MANUAL USE AND MAINTENANCE



ULTRA 85BS

ED. 01-2010 EN



The contained descriptions in the present publication are not binding. The company therefore reserves itself the right to bring in whatever moment possible organs changes, details or supplies of accessories, that it holds convenient for an improvement, or for any demand of constructive or commercial character.

The partial reproduction of the texts and diagrammes contained in the present catalog, is forbidden by law.

The company reserves itself the right to bring changes of technical character and/or of endowment. The images are meant of pure reference and not binding in terms of design and endowment.

Symbols used in the manual



Symbol of the book open with letter i It points out that this document is a manual of instructions.



Symbol of the open book

It points out to the operator to read the manual of use before using the machine.



Symbol of warning Read attentively the sections preceded by this symbol for the safety of the operator and the machine

CONTENTS

ON CONSIGNMENT OF THE MACHINE	4
SERIAL NUMBER PLATE	- ۸
	 ۸
	 ج
	00
2. HOW TO UNPACK THE MACHINE	
4. CONNECTING THE BATTERY CONNECTOR	12
	13
8 SOUFEGEE	14
9 ADJUSTING THE SQUEEGEE SUPPORT HEIGHT	13
10. ASSEMBLING THE BRUSHES	
11. DETERGENT SOLUTION	
12. RECOVERY TANK	
WORK	
CHECKING THE BRUSH MOTOR	
BRUSH PRESSURE	
TRACTION	
AUTOMATIC-MANUAL SQUEEGEE	
BRAKES	
HORN	
LIGHTS	20
AT THE END OF THE WORK	21
DAILY MAINTENANCE	24
CLEANING THE HOPPER	24
CLEANING THE RECOVERY TANK	
CLEANING THE SUCTION FILTER COVER	
CLEANING THE SOLUTION TANK AND EILTED	
AD ILISTING THE SOLUTION TAINS AND FILTER	20 26
	20 ວ໑
THE MACHINE DOES NOT CLEAN WELL	20 28
THE SOUFFGEE DOES NOT DRY PERFECTLY	20 28
THE SUCTION MOTOR DOES NOT FUNCTION	29
THE MACHINE DOES NOT START	29
EXCESSIVE FOAM PRODUCTION	
CHOOSING AND USING THE BRUSHES	
EC DECLARATION OF CONFORMITY	31

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

This is a floor scrubber-dryer 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.

Serial number plate



0

TECHNICAL DESCRIPTION		ULTRA 85BS
Working width	910	
Lateral movement of base	mm	100
Work capacity	sq.m/h	5500
Cylindrical brushes (2)	Ø xl mm	210x867
Cylindrical brushes rpm	rpm	630
Pressure on cylindrical brushes	kg	max 80
Maximum specific pressure	Grs/sq.cm	70
Cylindrical brush motors	W	2x1300
Cylindrical brush motor	V	36
Traction motor	W	1500
Traction motor	V	36
Traction wheel	Ømm	300
Movement speed	km/h	0÷6.5
Maximum gradient with full load		10%
Suction motor	V	36
Suction motor	W	670
Suction vacuum	mbar	190
Rear elastic wheels	Ømm	370x105
Solution tank	I	200
Recovery tank	I	215
Steering diameter	mm	2500
Machine length	mm	2030
Machine height	mm	1560
Machine width (with side bars)	mm	1060
Batteries	V/Ah	max 36/360
Battery weight	kg	max 430
Machine weight (empty and without batteries)	kg	630
Noise level (in compliance with IEC 704/1)	dB (A)	62.6
Hand vibration level	m/s ²	2.99
Body vibration level	m/s ²	0.96



SYMBOLS USED ON THE MACHINE



Symbol denoting solenoid valve open Used on the instrument panel, to indicate the solenoid valve switch



Symbol denoting solution tank empty Used on the instrument panel, for the red indicator light showing a low level of water in the solution tank



Symbol denoting brush base rise/fall Used on the instrument panel, for the yellow indicator light showing the brush command jack is working



Symbol denoting brushes Used on the instrument panel, to indicate the brush motor switch



Symbol denoting suction motor Used on the instrument panel, to indicate the suction motor switch



Symbol denoting battery charging



Symbol denoting charge level of batteries Used on the instrument panel, to indicate the charge level (from 1 to 4) of the batteries



Symbol denoting brake Used on the instrument panel, for the indicator light showing the handbrake is on



Symbol denoting brake Used on the instrument panel, for the indicator light showing the absence of oil in the work braking system



SYMBOLS USED ON THE MACHINE



Symbol denoting brush lever Used on the instrument panel, to indicate the lever of the brush base. Longitudinal movements are accompanied by vertical movements of the base.



Symbol denoting squeegee rise/fall Used on the instrument panel, to indicate the squeegee rise/fall lever



Symbol denoting squeegee fully down Used on the instrument panel, for the green indicator light showing the squeegee is on the floor



Symbol denoting ammetric check of the brush motor Used on the instrument panel, for the red indicator light showing the brush motor is under stress



Symbol denoting pressure applied to the brushes Used on the instrument panel, to indicate the switch to increase the pressure on the brushes



Symbol denoting tap regulation Used on the central panel of the steering cover, to indicate the tap lever to regulate the water



Symbol denoting forwards and backwards speed selector Used on the instrument panel, to indicate the speed of the forwards or backwards movements of the machine



Symbol denoting acoustic alarm Used on the instrument panel, to indicate the acoustic alarm button



Symbol denoting lights Used on the instrument panel, to indicate the lights switch



SYMBOLS USED ON THE MACHINE



Symbol denoting automatic or manual work mode Used on the instrument panel, to indicate the switch for operating the squeegee in automatic or manual mode



Symbol denoting forwards and backwards direction lever Used on the instrument panel, to indicate the machine direction lever



Symbol denoting on or off Used on the instrument panel, to indicate the key switch for machine operation on (I) or off (O)



Symbol denoting incorrect functioning Used on the instrument panel, for the red indicator light showing incorrect machine functioning



Symbol denoting detergent Used on the detergent tank cap, to indicate the presence of chemical substances



Symbol denoting regulation of quantity of water and detergent (optional) Used on the left-hand panel, to indicate the knobs for adjusting the percentage level of detergent dissolved in the water, and the level of water distributed on the brushes



SYMBOLS USED IN THE MANUAL



Indicates the disposal methods Respect the regulations



Indicates danger of gas exhalation and leakage of corrosive liquids



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



GENERAL SAFETY REGULATIONS

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

- ρ Read the labels on the machine carefully. Do not cover them for any reason and replace them immediately if they become damaged
- ρ The machine must be used exclusively by authorised, trained personnel
- ρ During the working of the machine, pay attention to other people and especially to children
- ρ The machine is not suitable for cleaning carpets
- ρ Do not mix different types of detergent as this may produce harmful gases
- ρ Do not place any liquid containers on the machine
- ρ The storage temperature must be between -25°C and +55°C; do not store outdoors in damp conditions
- ρ Conditions of use: room temperature between 0°C and 40°C with relative humidity between 30 and 95%
- ρ $\;$ Do not use the machine in an explosive atmosphere
- ρ $\;$ Do not use the machine as a means of transport
- ρ $\,$ Do not use acid solutions, which may damage the machine
- ρ $\;$ Avoid working with the brushes when the machine is standing still, so as not to damage the floor $\;$
- ρ Do not vacuum inflammable liquids
- ρ Do not use the machine to collect dangerous powders
- ρ $\$ In the event of a fire, use a powder extinguisher. Do not use water
- ρ Do not knock against shelving or scaffolding, where there is a danger of falling objects
- ρ Do not use the machine on surfaces with an inclination greater than the one shown on the plate
- ρ Adapt the speed to the adhesion conditions
- ρ Do not exceed the gradient limit as this could cause conditions of instability
- ρ When the machine is in parking mode, remove the key and insert the parking brake
- ρ 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
- ρ If the machine does not work properly, check this is not caused by failure to carry out routine maintenance. Otherwise, request the intervention of the COMAC technical service
- ρ If you need to replace any components, request the ORIGINAL spare parts from a COMAC dealer and/or Authorised Retailer
- ρ In the event of danger, activate the emergency lever (connector placed on the left side of the operator) immediately
- ρ Before carrying out any maintenance work, switch off the machine and disconnect the battery connector
- ρ Do not remove any protection devices which require the use of tools in order to be removed
- ρ Do not wash the machine with direct water jets or with pressurised water, nor with corrosive substances
- ρ After every 200 hours of operation, have the machine checked by a COMAC assistance centre
- ρ Before using the machine, check that all the hatches and covers are positioned as shown in this Use and Maintenance Manual
- ρ When disposing of consumption materials, observe the laws and regulations in force
- ρ The machine should not be abandoned, due to the presence of toxic-harmful materials (batteries, oil etc.) subject to regulations which provide for their scrapping in the appropriate centres
- ρ The machine does not cause harmful vibrations
- ρ When your COMAC machine has reached the end of its long working life, dispose of the materials it contains (especially oils and electronic components), and bearing in mind that the machine itself was constructed using 100% recyclable materials
- ρ Only use the brushes supplied with the device, or those specified in the Use and Maintenance Manual (page 29). The use of other brushes could compromise safety levels
- ρ $\;$ The batteries must be removed from the machine before its disposal
- ρ The batteries must be disposed of in a safe manner, fully observing the laws and regulations in force
- ρ 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
- ρ Children must be supervised to ensure they do not play with the device

1. HANDLING THE PACKED MACHINE

The machine is contained in specific packaging with a pallet for the handling with fork trucks. The packages cannot be placed on top of each other.

The total weight is 630 kg

The overall dimensions of the package are:

ULTRA 85BS

- A: 1760 mm
- **B**: 1335 mm
- **C**: 2135 mm



2. HOW TO UNPACK THE MACHINE

- 1. Remove the outer packaging
- 2. The machine is fixed to the pallet with wedges which block the wheels
- 3. Remove these wedges



- 4. Use a chute to get the machine down from the pallet, pushing it backwards. Avoid violent blows to the base
- 5. Keep the pallet for any future transport needs



During this operation, check there are no people or objects near the machine



3. FITTING THE BATTERIES INTO THE MACHINE

The batteries must be housed in the special compartment beneath the operator's seat. They should be handled using lifting equipment that is suitable in terms of both weight and hook-up system.

They must also satisfy the requirements of Standard CEI 21-5.

For battery maintenance and daily recharging, you must fully respect the indications provided by the manufacturer or retailer. All installation and maintenance operations must be carried out by specialised personnel.

There are two ways to insert the batteries in their compartment:

the first is to raise the seat base support until the seat is resting against the steering wheel, then insert the batteries from above, positioning the first one near the side of the tank. If there are battery-holder cases, insert them from above and position them next to each other in the compartment

The second way of positioning the batteries is to remove both the detergent tank and the metal cover, then insert the batteries (or the battery-holder cases) from the side of the machine

4. CONNECTING THE BATTERY CONNECTOR

The battery connector (1) is placed in the lower left section (in relation to the operator), and must be connected to the machine connector (2).



This process must be carried out by qualified personnel. The incorrect or imperfect connection of the cables to the connector can cause serious harm to people and damage to objects.









5. CONNECTING THE BATTERY CHARGER

The connector is placed in the lower left section (in relation to the operator). The lower part (1), connected to the batteries, must be inserted in the upper connector (2), fixed to the cables of the battery charger. The coupling connector is consigned inside the bag containing this instruction booklet, and must be assembled on the cables of the battery charger as indicated in the instructions (see the battery charger manual).



6. RECHARGING THE BATTERIES

In order not to cause permanent damage to the batteries it is essential to avoid their complete discharge: arrange the recharge within a few minutes of the switching on of the flashing "discharged batteries" signal.

NOTE: never leave the batteries completely discharged, even if the machine is not being used. When recharging the batteries, keep the seat base support raised. After every 20 recharging operations, check the level of the electrolyte and, if necessary, top up with distilled water.



Danger of exhalation of gas and leakage of corrosive liquids.



Danger of fire: do not go near with free flames



7. BATTERY CHARGE LEVEL INDICATOR

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

4 = maximum charge, 3 = 3/4 charge, 2 = 2/4 charge, 1 = 1/4 charge,**0** = discharged batteries (flashing)



A few seconds after the appearance of the flashing "0", the brush motor will switch off automatically. With the remaining charge it is possible to complete the drying process before starting the recharge.



8. SQUEEGEE

For packaging reasons, the squeegee may be supplied disassembled. It must be assembled as shown in the figure, tightening the small columns (1) on the threaded pins of the squeegee, in the special housings on the squeegee support

Insert the suction tube in the squeegee sleeve and fix it with the special clamp (2)

During working operation, the rear rubber is slightly tilted backwards (by about 5mm) in a uniform way for its whole length.

If it is necessary to increase the bend of the rubber in the central part, you must tilt the squeegee backwards, loosening the locknut (1) and rotating the tie-rod (2) anticlockwise. To increase the bend of the rubber at the sides of the squeegee, loosen the locknut (1) and rotate the tie-rod (2) clockwise. When fully adjusted, fix the locknut.

ADJUSTING THE SQUEEGEE HEIGHT 9.

The height of the squeegee must be adjusted on the basis of the state of wear and tear of the rubber. Proceed as follows:

- 1. loosen the ring nut (1)
- 2. use a CH17 spanner to turn the pivoting wheel, via the nut (2), clockwise to lift the squeegee and anticlockwise to lower it
- 3. fix the ring nut (1)

NOTE: the left and right pivoting wheels must be adjusted to the same height















10. ASSEMBLING THE BRUSHES

- 1. Connect the battery connector
- 2. Turn the key to the ON position
- 3. Use the lever to raise the base
- 4. Turn the key to the OFF position and remove it from the panel (carrying out the brush assembly operation with the power supply connected may cause injuries to the hands)





- 5. With the base up, release the side bar from its support
- 6. Loosen the knob (1) and take out the movable brush support plate (2)



This operation must be carried out using gloves to protect your hands

8. Check the inclination of the bristles on the front cylindrical brush (3) and the rear brush (4)

7. Insert the brush in the tunnel until it is placed on the driving hub

- 9. Insert the idle hub of the movable plate in the brush
- 10. Hook the plate to the tunnel and tighten the knob
- 11. Repeat the process for the other movable plate

11. DETERGENT SOLUTION

Fill the solution tank with clean water at a temperature no greater than 50°C and add liquid detergent in the proper concentration, following the instructions of the manufacturer. The formation of excess foam could damage the suction motor, so use only the minimum amount of detergent necessary.



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. **Never use pure acid.**



12. RECOVERY TANK

Check the drainage cap of the tank is tightened

Check the cap of the drainage tube is inserted, with the knob well tightened (1)





- 1. Carry out the operations to prepare the machine
- 2. Sit on the driver's seat
- Check the parking brake is released (1) 3.
- 4. Connect the battery connector (2)

5. Turn the key of the main switch to I (3). The red indicator light (3) of the motor will immediately begin to flash on the instrument panel, and the battery display (4) will switch on. The flashing light indicates that the brush motor is being checked

- 6. Place the switch on automatic mode (5)
- 7. Press the suction motor switch (6)

- 8. Press the brush motor switch (7)
- 9. Press the solenoid valve switch (8)











- 10. Position the selector on forwards (9)
- 11. Select the advance speed by turning the knob
- 12. Turn the lever (10) clockwise to turn on the tap. The water indicator light only switches on during the advance phase

13. Position the brush lever downwards (1) to lower the base. During the descent, the indicator lights of the jack and the brush motor will switch on. The brush base will be in its working position when the yellow indicator light (2) switches off.

14. Press the accelerator pedal. The machine will begin to move, the squeegee will lower and the suction motor will switch on.

During the first metres of operation, check the brush pressure is suitable (see "BRUSH PRESSURE" below), the quantity of detergent solution is sufficient, and that the squeegee dries perfectly.

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

If problems occur while working, immediately disconnect the emergency lever (1) situated on the left side of the operator and apply the emergency brake (2). These commands block all moving machine parts. To start the machine again, once the problem has been solved, turn off the key (3), reconnect the connector (1), switch on the key (3) and lower the parking brake lever (2).

The machine will not start if the operator is not properly seated.

When the solution tank is empty, the indicator light on the instrument panel switches on.

When the recovery tank is full, the suction motor stops. To start it up again, even if the tank has been emptied, it is necessary to turn the main switch key off and on again.









CHECKING THE BRUSH MOTOR

The brush motor is checked electronically. If it reaches established overload limits, the red indicator light (1) on the instrument panel starts to flash. After a few seconds the motor stops and the indicator light of the brush switch goes off. To start up the motor again, turn the main switch key (2) off and on again. If the motor stops again, check the reason of the overload in order to prevent damage to the motor. Check whether the switch to increase the pressure on the brushes is activated and, if this is the case, turn it off (4).

BRUSH PRESSURE

It is possible to increase the pressure on the brushes via the switch (1) on the instrument panel to the operator's right.

The pressure must be chosen according to the type of floor and the extent of the dirt. A pressure increase causes greater wear and tear of the brushes and higher energy consumption (for further information, read "CHOOSING AND USING THE BRUSHES")

TRACTION

These machines are equipped with electronically commanded traction, with three speeds forwards and one backwards. To move the machine, it is necessary to turn the key and then move the lever (1) forwards (forward movement) or backwards (rear movement). Press the drive pedal and the machine will start to move. The movement speed can be adjusted by rotating the selector (2).



ATTENTION: during the backwards movement, if the switch to operate the squeegee in manual-automatic mode (1) is in the manual position, remember to raise the squeegee by means of the selector switch (2). During transfer, put the switch onto manual









AUTOMATIC - MANUAL SQUEEGEE

Automatic: if the switch is placed on automatic, the squeegee lowers and the suction motor starts up when the machine moves forwards. In the same way, the squeegee rises and the suction motor stops when the machine moves backwards.

Manual: if the switch is placed on manual, the squeegee has to be lifted and lowered manually by means of the switch (2). Suction motor operation is commanded in both cases by the movement of the squeegee.



1

2

BRAKES

To brake, press the service brake pedal (1) with your right foot. If this brake is working badly, or if necessary (interruption, danger), activate the parking brake (2).



When the parking brake is activated, the red indicator light on the instrument panel switches on

HORN

The machine is equipped with a horn switch. To sound the horn, press the button (1) on the instrument panel on the operator's right.





LIGHTS

The machine is fitted with one rear work light and two front work lights. To activate them, press the switch (1).

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 tap
- 2. raise the base
- 3. switch off the brush motor switch
- 4. switch off the solenoid valve switch

- 5. position the squeegee switch on manual mode
- 6. raise the squeegee
- 7. switch off the suction motor switch
- 8. bring the machine to the place provided for draining the water
- 9. make a 1/4 turn of the key, anticlockwise

10. Disconnect the exhaust pipe from its hook, unscrew the exhaust plug and empty the recovery tank. To simplify the draining operation, you are advised to keep the tube bent with one hand and, with the other, unscrew the knob and remove the plug. Slowly straighten the tube and the liquid will start draining at the desired speed.



This operation must be carried out using gloves to protect against contact with dangerous solutions.

- 11. The squeegee must be raised when the machine is not operating, to avoid deforming the rubber blades.
- 12. Disassemble the brushes and clean them with a jet of water (to disassemble the brushes, see "DISASSEMBLING THE BRUSHES" below).









DAILY MAINTENANCE

CLEANING THE HOPPER

1. Remove the pin of the right-hand side bar, and turn the bar outwards (1)





2. Release the pin of the hopper (2)



This operation must be carried out using gloves to protect against contact with dangerous solutions

- 3. Remove the hopper, remembering to clean the filter (3)
- 4. Reassemble everything, carrying out the above-mentioned operations in the reverse order

DAILY MAINTENANCE

CLEANING THE RECOVERY TANK

- 5. Empty the tank by means of the flexible tube, turning the knob a couple of times to loosen it and then removing the cap (1)
- 6. To empty the tank quickly, loosen and remove the side plug (2)



This operation must be carried out using gloves to protect against contact with dangerous solutions

- 7. Open the hinge that fixes the tanks (3)
- 8. Pull the tank slowly backwards until the blocking chain is taut (4)



1

3

2

4





CLEANING THE SUCTION FILTER COVER

1. Open the suction cover as indicated in the points above

Open the hinge that fixes the suction cover (5)

Reposition the side plug and the plug on the exhaust pipe

Rinse the tank and clean the drainage tube

2. Remove the conical cover protecting the filter (1) by loosening the fixing screws (2)

Open the cover by rotating it forwards until it is resting against the tank (6)

To close the suction cover and the tank, carry out the operations in the reverse

3. Remove the filter

order

9.

10.

11.

12.

13.

4. Wash it thoroughly then reposition it

CLEANING THE SQUEEGEE

1. Raise the squeegee by pressing the command lever forwards (1)

- 2. Remove the suction tube from the squeegee sleeve (2)
- 3. Remove the pins from the left and right squeegee bars (3)
- 4. Loosen the small fixing columns (4)
- 5. Rinse with running water and remove any impurities that may impede good drying/suction
- 6. After cleaning, assemble the squeegee by carrying out the disassembly operations in the reverse order



If the 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
- 2. remove the rubber-pressing blade and the rubber itself
- 3. turn the rubber upside-down and, if necessary, replace it
- 4. adjust the squeegee height as indicated in "ADJUSTING THE SQUEEGEE SUPPORT HEIGHT" in the chapter "MACHINE PREPARATION"

Reassemble everything, carrying out the above-mentioned operations in the reverse order

DISASSEMBLING THE BRUSHES

- 1. Connect the battery connector if it is not already connected
- 2. Turn the key to the ON position
- 3. Use the lever to raise the base

Turn the key to the OFF position and remove it from the panel (carrying out the brush disassembly operation with the power supply connected may cause injuries to the hands)









DAILY MAINTENANCE

- 12. With the base up, release the side bar from its support13. Loose the knob (1) and take out the movable brush support plate (2) 14. Check the state of wear and tear of the bristles of the cylindrical brushes
- 15. To reassemble the brushes, carry out the above-mentioned operations in the reverse order



This operation must be carried out using gloves to protect your hands



WEEKLY MAINTENANCE

CLEANING THE SUCTION TUBE

Whenever suction seems to be unsatisfactory, check that the suction tube is not obstructed. If necessary, clean it with a water jet introduced from the side where it is connected to the tank. Proceed as follows:

- 1. remove the suction tube from the curved sleeve of the recovery tank (1)
- 2. disconnect the clamp (2) and remove the suction tube from the squeegee suction sleeve
- 3. clean the inside of the tube with a jet of water
- 5. reassemble everything, carrying out the above-mentioned operations in the reverse order



CLEANING THE SOLUTION TANK AND FILTER

With the solution tank empty:

- 1. turn off the water tap
- 2. unscrew the filter and rinse the inside thoroughly
- 3. remove the cartridge and clean it
- 4. reassemble everything, repeating the above-mentioned operations in
- the reverse order
- 5. turn on the water tap

Note: the filter can also be cleaned when the solution tank is full. Just remember to turn off the tap



7. Rinse the tank with a water jet





WEEKLY MAINTENANCE

ADJUSTING THE SIDE BARS

4. Remove the retaining clip (1)5. Remove the side bar (2)

6. Adjust the height of the supporting nut (3)

7. Put the side bar and the retaining clip back in position

Bear in mind that the side bar must be parallel to the floor. These adjustments must be made on both side bars.

It is necessary to adjust the height of the side bars at regular intervals. This operation must be carried out with the base lowered.

- 1. Loosen the knob (1)
- 2. Tighten the register (2) to raise the side bar, or loosen it (2) to lower the side bar
- 3. When the adjustment has been completed, fix the knob (1)





27

TROUBLESHOOTING

INSUFFICIENT WATER ON THE BRUSHES

- 1. Check the tap is turned on
- 2. Check the solenoid valve switch is on
- 3. Check there is water in the solution tank ("RESERVE" indicator light off)

4. Clean the solution filter





THE MACHINE DOES NOT CLEAN WELL

- 1. Check the state of wear and tear of the brushes and, if necessary, replace them (the brushes must be replaced when the bristles are about 15mm long).
- Check the brush pressure is sufficient and, if necessary, increase it (see "BRUSH PRESSURE" in the chapter "WORK")
- 3. Use a different kind of brush to the one fitted as standard. For cleaning floors where the dirt is particularly resistant, we recommend the use of special brushes supplied upon request and according to needs (see "CHOOSING AND USING THE BRUSHES").

THE SQUEEGEE DOES NOT DRY PERFECTLY

- 1. Check the squeegee is clean
- 2. Adjust the height of the squeegee support (see "MACHINE PREPARATION")
- 3. Clean the entire suction unit (see "WEEKLY MAINTENANCE")
- 4. Replace the rubbers, if worn

TROUBLESHOOTING

THE SUCTION MOTOR DOES NOT FUNCTION

- 1. Check the suction motor switch is on
- 2. Check whether the recovery tank is full and, if necessary, empty it

- Check the float switch is working correctly. With the recovery tank empty, the mobile float must be disconnected from the upper contact (see also "CLEANING THE RECOVERY TANK FILTER" in the chapter "DAILY MAINTENANCE")
- 4. To reactivate the suction functioning, following the intervention of the float switch, turn the key switch off and then on again







THE MACHINE DOES NOT START

Check the key switch is on

2.

3.

1. The operator must be properly seated in the driving position

Check the parking brake lever is fully lowered

4. Check the connector is connected to the batteries

EXCESSIVE FOAM PRDUCTION

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.

NYLON BRUSH

Used on all types of floors. Excellent resistance to wear and tear, and hot water (even over 60°C). The nylon is hygroscopic and so tends to lose its characteristics over time 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 over-large bristles, the brush tends to jump.

TABLE FOR CHOOSING THE BRUSHES

Machine	No. of brushes	Code	Type of bristles	Ø Bristles	Ø Brush.	Notes
ULTRA 85BS	2	404628 404629 404630 404631 404632	PPL PPL PPL ABRASIVE MIXED ABRASIVE	0.7 0.8 1.0 1.0 1.0+0.6	210 210 210 210 210 210	WHITE BRISTLES YELLOW BRISTLES BLACK BRISTLES GREY BRISTLES GREY BRISTLES



EC DECLARATION OF CONFORMITY

The undersigned company: **COMAC S.p.A.** Via Ca' Nova Zampieri no. 5 37057 San Giovanni Lupatoto (VR), Italy Declares under its sole responsibility that the

FLOOR SCRUBBER-DRYER mod. ULTRA 85BS

complies with the requirements of the following Directives:

- 2006/42/EC: Machinery Directive
- 2004/108/EC: Electromagnetic Compatibility Directive and subsequent modifications.

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: Machine safety Fundamental concepts, fundamental principles of design Part 1: Basic terminology and methodology
- EN 12100-2: Machine safety Fundamental concepts, fundamental principles of design Part 2: Technical principles
- EN 61000-6-3: Electromagnetic compatibility (EMC) Part 6-3: Generic standards Standard emission for residential, commercial and light-industrial environments
- EN 61000-6-1: Electromagnetic compatibility (EMC) Part 6-1: Generic standards Immunity for residential, commercial and light-industrial environments
- EN 62233: Household and similar electrical appliances Electromagnetic fields Methods for evaluation and measurement

San Giovanni Lupatoto, 15/01/2010

COMAC S.p.A.

Legal representative Granca lo Ruffo

COMAC spa Via Cà Nova Zampieri, 5 – 37057 San Giovanni Lupatoto – Verona – ITALY Tel. +39 045 8774222 – Fax +39 045 8750303 – E-mail: <u>com@comac.it</u> or <u>info@comac.it</u> - <u>www.comac.it</u>