR THE CHARGE OF THE BATTERIES

The batteries' indicator is digital with 4 fixed positions and a blinking one. The numbers, which appear on the display, show the approximate charge level.

 $\mathbf{4}=$  maximum charge,  $\mathbf{3}=$  charge 3/4,  $\mathbf{2}=$  charge 2/4,  $\mathbf{1}=$  charge 1/4,  $\mathbf{0}=$  (blinking) discharged batteries



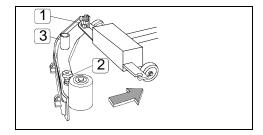
**ATTENTION!** Some seconds after that "0" blinks, the brushes motor automatically switches off. Anyway, the machine can finish to dry before recharging the batteries.



#### 9. SQUEEGEE ASSEMBLY

The floor-wiper is supplied separately, dismantled from the machine, for packing reasons. It must be installed as illustrated, first threading left pin (1) of the floor-wiper into the left slot on the arm and then right pin (2) into the right slot, being careful to keep the spring and the washer above the arm's flat bar. This can be simplified by first loosening the handwheel on the pin. Then retighten the handwheel to clamp the floor-wiper into position.

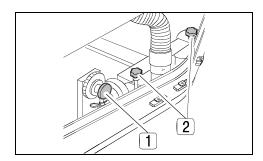
Now insert the floor-wiper tube into its specific fitting sleeve (3).



#### 10. SQUEEGEE ADJUSTMENT

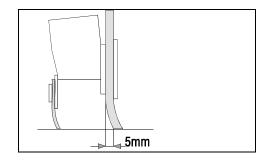
During operation the rear rubber must be slightly and uniformly bent back about 5 mm along its entire length.

If it is necessary to increase curvature of the rubber in the central section then the wiper's body must be inclined backwards by rotating adjustment unit (1) counter-clockwise. To increase curvature of the rubber on the sides of the floor-wiper rotate adjustment unit (1) clockwise.



The floor-wiper must be adjusted in height depending on rubber wear. Adjust height by rotating knob (2) clockwise (tightening) to lift the floor-wiper and counter-clockwise (loosening) to lower it.

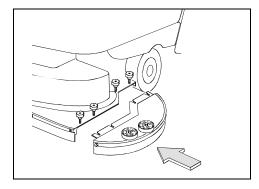
**Note:** The right and left wheels must be adjusted equally so that the floor-wiper works perfectly parallel with the floor.



#### 11. COVER ASSEMBLY OMNIA 42

The covers of the brushes base of Omnia 42 are packed separately from the machine. Before the assembling operations are carried out, make sure that the battery connector has been uncoupled. Then, proceed as follows:

- 1. Loosen the knobs on the brushes base
- 2. Insert the cover as shown in the figure
- Tighten the knobs

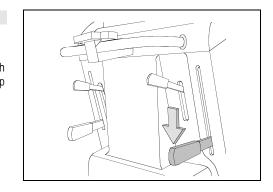




# 12. ASSEMBLY ROTATING BRUSHES

1. Push downwards the control lever to lift the brushes base

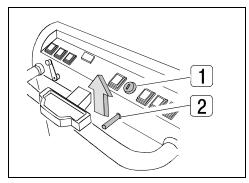
Note In case of machines with automatic control (machines with actuator) rotate the switch with key into position ON (1) and push the lever button (2) upwards so much until the signal lamp of the up-down brushes base is coming off.



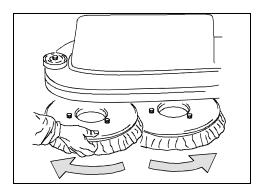
2. Turn the key into position OFF and take it off from the instrument board (1)



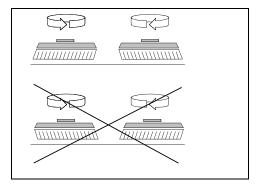
**ATTENTION!** To carry out the operations of brushes assembly with connected current can cause serious damage to the hands



3. With the brushes base in lifted position, insert the brushes into the seat of the plate under the base until the three buttons fit into the holes of the plate. Turn the brush so that the buttons are pushed towards their retaining springs until the brush is clamped in place. The figure shows the direction of rotation for the coupling of the brushes.



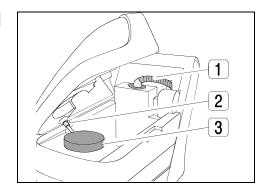
It is recommended to invert daily the position of the right brush with the left one and vice versa. If the brushes are not new and they show deformed bristles, it is better to reassemble them in the same position, in order to avoid that the different inclination of the bristles causes an overload to the brushes motor and excessive vibrations.



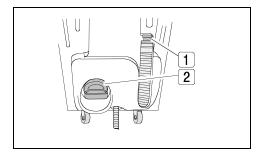


# 13. TANKS

- 1. Check that the solution tank is empty, then lift it until the blocking prop is coupled. Check the correct position of the suction hose in its seat (1), that the solution hose is firmly fixed to the proper connector (2) and that the upper plug is closed (3).
- 2. Release the prop and lower the solution tank



3. Check that the rear plug (1) and the exhaust one (2) of the recovery tank are closed.

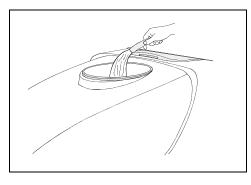


# 14. SOLUTION WATER

1. Fill the solution tank with clean water at a temperature not more than 50°C and add liquid detergent in the proper concentration following the instructions of the manufacturer. Excess foam in the recovery tank could damage the suction motor, so use only the minimum amount of detergent necessary.



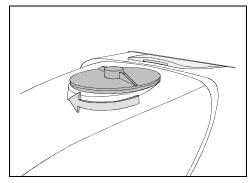
**ATTENTION!** Always use low foam detergent. To avoid the production of foam, before starting to clean, put a minimum quantity of antifoam liquid into the recovery tank.



2. Retighten the plug of the solution tank.



ATTENTION! Do absolutely not use pure acid.

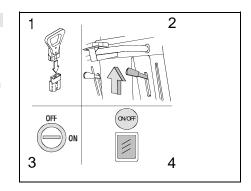




#### WORK

# 1. PREPARING TO WORK

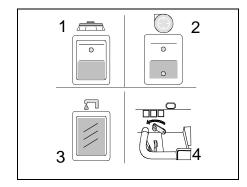
- 1. Carry out the operations for the preparation of the machine
- 2. Connect the connector to the batteries (1)
- 3. Check that the parking brake is released (2)
- 4. Turn the key of the general switch (3) clockwise of a quarter turn. Immediately, the general green signal lamp comes on (4) and the digital display indicates the charge level of the batteries



- 5. Press the brushes motor switch (1)
- 6. Press the suction motor switch (2)

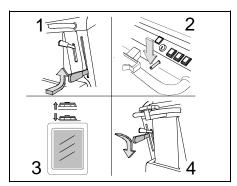
Note The machines with automatic version have the functioning of the suction motor only during forward motion

- 7. Press the solenoid valve switch (3) (only in the automatic versions)
- 8. Adjust the amount of detergent solution through the cock lever (4)



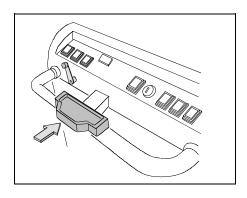
- Push forward and lift the control lever to lower the brushes base and to adjust its pressure onto the floor (1). In case of machines with actuator, lower the lever button (2) until the yellow lamp comes off (3)
- 10. Lower the squeegee acting upon the lever (4)

Note For the automatic versions see further on in the paragraph "SQUEEGEE AUTOMATIC MANUAL"



11. Pushing forward the lever on the handle bar, the machine begins to move. During the first metres of operating, check that the brushes pressure is suitable (see further on under "BRUSHES PRESSURE"), that the quantity of the detergent solution is sufficient and that the squeegee dries perfectly.

The machine will now start working efficiently until the detergent solution runs out.

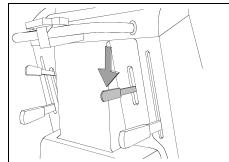




#### WORK



**ATTENTION!** Whenever problems during operating occur, lower promptly the lever of the emergency brake placed on the rear right side of the machine. This command will block immediately the traction of the machine. To restart the machine again, press the releasing trigger and lift the lever of the emergency brake; then push forward the lever on the handle bar.



#### 2. SQUEEGEE AUTOMATIC-MANUAL

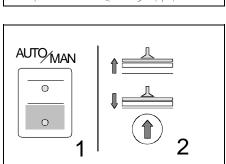
The machines with automatic version have the possibility to control electrically the squeegee movement. Depending on the position of the switch (1) the following functioning systems are activated.

Automatic If the switch is placed on automatic, lowering of the squeegee and starting of the suction

motor are obtained with the machine advancement. Also, lifting of the squeegee and stopping of the suction motor are achieved with the reverse motion of the machine.

Manual If the switch is placed on manual, the squeegee lifts and lowers itself manually through the commutator (2). The operation of the suction motor is commanded anyhow through the

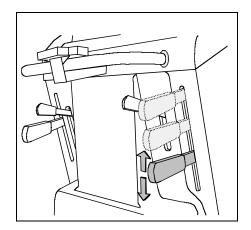
squeegee.



#### 3. BRUSHES PRESSURE MANUAL

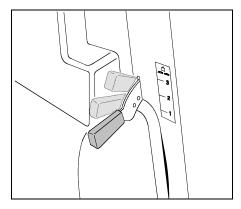
Brushes pressure can be adjusted through the lever shown in the figure. There are three predetermined positions. Major is the pressure when the lever is in the highest position.

The pressure must be chosen based upon the type of floor and the type of dirt. Excessive pressure causes higher brushes wear and major energy consumption.



#### 4. BRUSHES PRESSURE WITH AUTOMATIC CONTROL

n case of machines equipped with automatic control (machines with actuator), the lever for the adjustment of the brushes pressure allows four different levels. Also in this case, major is the pressure onto the brushes when the lever is in its highest position.





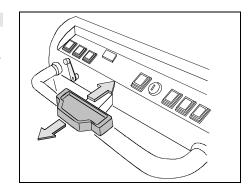
#### WORK

#### 5. TRACTION

These machines are equipped with electronically commanded traction, and continuous speed variation. To move the machine, rotate the key into position ON, wait for three seconds and then push forwards (forward movement) or backwards (rear movement) the lever placed on the handle bar. For safety reasons, in reverse motion, the speed movement is reduced.



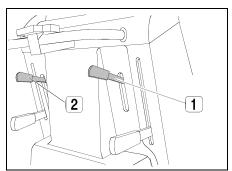
**ATTENTION!** When carrying out even short backward movements, make sure that the squeegee is lifted.



# 6. BRAKES

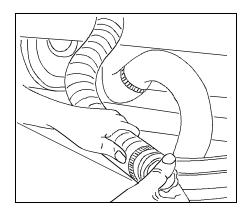
The machine is equipped with two braking systems: a working brake controlled by the lever on the rear left side (2) and a parking and emergency brake controlled by the lever placed on the rear right side (1). Lower the levers to operate the brakes.

The lever of the emergency brake is equipped with a blocking device. To release this brake, press the trigger placed on the lever (1) itself.



# 7. DEVICE TOO FULL

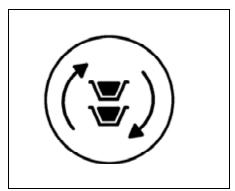
The machine is equipped with a float, which intervenes when the recovery tank is full. Its intervention causes the closing of the suction hose. In this case, it is necessary to proceed with the emptying of the recovery tank taking off the plug of the exhaust hose.



# 8. RECYCLING OF THE CLEANING SOLUTION

If the machine is equipped with a recycling system of the cleaning solution, for its use refer to the instructions given with the device. In any case, it is necessary to pay attention to the following recommendations:

- 1. the use of the recycling system must be limited to the cleaning of environments not excessively dirty
- 2. avoid absolutely to treat environments not homogeneous for use and typology of dirt or anyhow separated between each other
- 3. normally, the treated surface does not have to exceed twice as much of the one treated without recycling
- remember that the detergent efficacy progressively gets exhausted and it is absolutely not recommended to make additions in the dirty solution
- 5. clean thoroughly the filters and the tanks at the end of the work





#### AT THE END OF THE WORK

# 1. AT THE END OF THE WORK

Having finished the job and before any type of maintenance is done, it is necessary to:

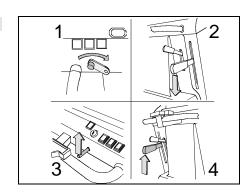
- 1. Close the water cock (1)
- 2. Lift the brushes base through the suitable lever if the machine is equipped with manual control (2) or through the lever button, should the machine be equipped with the automatic control (3)

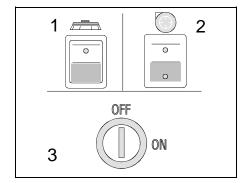
Note In case of machines with automatic control act upon the lever button (3) until the signal lamp of the up-down brushes base is coming off.

3. Lift the squeegee (4). The squeegee has to be lifted when the machine is not operating. In this way damage to the squeegee rubbers is avoided

Note In case of automatic versions, put the switch into the "MAN" position, in order to avoid that it is being lowered during transfer

- 4. Switch off the brushes motor switch (1)
- 5. Switch off the suction motor switch (2)
- 6. Bring the machine up to the place provided for the water outlet
- 7. Turn the key into position OFF (3)
- 8. Insert the parking brake

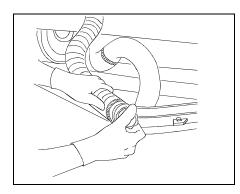




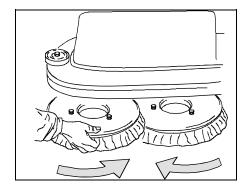
9. Take off the exhaust pipe from its seat, unscrew the exhaust plug and empty the recovery tank.



**ATTENTION!** This operation has to be carried out using gloves to protect from contact with dangerous solutions



- 10. Take off the brushes and clean them with a water jet (for the brushes disassembly please read further on under "DISASSEMBLY OF THE ROTATING BRUSHES")
- 11. Clean the squeegee with a water jet.



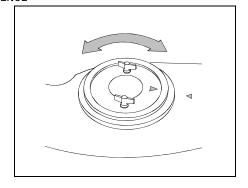


# **DAILY MAINTENANCE**

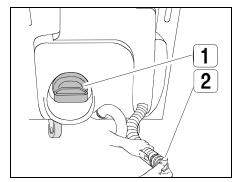
# PERFORM ALL MAINTENANCE OPERATIONS IN SEQUENCE

# 1. CLEANING OF THE RECOVERY TANK

- 1. Empty the recovery tank completely
- 2. Empty the solution tank completely and lift it up to its vertical position blocking it through the suitable prop
- 3. Unscrew the wing nuts of the recovery tank cover, rotate it of 90° and take it off



- 4. Take off the rear plug of the recovery tank (1)
- 5. Take off the exhaust hose from its seat and unscrew the plug (2)
- 6. Clean the inside of the recovery tank with a water jet
- 7. Reassemble everything repeating inversely above-mentioned operations

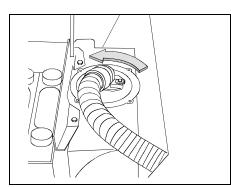


# 2. CLEANING OF THE RECOVERY TANK FILTER

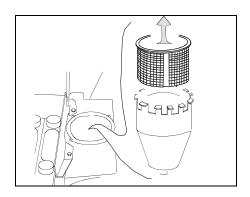
- Empty the solution tank completely and lift it up to its vertical position blocking it through the suitable prop
- 2. Unscrew the filter cover rotating it counterclockwise



ATTENTION! Do not let in water into the hose connected to the filter cover



- 3. Extract the filter body from its housing and rinse it thoroughly
- 4. Reassemble everything repeating inversely above-mentioned operations

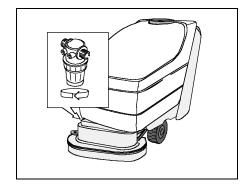




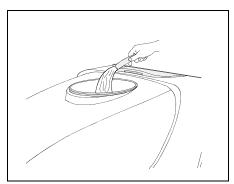
# **DAILY MAINTENANCE**

# 3. CLEANING OF THE SOLUTION TANK FILTER

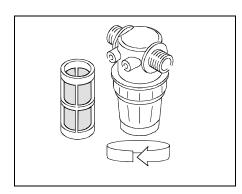
- 1. Open the cock of the water
- Empty the solution tank completely
   Unscrew the filter placed under the front right side of the machine



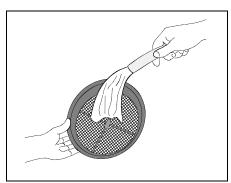
- 4. Take off the plug of the water inlet of the solution tank and the filter underneath5. Clean the inside of the solution tank with a water jet (the water temperature does not have to exceed 50°C)



6. Extract the cartridge from the filter and clean it with a water jet



- 7. Clean the filter of the solution tank plug
- 8. Reassemble everything repeating inversely above-mentioned operations





# **DAILY MAINTENANCE**

# 4. CLEANING OF THE SQUEEGEE

In order to have the best drying results, check that the squeegee is always clean. To clean the squeegee:

- 1. Lift the squeegee through the suitable lever
- 2. Clean accurately the inside of the squeegee with a water jet
- 3. Clean accurately the squeegee rubbers with a water jet
- 4. Check the rubber wear and if necessary, turn them upside-down or change them

**Note** The careful cleaning of the complete suction group assures higher life of the suction motor.

# 5. DISASSEMBLY OF THE ROTATING BRUSHES

1. Lift the brushes base acting upon the suitable handle

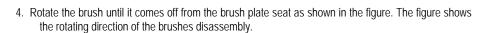
<u>Note</u> In case of machines with automatic control (machines with actuator), lift the brushes base acting upon the suitable lever button.

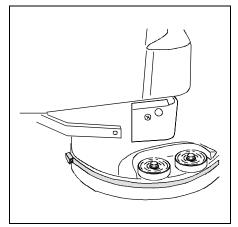
2. Rotate the key into position OFF and take if off from the switch

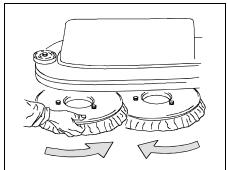


**ATTENTION!** To carry out the operations of the rotary brushes' disassembly with connected current can cause serious damages to the hands.









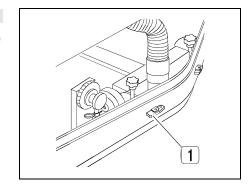


#### WEEKLY MAINTENANCE

# 1. REPLACEMENT REAR SQUEEGEE RUBBER

If the rear squeegee rubber is worn and does not dry well, it is possible to change the drying edge proceeding as follows:

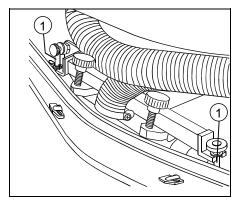
- 1. Push and rotate the fixing plates (1)
- 2. Slip off the rubber blade and the rubber itself
- 3. Turn the rubber upside-down and if necessary, replace it
- 4. Reassemble everything repeating inversely above operations
- 5. Adjust the squeegee height depending on the rubber (see under "SQUEEGEE ADJUSTMENT")



#### 2. REPLACEMENT FRONT SQUEEGEE RUBBER

Aspiration is poor and the machine will not dry perfectly if the front floor-wiper rubber is worn. Proceed as follows to replace:

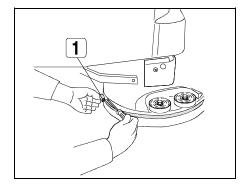
- 1. Detach the floor-wiper from the machine (1)
- 2. Loosen the screws that clamp the front rubber
- 3. Pull out the rubber-pressing blade
- 4. Pull out and replace the rubber
- 5. Reassemble by repeating these procedures in reverse order



# 3. REPLACEMENT SPLASH GUARD BRUSHES BASE

Check the condition of the splash guards brushes base. If necessary, to replace them, proceed as follows:

- 1. Loosen the screws (1) which fix the metallic blades
- 2. Take off the splash guard and replace it
- 3. Reassemble everything repeating inversely above operations

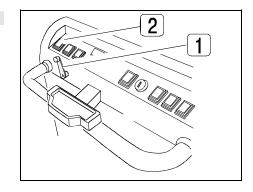




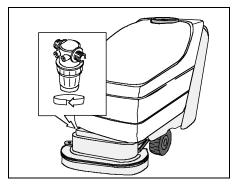
# **TROUBLESHOOTING**

#### 1. INSUFFICIENT WATER ONTO THE BRUSHES

- 1. Make sure that the cock is open (1). In this case the signal lamp must be on (2)
- 2. Make sure that there is water in the solution tank
- 3. In the machines with automatic version check that the solenoid valve switch is on



4. Clean the solution filter



# 2. THE MACHINE DOES NOT CLEAN SATISFACTORILY

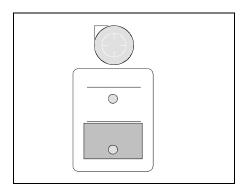
- Check the condition of the brushes and replace them, if necessary. The brushes have to be changed when the bristles reach around 15mm. To work with worn brushes can cause floor damages
- 2. Check that the brushes pressure is sufficient (see under "BRUSHES PRESSURE")
- 3. Use a different kind of brushes to the ones fitted as standard. For cleaning operations on floors where the dirt proves to be particularly resistant, we recommend using special brushes which may be supplied optionally according to needs (see under "CHOICE AND USE OF BRUSHES")

# 3. THE SQUEEGEE DOES NOT DRY PERFECTLY

- 1. Check that the squeegee is clean
- 2. Check the squeegee adjustments (see under "MACHINE PREPARATION")
- 3. Clean the whole suction group (see under "DAILY MAINTENANCE")
- 4. Replace the rubbers, if worn (see under "WEEKLY MAINTENANCE")

# 4. THE SUCTION MOTOR DOES NOT FUNCTION

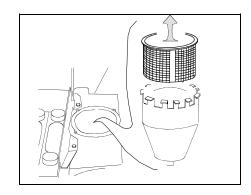
- 1. Check that the signal lamp of the suction motor switch is on
- 2. Check whether the recovery tank is full; eventually empty it
- 3. In the automatic versions, the suction motor works only when the squeegee is lowered. Check that the selector is on the "AUTO" position and move forward of some metres.





# CONTROLLO DI FUNZIONAMENTO

4. Check the perfect float condition of the recovery tank filter (see under "CLEANING OF THE RECOVERY TANK FILTER")



# 5. EXCESSIVE FOAM PRODUCTION

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

Remember that, when the floor is not very dirty, more foam is generated. In this case dilute more the

detergent.



# **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:

- brushes
- filter
- electric and electronic parts\*
- batteries
- plastic parts (tanks and handlebars)
- metal parts (levers and frame)

(\*) In particular, to scrap the electric and electronic parts, contact your area distributor.



#### 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.

#### ABRASIVE BRUSH

The bristles of this type of brush are charged with highly aggressive abrasives. It is used to clean very dirty floors. To avoid floor damage, work only with the pressure strictly necessary.

#### THICKNESS OF THE BRISTLES

Thicker bristles are more rigid and are therefore used on smooth floors or floors with small joints.

On uneven floors or those with deep joints, it is advisable to use softer bristles which can enter the gaps more easily.

Remember that when the bristles are worn and therefore too short, they will become rigid and are no longer able to penetrate and clean deep down. In this case, like with overlarge bristles, the brush tends to jump.

#### PAD HOLDER

The pad holder is recommended for cleaning shiny surfaces.

There are two types of pad holder:

- 1. the traditional pad holder is fitted with a series of anchor points that allow the abrasive floor pad to be held and dragged while working
- 2. the CENTRE LOCK type pad holder not only has anchor points, but also a snap-type central locking system in plastic that allows the abrasive floor pad to be perfectly centred and held without any risk of it becoming detached. This type of dragging device is recommended above all for machines with more than one brush, where the centring of the abrasive discs is difficult

# TABLE FOR CHOOSING THE BRUSHES

Machine	No. of	Code	Type of bristles	Ø Bristles	Ø Brush	Length	Notes
		405590	PPL	0.3	0.3 0.6 0.9 345 1 0.6 + 0.3	-	BLUE
		405591	PPL	0.6			WHITE
OMNIA 26	2	405592	PPL	0.9			BLACK
		405593	ABRASIVA	1			
		405594	PPL + ACCIAIO	0.6 + 0.3			
		405562	PPL	0.3	0.3 0.6 0.9 1 0.6 + 0.3	-	BLUE
		405563	PPL	0.6			WHITE
OMNIA 32	2	405564	PPL	0.9			BLACK
		405565	ABRASIVA	1			
		405566	PPL + ACCIAIO	0.6 + 0.3			
		404633	PPL	0.9	533	-	
		404634	PPL	0.6			
OMNIA 42	2	404635	PPL	0.3			
		404636	ABRASIVA	1			
		404637	NYLON	0.9			

#### PAD HOLDER SELECTION TABLE

Machine	No. of	Code	Description	Ø Pad	Height	Center	Notes
OMNIA 26	2	405521	DISCO TRASCINATORE	335	-	-	-
OMNIA 32	2	421819	DISCO TRASCINATORE	430	-	-	-
OMNIA 42	2	405517	DISCO TRASCINATORE	510	-		-



