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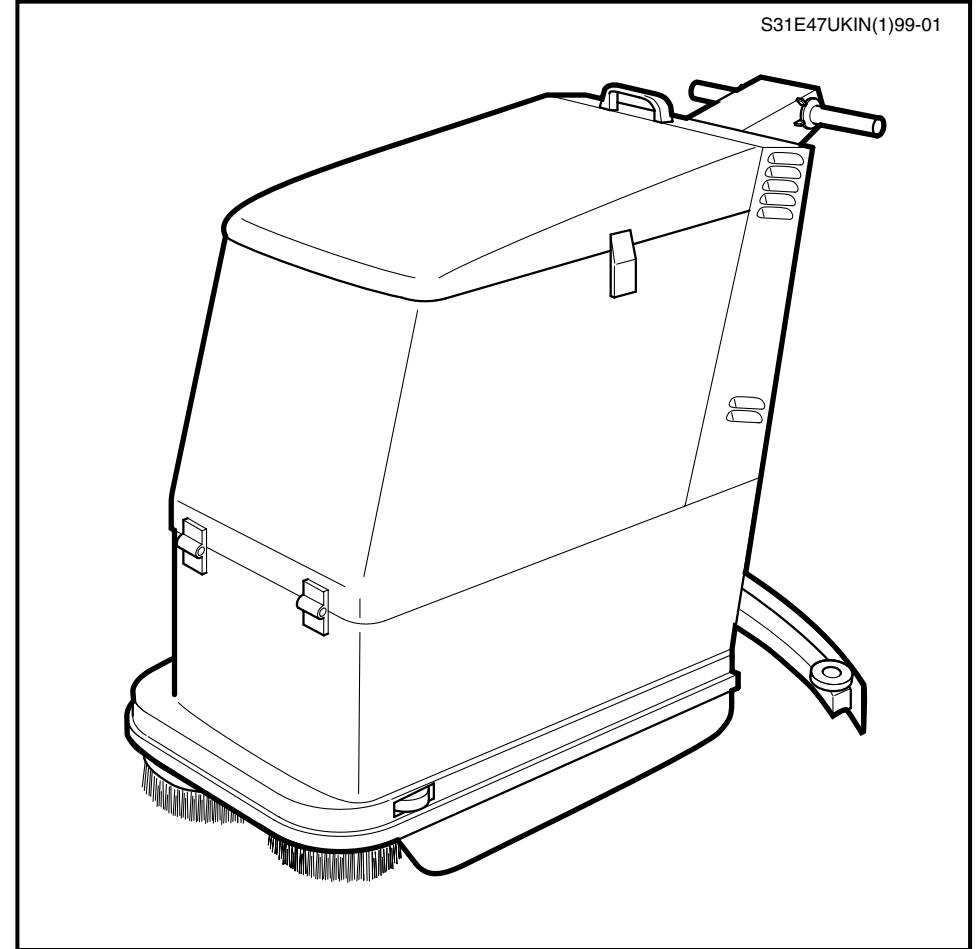
S31E47UKIN(1)99-01

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 **Electrolux**  
**EUROCLEAN**  
*by Nilfisk-Advance*

**MANUAL**

S31E47UKIN(1)99-01

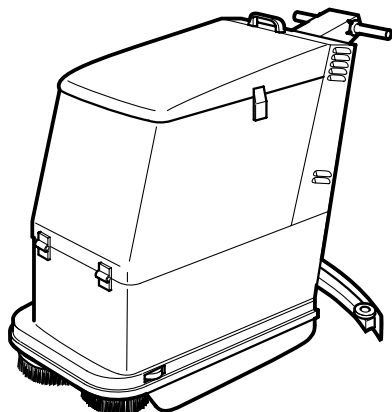


AW 445  
AW 445 T  
AW 455 T  
AW 465  
AW 475

**Operating instruction**



## INDEX

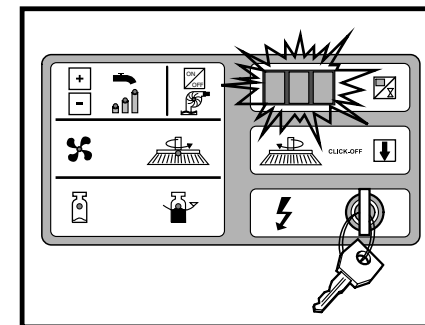


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## SAFETY FEATURES

The multifunction display on the control panel can show some code numbers when the safety devices of the machine are operated.  
The list of the safety code numbers is shown below:



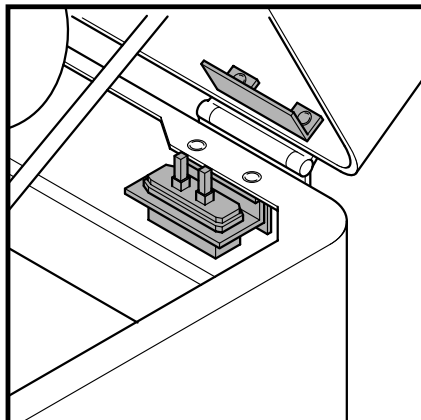
SAFETY CODE-EVENT	MACHINE BEHAVIOUR	POSSIBLE INTERVENTION	NOTES
<b>302:</b> TROUBLE ON THE ELECTRONIC CONTROL OF THE DRIVE FUNCTION.	AUTOMATIC STOP OF THE MACHINE.	BEFORE REPLACING THE POWER ELECTRONIC BOARD: 1-CHECK THE CONTINUITY OF THE CONNECTION CABLES BETWEEN THE POWER ELECTRONIC BOARD AND THE DRIVE MOTOR 2-CHECK THE OPERATION OF THE DRIVE MOTOR AND OF ITS CARBON BRUSHES.	FOR FURTHER DETAILS SEE THE WORKSHOP MANUAL OR CALL THE SERVICE PERSONNEL.
<b>304:</b> OVERTEMPERATURE ON THE POWER ELECTRONIC BOARD.	THE MULTIFUNCTION DISPLAY ON THE CONTROL PANEL IS FLASHING AND THE MACHINE IS STILL WORKING.	IF THE AMBIENT TEMPERATURE IS HIGH (OVER 35°C) THIS COULD BE A NORMAL CONDITION. OTHERWISE CHECK THAT THE ROTATION OF THE DRIVE MOTOR AND/OR OF THE BRUSH MOTOR(S) IS FREE. IT COULD BE USEFULL TO REDUCE THE PRESSURE OF THE BRUSH(ES) ON THE FLOOR.	
<b>306:</b> OVERTEMPERATURE ON THE POWER ELECTRONIC BOARD.	AUTOMATIC STOP OF ALL THE FUNCTIONS OF THE MACHINE.	TURN-OFF THE KEY AND WAIT FOR THE SELF COOLING OF THE ELECTRONIC BOARD (AT LEAST 20 MINUTES). THEN CHECK THAT THE ROTATION OF THE DRIVE MOTOR AND/OR OF THE BRUSH MOTOR(S) IS FREE. IT COULD BE USEFULL TO REDUCE THE PRESSURE OF THE BRUSH(ES) ON THE FLOOR.	IF THE 306 CODE OCCURS FREQUENTLY CALL THE SERVICE PERSONNEL.
<b>307:</b> WRONG SWITCH-ON SEQUENCE: THE ACCELERATOR THUMB WHEELS WERE OUT OF THE NEUTRAL POSITION WHEN TURNING ON THE KEY.	THE MACHINE IS NOT ABLE TO WORK.	PUT THE ACCELERATOR THUMB WHEELS IN THE NEUTRAL POSITION. IN THE EVENT THAT THE 307 CODE IS STILL FLASHING A CHECK OF THE TWO MICROSWITCHES DEDICATED TO THE FORWARD/REVERSE DRIVE CONTROL MUST BE DONE (CALL THE SERVICE PERSONNEL). CHECK THAT NO INTERFERENCE OCCURS BETWEEN THE HAND GRIPS AND THE THUMB WHEELS.	
<b>308:</b> THE WIRES OF THE POTENTIOMETER ARE CUT.	THE MACHINE IS NOT ABLE TO WORK.	1-CHECK THE CONNECTION CABLES OF THE POTENTIOMETER DEDICATED TO THE SPEED CONTROL. 2- IF THE POTENTIOMETER CONNECTION CABLES ARE GOOD REPLACE THE POTENTIOMETER (CALL THE SERVICE PERSONNEL).	

## SAFETY FEATURES

### For all models:

#### Safety micro switch:

Micro switch to shut off all the functions when the tank unit is in the upright position. (SEMKO APPROVAL).



## INTRODUCTION AND WARNINGS

### INTRODUCTION

This manual is a guide to the efficient use of the machine and also contains practical information concerning the functioning, adjustments and user maintenance of your new scrubber/drier. Your machine has been designed and constructed to ensure maximum performance and ease of operation in a wide variety of applications. Before delivery, the machine has been tested in our factory and by our distributor to ensure that it is delivered to you in perfect condition. To maintain the machine in this condition and guarantee functioning without problems, it is essential that the periodic maintenance operations indicated in this manual are properly carried out. Before using the machine, carefully read this manual and keep it within easy reach for your future reference. Indications of "LEFT" and "RIGHT" are as seen from the operator position. If you should need any further information concerning the machine, please do not hesitate to contact either Electrolux Euroclean or our local distributor.

### GENERAL SAFETY RULES

- The rules below have to be followed carefully in order to avoid damages to the operator and to the machine.
- Read the labels carefully on the machine; Do not cover them for any reason and replace them immediately if damaged.
  - The socket for the power supply must be fitted with a standard earthing (ground) system.
  - With the brushes in working position, avoid touching or passing over the mains cable. Avoid damaging by squashing, bending or stressing.
  - Where there is damage to the mains cable, stop the machine, take off the plug from the mains system, and replace the damaged cable immediately by calling the Electrolux Service department.
  - Do not mix different detergents, avoiding harmful odours.
  - Do not place any liquid containers onto the machine.
  - The storage temperature has to be between +15°C and +55°C.
  - The perfect operating temperature should be between 0° C and 40° C.
  - The humidity should be between 30 and 95%.
  - Do not use the machine in explosive atmosphere.
  - Do not use the machine as a means of transport.
  - Do not use acid solutions which could damage the machine.
  - Avoid working with the brushes when the machine stands still, in order to prevent floor damages.
  - Do not vacuum inflammable liquids.
  - In case of fire, use a powder extinguisher. Do not use water.
  - Do not strike shelvings or scaffoldings, where there is danger of falling objects.
  - Adapt the utilization speed to the adhesion conditions.
  - Do not exceed over the limit gradient stated, to avoid conditions of instability (2% max).
  - The machine has to carry out simultaneously the operations of washing and drying. Different operations have to be carried out in areas which are not permitted for the passage of non employed staff. Signal the areas of moist floors with suitable signs.
  - If the machine does not work properly, check by conducting simple maintenance procedures. Otherwise, it is better to ask for technical service.
  - Where parts are required, ask for ORIGINAL spare parts to an agent and/or to an authorized dealer.
  - For any maintenance operation take off the power supply from the machine.
  - Do not take off the pieces which require the use of tools to be removed.
  - Do not wash the machine with direct water jets or with high water pressure not with corrosive material.
  - Every 200 working hours have a machine check through a service department.
  - The machine should not be abandoned, because of the presence of toxic-harmful materials (batteries, oil etc.). This disposal must be subject to the rules which provide for its scrapping in appropriate centres.
  - The machine does not cause any harmful vibrations.

### MODIFICATIONS AND IMPROVEMENTS

Electrolux Euroclean aim toward continuous improvement of its machines and reserves the right to carry out modifications and improvements whenever necessary without being obliged to update machines which have been sold previously.

### SAFETY

#### You too can avoid accidents.

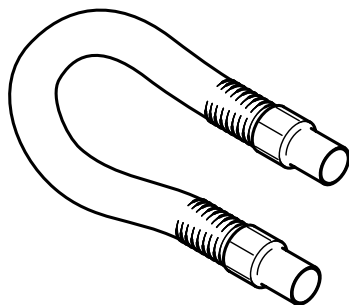
No accident prevention programme is effective without the total co-operation of the person directly responsible for the functioning of the machine. The majority of accidents which may occur either during work or transferring the machine from site to site are caused by the non-observance of the most elementary safety rules. An alert and cautious operator is the best guarantee against accidents and is more effective than any other part of an accident prevention programme.

The machine must be switched off and disconnected from either its battery or mains supply before any servicing or adjustment of operational parts be carried out. Ensure that any assistant is clear of the machine and that covers are closed before switching on.

## UNPACKING

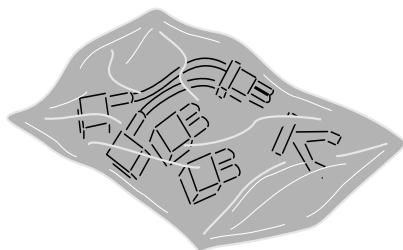
Check that you have received the following parts together with the machine:

**1-** Connecting hose for squeegee

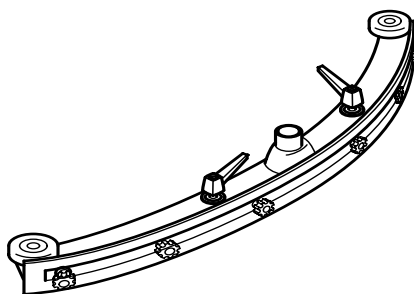


**2-** Plastic bag with cables for connection of batteries

**NOTE:** Not supplied with mains cable versions of models **AW445**, **AW445 T** and **AW455 T**.



**3-** Squeegee



**4-** Documents

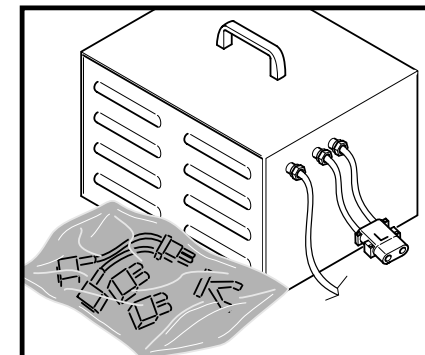


## OPTIONALS

**For models AW445, AW445 T and AW455 T:**

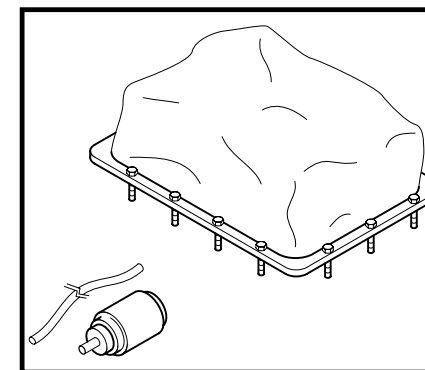
Kit of cables to transform the machine from mains version to battery operated version.

Mains unit (or transformer) to change the machine from the battery operated version to the mains version.



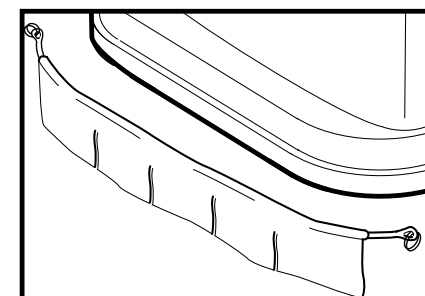
**For all versions of models AW445, AW445 T and AW455 T:**

A kit is available to equip the machine with the membrane; in this case also the water pump must be mounted.



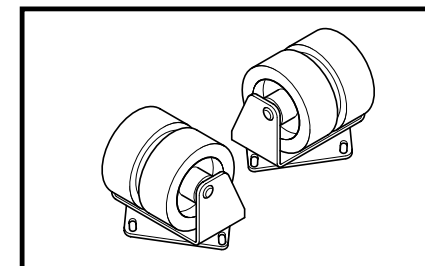
**For all models:**

A front splash guard is also available.



**For all models:**

In order to reduce the pressure of the machine on the floor (according to norm DIN 18032) two rear twin wheels can be mounted.



## OPTIONALS

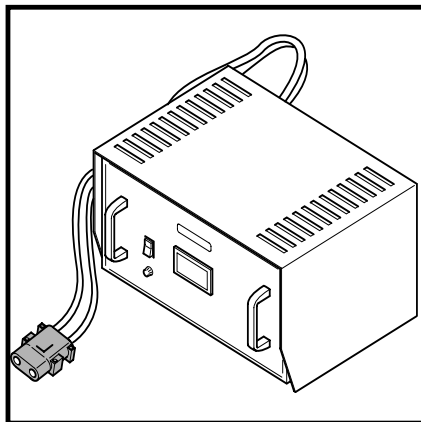
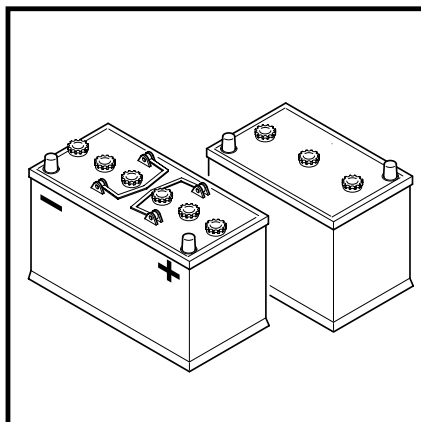
In addition to the normal accessories supplied with the machine the following optionals are available:

Batteries:

- For models **AW465** and **AW475**: four 6 V batteries 240 amp.h wet type.

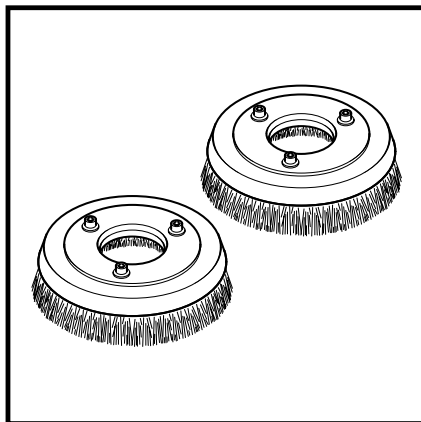
- For models **AW445 T** and **AW455 T**: two 12 V batteries 140 amp.h wet type.

- For model **AW445**: two 12 V batteries 115 amp.h wet type.



Battery chargers:

- For all models: charger for wet batteries  
charger for dry batteries



Different types of brushes and pad holders are available.

Union mix scrub brush  
Polypropylene scrub brush  
Silicon Carbide scrub brush  
Pad holder

For sizes and codes consult the factory.

## TECHNICAL SPECIFICATION

MODELS	AW 445 BATTERY	AW 445 CABLE	AW 445 T BATTERY	AW 445 T CABLE
Voltage	24V	220VAC-24VDC	24V	220VAC-24VDC
Drive motor	-	-	24V-90W	24V-90W
Vacuum motor rating	420W-2 stages	420W-2 stages	420W-2 stages	420W-2 stages
Vacuum depression (mm H <sub>2</sub> O)	1150	1150	1150	1150
Brush motor	24V-250W	24V-250W	24V-250W	24V-250W
Brush	nr. 1x 430mm	nr. 1x 430mm	nr. 1x 430mm	nr. 1x 430mm
Brush speed (scrubbing)	330 RPM	330 RPM	330 RPM	330 RPM
Brush pressure to floor (Kg)	from 9 to 21	from 9 to 21	from 9 to 24	from 9 to 24
Automatic Click OFF/Click ON	yes	yes	yes	yes
Electrovalves	nr. 3 hole diameters: 3.5-4.5-5.5mm	nr. 3 hole diameters: 3.5-4.5-5.5mm	nr. 3 hole diameters: 3.5-4.5-5.5mm	nr. 3 hole diameters: 3.5-4.5-5.5mm
Water pump (optional)	12V-31W-0.9lt/1'	12V-31W-0.9lt/1'	12V-126W- 9lt/1'	12V-126W- 9lt/1'
Water flow (lt/min)	1.3-2.6	1.3-2.6	1.3-2.6	1.3-2.6
Water flow + pump lt/min (opt)	1.9-3	1.9-3	2.8-4.5	2.8-4.5
Max slope	-	-	2 %	2 %
Driving speed F/R (Km/h)	-	-	3/2.25	3/2.25
Working width (mm)	430	430	430	430
Squeegee width (mm)	700	700	700	700
Solution tank capacity (lt)	34	34	34	34
with membrane (optional) (lt)	50	50	50	50
Recovery tank capacity (lt)	35	35	35	35
with membrane (optional) (lt)	51	51	51	51
Suggested batteries (wet)	nr.2 12V-115Ah	-	nr.2 12V-140Ah	-
Suggested batteries (dry)	nr.2 12V-70Ah	-	-	-
Running time (with wet batteries)	about 2h	-	2.8-3h	-
Running time (with dry batteries)	about 1h 30'	-	-	-
Suggested battery charger (for wet battery)	CBN2 20A-24V	-	CBN2 25A-24V	-
Suggested battery charger (for dry battery)	CBS2 20A-24V	-	CBS2 25A-24V	-
Feeder	-	220/240 VAC 50/60HZ	-	220/240 VAC 50/60HZ
Front wheels diameter (mm)	nr.2-150	nr.2-150	nr.2-150	nr.2-150
Rear wheels diameter (mm)	nr.2-80	nr.2-80	nr.2-80	nr.2-80
Middle drive wheel diameter	-	-	nr.1-150	nr.1-150
Width (mm)	460	460	460	460
Length (mm)	1235	1235	1235	1235
Height (mm)	1050	1050	1050	1050
Weigh without batteries (Kg)	81	-	91	-
Total weigh with feeder (Kg)	-	115	-	125

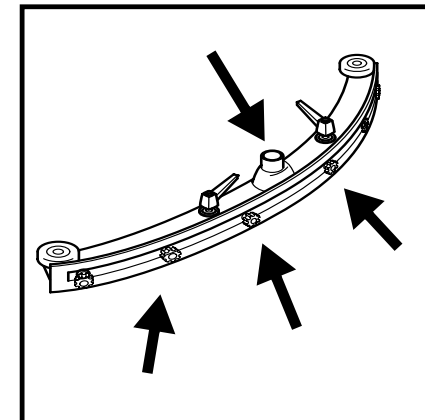
## TECHNICAL SPECIFICATION

MODELS	AW 455 T BATTERY	AW 455 T CABLE
Voltage	24V	220VAC-24VDC
Drive motor	24V-120W	24V-120W
Vacuum motor rating	540W-3 stages	540W-3 stages
Vacuum depression (mm H <sub>2</sub> O)	1700	1700
Brush motor	24V-200W	24V-200W
Brush	nr. 2x 280mm	nr. 2x 280mm
Brush speed (scrubbing)	430 RPM	430 RPM
Brush pressure to floor (Kg)	from 14 to 27	from 14 to 27
Automatic Click OFF/Click ON	yes	yes
Electrovalves	nr. 3 hole diameters: 3.5-4.5-5.5mm	nr. 3 hole diameters: 3.5-4.5-5.5mm
Water pump (optional)	12V-126W-9lt/1'	12V-126W-9lt/1'
Water flow (lt/min)	1.3-2.6	1.3-2.6
Water flow + pump lt/min (opt)	2.8-4.5	2.8-4.5
Driving speed F/R (Km/h)	nr.2-max. 4.5 nr.2-max. 2.5	nr.2-max. 4.5 nr.2-max. 2.5
Parking brake	yes	yes
Working width (mm)	538	538
Max slope	16 %	16 %
Squeegee width (mm)	800	800
Solution tank capacity (lt) →	38	38
with membrane (optional) (lt) →	54	54
Recovery tank capacity (lt) →	39	39
with membrane (optional) (lt) →	55	55
Suggested batteries (wet)	nr.2 12V-140Ah	-
Running time (with wet batteries)	about 2.5h	-
Suggested battery charger (for wet battery)	CBN2 25A-24V	-
Suggested battery charger (for dry battery)	CBS2 25A-24V	-
Feeder	-	220/240VAC-50/60HZ
Front wheels diameter (mm)	nr.2-150	nr.2-150
Rear wheels diameter (mm)	nr.2-80	nr.2-80
Width (mm)	580	580
Length (mm)	1235	1235
Height (mm)	1050	1050
Weigh without batteries (Kg)	108	-
Total weigh with feeder (Kg)	-	142

## MAINTENANCE

Regularly inspect the squeegee for damage or wear to the lips. The lips may be easily replaced by unscrewing the retaining strips; remove the lips, replace with the new ones then screw the cover strips back again to retain them.

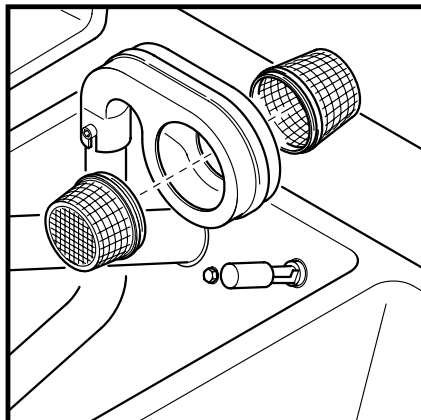
The rear lip can be turned to be used on both upper and lower sides.



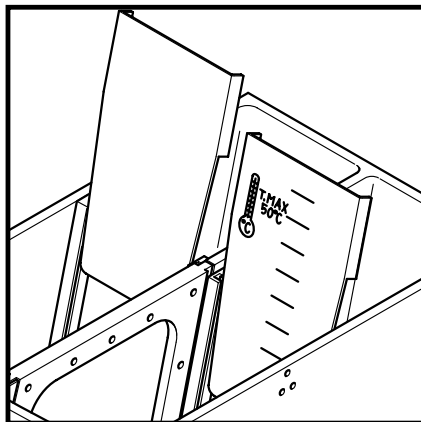
## MAINTENANCE

Periodically remove the filter inside the dirty water tank, scrub it with a stiff brush under running water to remove any accumulated foreign matter.

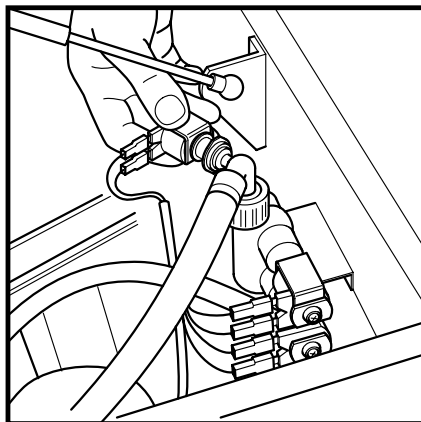
**Note: This operation is very important to prevent the reduction of the suction (drying) capability of the squeegee.**



The plastic baffles can be easily removed for the best cleaning of the tanks.



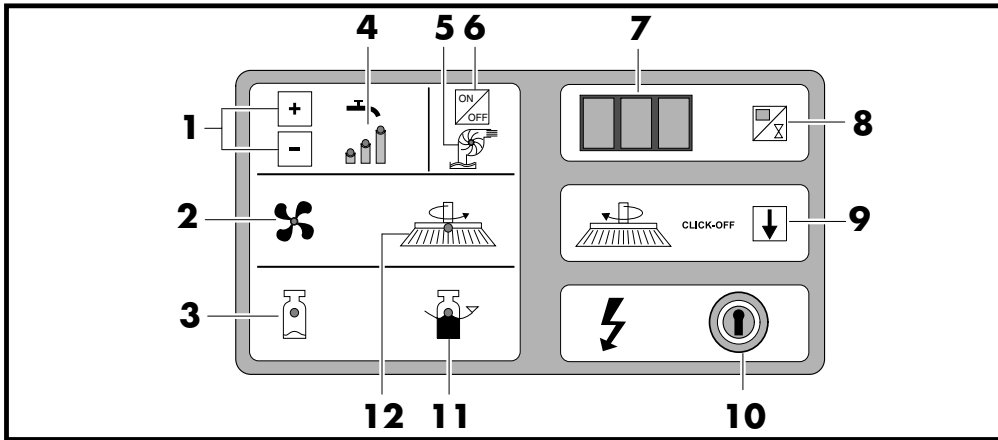
The three solenoid valve bodies may be removed by turning them through 90 degrees and lifting them away to reveal the plunger and seating of each valve. These should be cleaned of scale and of any other foreign matter.



## TECHNICAL SPECIFICATION

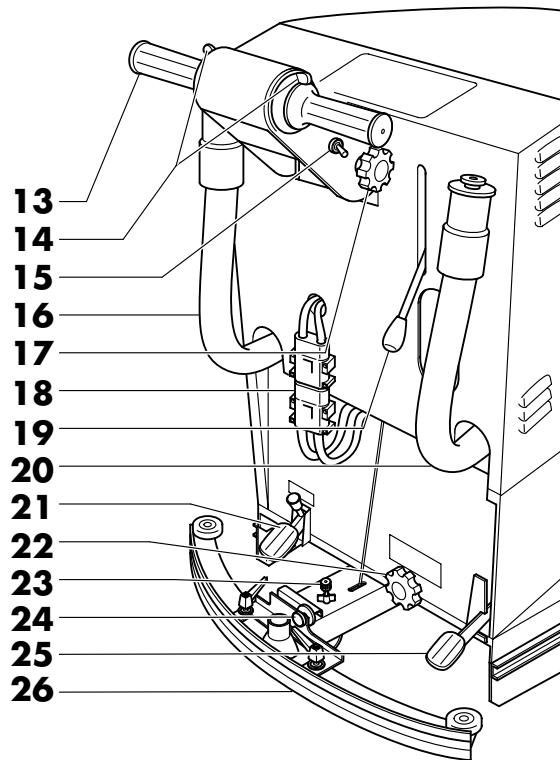
MODELS	AW 465	AW 475
Voltage	24V	24V
Drive motor	24V-200W	24V-200W
Vacuum motor rating	540W-3 stages	540W-3 stages
Vacuum depression (mm H2O)	1700	1700
Brush motor	24V-250W	24V-375W
Brush	nr. 2x320mm	nr. 2x370mm
Brush speed (scrubbing)	270 RPM	180 RPM
Brush pressure to floor (Kg)	from 21 to 36	from 30 to 45
Automatic Click OFF/Click ON	yes	yes
Electrovalves	nr. 3 hole diameters: 3.5-4.5-5.5mm	nr. 3 hole diameters: 3.5-4.5-5.5mm
Water pump	12V-126W-9lt/1'	12V-126W-9lt/1'
Water flow pump OFF (lt/min)	1.3-2.6	1.3-2.6
Water flow pump ON (lt/min)	2.8-4.5	2.8-4.5
Driving speed F/R (Km/h)	nr.2-max. 5.0 nr.2-max. 2.5	nr.2-max. 5.0 nr.2-max. 2.5
Parking brake	yes	yes
Working width (mm)	628	728
Max slope	16 %	16 %
Squeegee width (mm)	920	1010
Solution tank capacity (lt) with membrane	72	72
Recovery tank capacity (lt) with membrane	74	74
Suggested batteries (wet)	nr.4 6V-240Ah	nr.4 6V-240Ah
Running time (with wet batteries)	3h	3h
Suggested battery charger (for wet battery)	CBN2 25A-24V	CBN2 25A-24V
Front wheels diameter (mm)	nr.2-200	nr.2-200
Rear wheels diameter (mm)	nr.2-100	nr.2-100
Width (mm)	685	775
Length (mm)	1330	1330
Height (mm)	1095	1095
Weigth without batteries (Kg)	125	135
Total weigth with batteries (Kg)	257	267

## MACHINE CONTROLS AND MONITORS



- 1- Scrubbing detergent flow adjustment push button
- 2- Suction motor operation indicator
- 3- Scrubbing detergent tank empty indicator warning
- 4- Scrubbing detergent flow monitor
- 5- Scrubbing detergent flow: boost pump monitor
- 6- Scrubbing detergent flow: boost pump on/off push button \*
- 7- Multifunction display
- 8- Push button for selection of runtime or battery voltage
- 9- Brush release push button
- 10- Master key switch
- 11- Recovery tank full warning indicator
- 12- Brush motor operation indicator

- \* - This function is not available on model **AW445** (both battery and cable versions).
- \*\* - This function is not available on models **AW445** and **AW445 T** (both battery and cable versions).



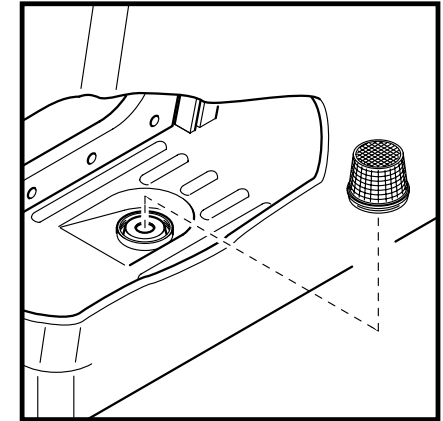
- 13- Handle
- 14- Drive control thumb wheels \*
- 15- Switch for the selection of the speed range \*
- 16- Scrubbing detergent tank emptying hose
- 17- Handle height adjustment locking knob
- 18- Battery cable
- 19- Lever for squeegee lifting/lowering and suction motor switch on/off
- 20- Recovery tank emptying hose
- 21- Brake pedal \*\*
- 22- Brush pressure control knob
- 23- Squeegee pressure control knob
- 24- Squeegee angle control knob
- 25- Pedal for brush lifting/lowering and brush motor switch on/off.
- 26- Squeegee

## MAINTENANCE

**BEFORE ANY MAINTENANCE IS CARRIED OUT THE BATTERY MUST BE UNPLUGGED, OR THE MAINS LEAD UNPLUGGED.**

Periodically remove the filter inside the scrubbing detergent tank; scrub it with a stiff brush under running water to remove any accumulated foreign matter.

**Note:** The filter is mounted by simply pressing it toward the bottom of the tank (no need to screw/unscrew it).

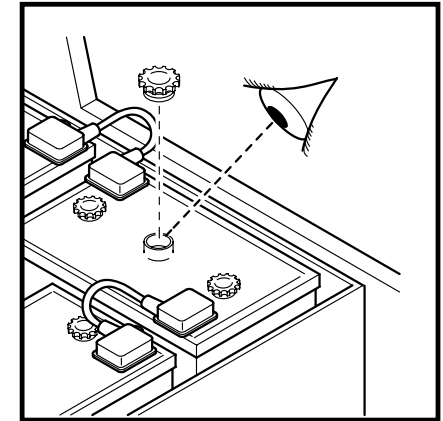


The level of the liquid inside batteries must be checked periodically, and topped up with distilled water if necessary.

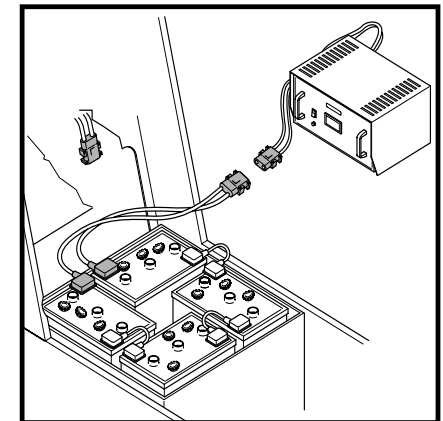
Raise the tank unit, remove caps and check level.



**Special care should be taken when handling battery liquid as it is corrosive. If it should come into contact with skin or eyes, wash abundantly with water and consult a doctor.**



Recharge batteries when necessary with a specific battery charger. If the batteries are of the wet type open all the battery caps before starting the recharge. The recharge must be done in a well ventilated area.





## CLEANING OR REPLACING THE BRUSHES

To replace the brushes (or to clean them) carry out the following sequence of operations:

The machine must be switched on but all functions switched off; it means that the squeegee must be lifted.

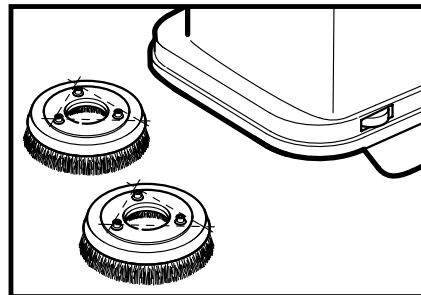
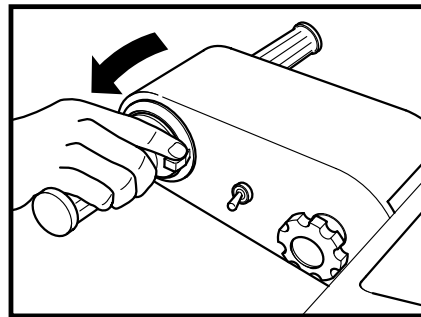
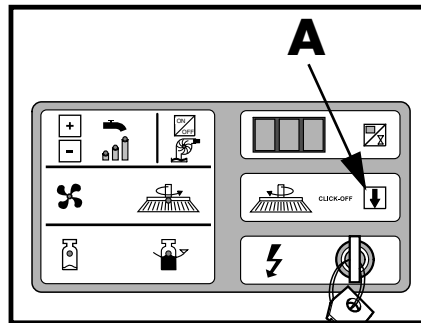
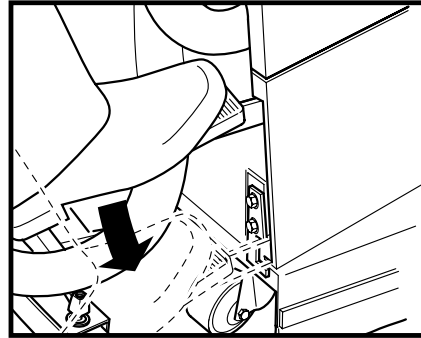
Raise the brush unit by pressing down the relevant pedal and latching it in its lowest position.

Press the brush release push button **A** momentarily (1 or 2 seconds) and the brushes will be unloaded from the machine.

Move the machine backward by rolling the drive control thumb wheels rearward until the brushes are visible in front of the machine.  
(pull the machine that is not equipped with the drive motor).

Clean carefully the three pins of each brush to keep efficient the Click ON/Click OFF function.

To mount the new brushes see the "Preparation for use" at page 10.

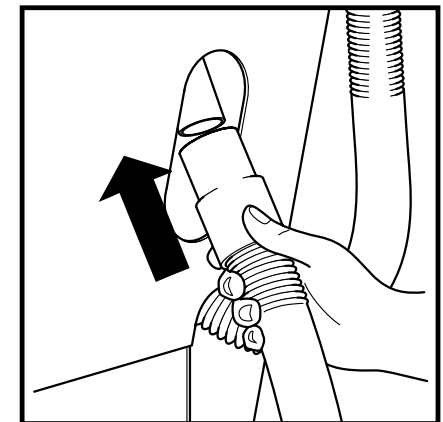
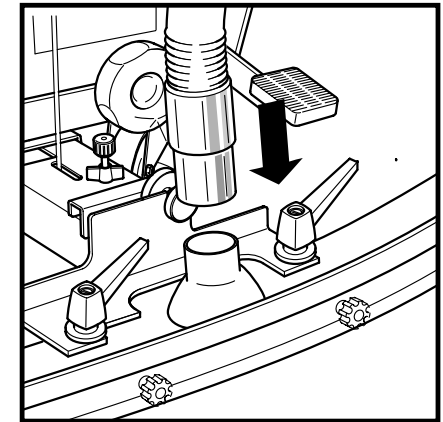
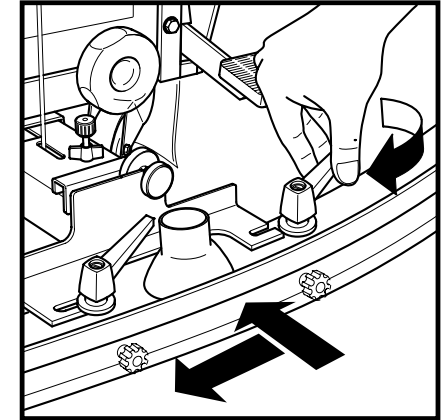


## PREPARATION FOR USE

Partially unscrew the two middle levers on the squeegee. Push the squeegee into the locating lugs as illustrated and fully tighten the hand-levers. (Pull the lever up to disengage it and make its rotation free).

Push the coiled end of the squeegee hose fully home onto the tubular spigot in the centre of the squeegee.

Push the straight end of the squeegee hose onto the tank inlet pipe which protrudes through a slot in the rear panel.

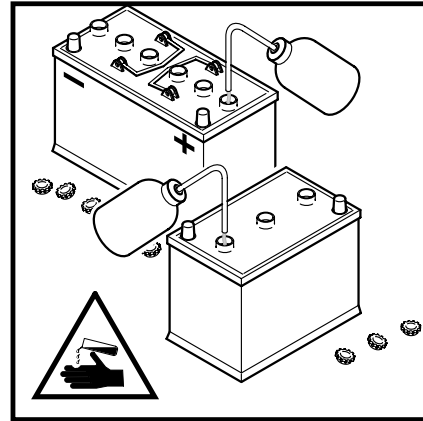


## PREPARATION FOR USE

For models working with batteries follow the instructions below, whereas in the case of mains operated models the transformer (or mains unit) has already been placed inside the machine and needs no further installation.

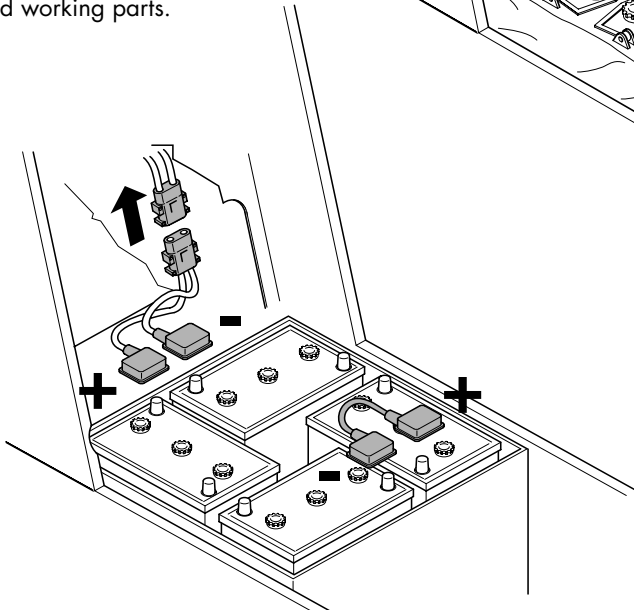
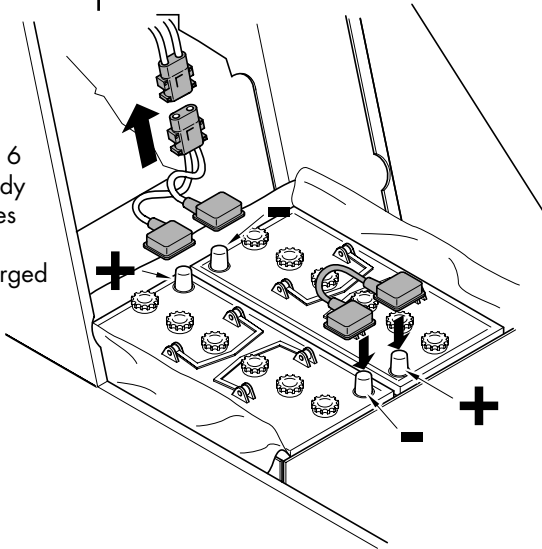
The batteries are supplied without liquid, therefore they must be filled up with the appropriate acid solution (concentration greater than 30%) before they can be used.

**Take special care when handling the acid solution as it is corrosive. If it should come into contact with skin or eyes, wash abundantly with water and consult a doctor.**



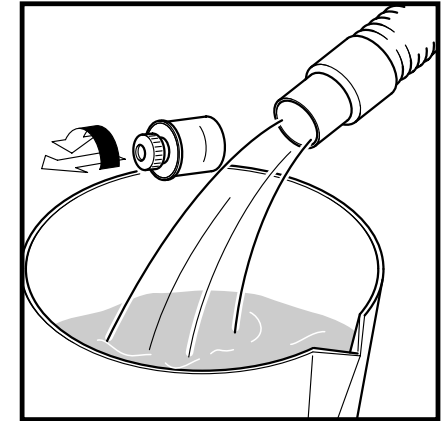
The **AW445**, **AW445 T** and **AW455 T** models use two 12 Volt batteries connected in series.

The **AW465** and **AW475** models use four 6 Volt batteries connected in series. Please study the applicable illustration then fit the batteries and connect the supplied links as indicated. When the battery set has been properly charged plug the battery socket into the machine as shown. Lower the tank unit to safely cover exposed working parts.

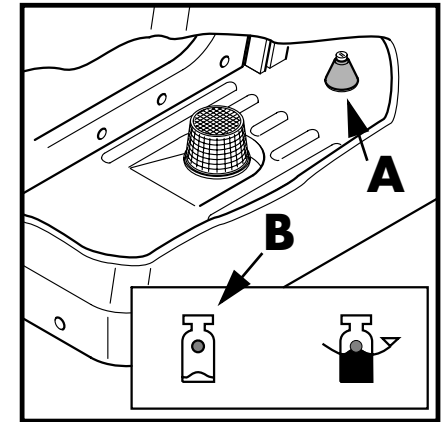


## SCRUBBING AND DRYING OPERATION

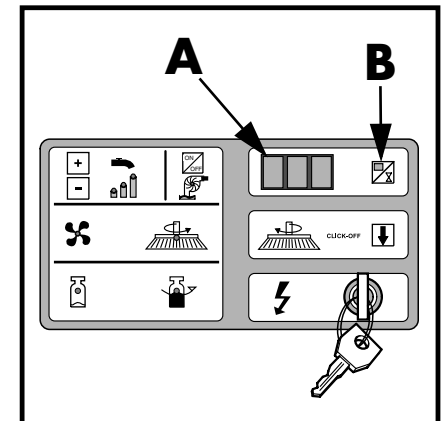
Remove the cap from the hose unscrewing the knob and empty the tank.



There is a water level sensor also in the tank for the clean water (**A**). When the tank is going to be empty the red light **B** will turn-on; 80 seconds later the automatic switch "off" of the water flow (electrovalves and water pump) will occur and a beep will be heard.



The display **A** normally shows the voltage of the battery (or the output voltage of the transformer unit for the machines with mains cable). By pushing button **B** one time the working hours of the machine will be shown (hour meter); by pushing the button **B** two times the working minutes will be shown. Push the third time or wait 10 seconds to restore the battery voltage.



## SCRUBBING AND DRYING OPERATION

Also the tilting of the squeegee can be adjusted by means of the dedicated knob, in order to improve the drying capability of the machine.

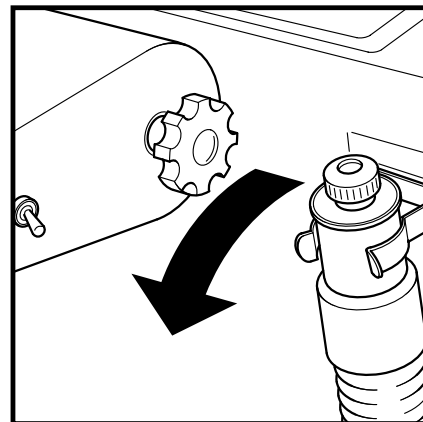
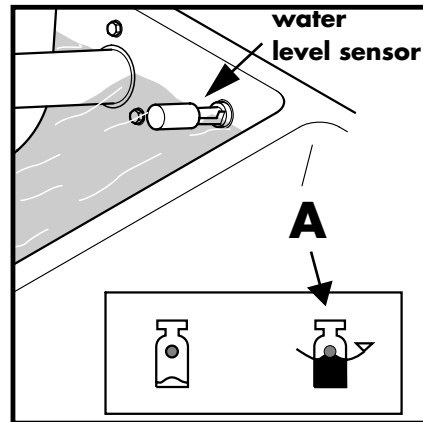
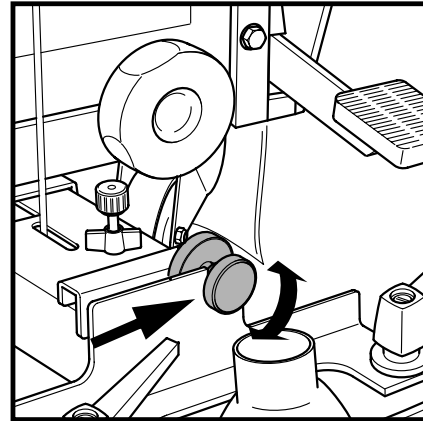
Move the machine slowly forward, and adjust the squeegee pressure and tilting controls until the lips bend over evenly as illustrated below.



The lips must be replaced when they become feather edged or torn.

When the recovery tank (dirty water) will be filled the red light **A** will turn "on"; within 5 seconds the automatic switch-off of the suction motor will also occur.

In order to be able to re-use the machine the recovery tank must be emptied. Then lift the squeegee and the brushes by means of the relevant lever and pedal. Turn the master key OFF and disconnect the hose.



## PREPARATION FOR USE

After filling the batteries must stand for at least 1 hour and then they must be filled up if necessary. After one further hour the batteries must be recharged: remove the battery caps during the recharge operation.

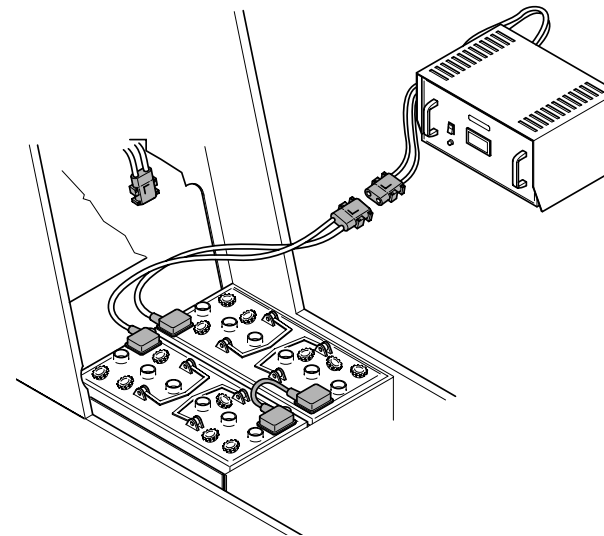
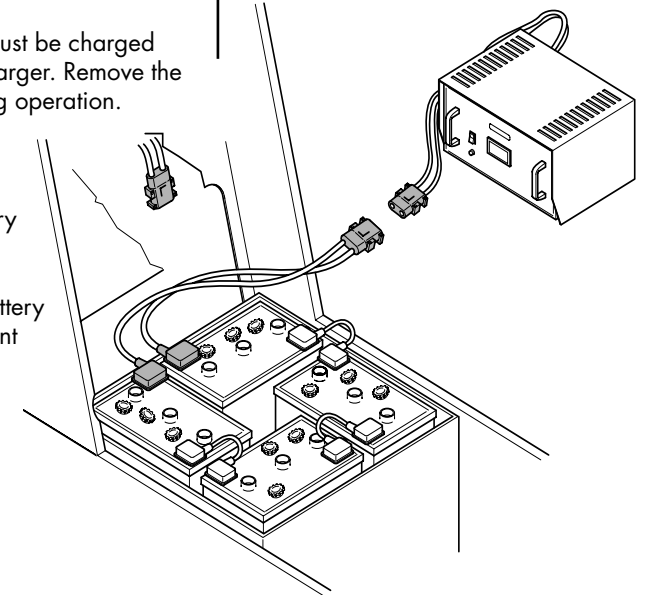
The new batteries will gradually "run in" and will increase their capacity.

The maximum capacity will be achieved in about 10 charge/discharge cycles.

When necessary the batteries must be charged using an appropriate battery charger. Remove the battery caps during the charging operation.

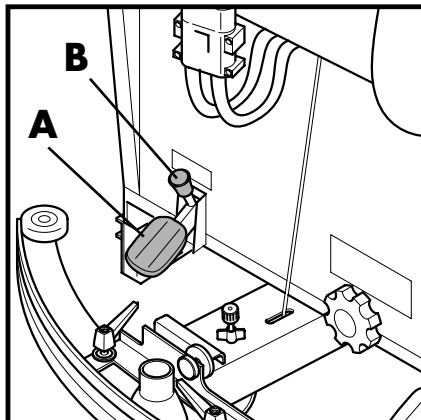
Check that the Volt and Hertz reading of the mains supply correspond to those of the battery charger.

For further information about battery maintenance see also the relevant paragraph.

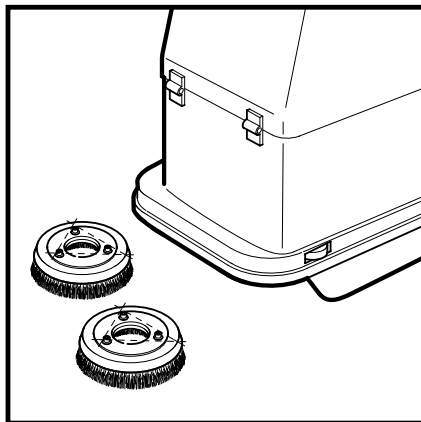


## PREPARATION FOR USE

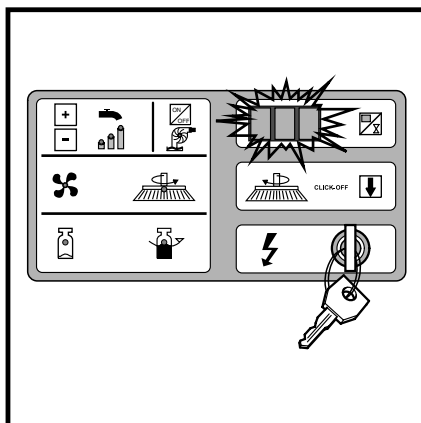
For models equipped with parking brake: press pedal **A** to engage the brake. Press pedal **B** to disengage it.



Drop the brushes roughly side by side in front of the machine; the actual position does not matter.



Switch the machine on by turning the key switch a quarter of turn clockwise. Wait momentarily until the multifunction display lights showing the battery voltage.



## SCRUBBING AND DRYING OPERATION

Drive the machine forward by holding the hand-grips, then rolling the thumb wheels forward until the machine moves.

In the event of a temporary stop (releasing thumb wheels) the automatic switch-off of the all functions will occur (AUTOPOWER-OFF).

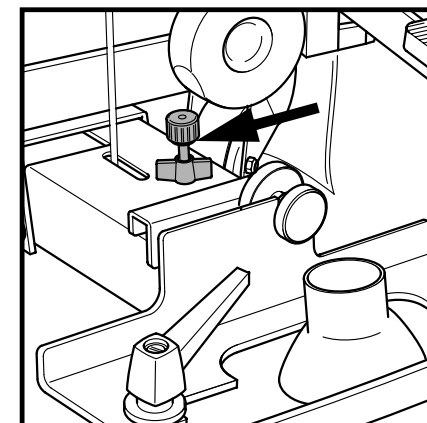
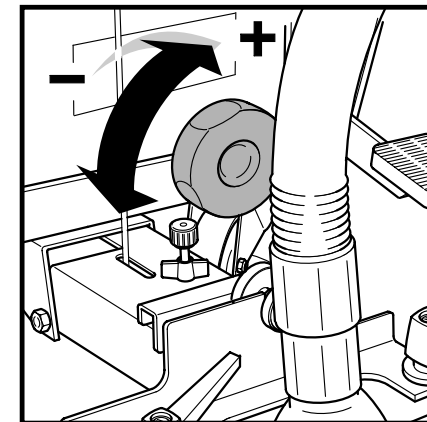
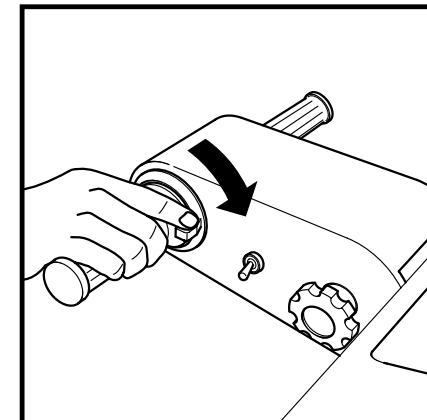
Turn the thumb wheels in order to restart the normal operation; all the functions will restart automatically (AUTOPOWER-ON).

**NOTE:** for all versions of model **AW445** and (brush driven model) the rotation of the brush will make the forward displacement of the machine easier. On the same model the "AUTOPOWER-OFF"/"AUTOPOWER-ON" function is not available.

The following adjustments can be done on the machine: increase or reduction of the pressure of the brushes on the floor by means of the dedicated rotating knob: the required pressure will depend on the kind of floor and dirt to be scrubbed.

**NOTE:** Set the pressure to the minimum possible value, constantly with the kind of dirt to be cleaned: this will increase the battery working time.

Increase or reduce of the pressure of the squeegee on the floor by means of the dedicated knob: again the required pressure will be different depending on the kind of floor to be dried.

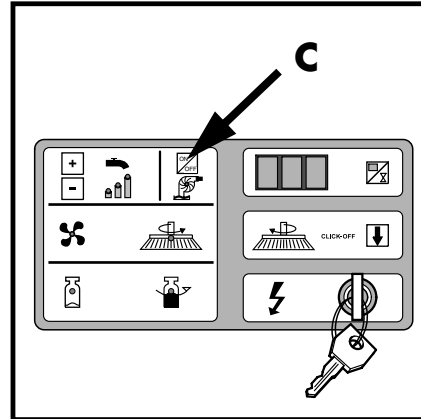


## SCRUBBING AND DRYING OPERATION

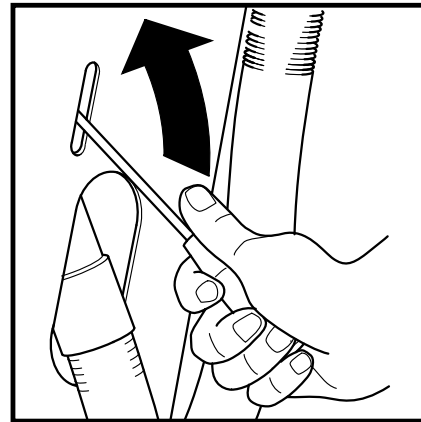
In order to achieve a further reduction of the water flow the water pump can also be switched off by means of push button **C**.

The same button allows to re-switch on the water pump.

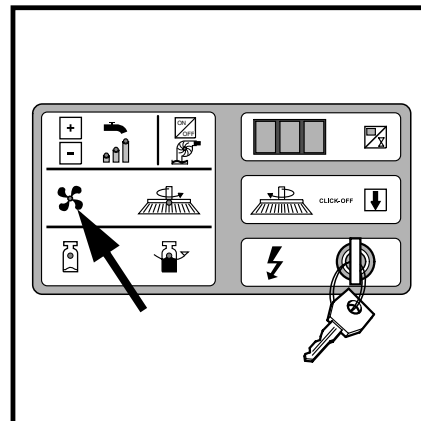
**NOTE:** on all versions of model **AW445** (without traction) the push button **C** is not available.



Pull down the squeegee to the floor by lifting the dedicated lever; the automatic switch-on of the suction motor will also occur.



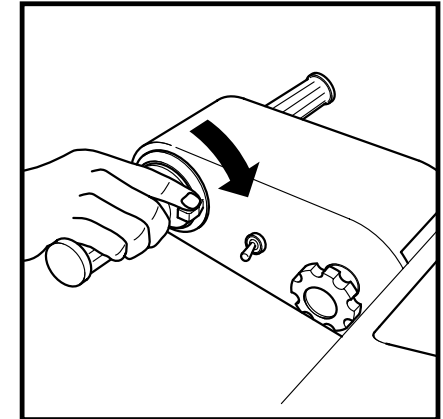
The relevant green light indicator will turn "on" on the control panel.



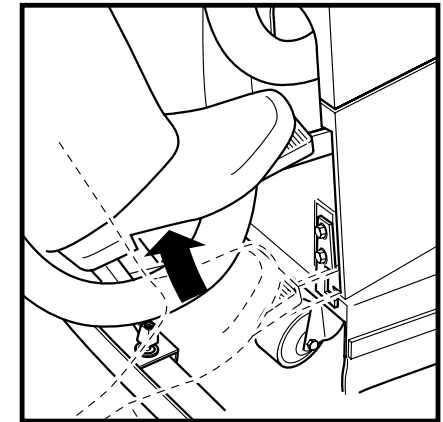
## PREPARATION FOR USE

Drive the machine forward by holding the hand-grips, then rolling the thumb wheels forward until the machine moves completely over the brushes. To stop release the thumb wheels and they will return to a neutral position. This will ensure the brushes are fully located under the drive plates.

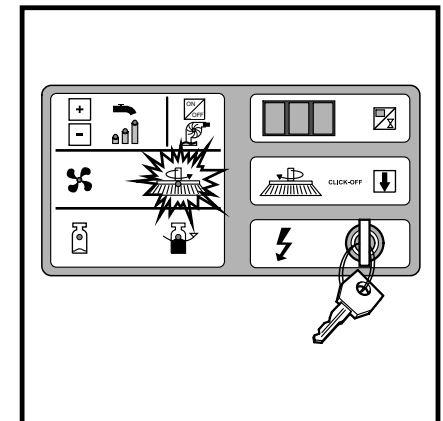
**NOTE:** for the models without traction the machine must be pushed over the brush.



Lower the brush unit by pushing the pedal to the right to unlatch it. Then allow it to rise as far as it will go.

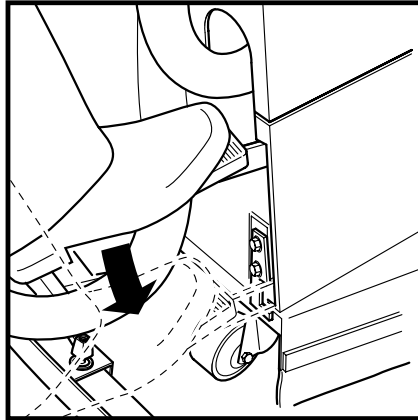


The brush motors will start automatically; the indicator will light and the motors will engage the brushes.

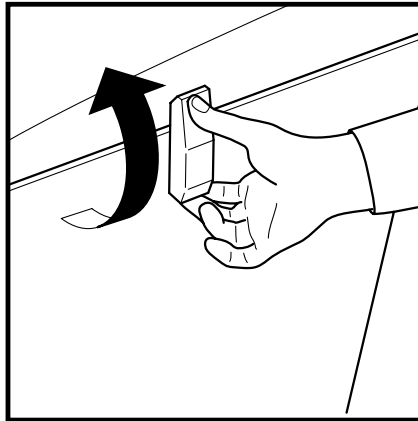


## SCRUBBING AND DRYING OPERATION

Once the brushes have been locked on, raise the brush unit by pushing the pedal down and latching it at its lower position. Now the machine is ready for use.



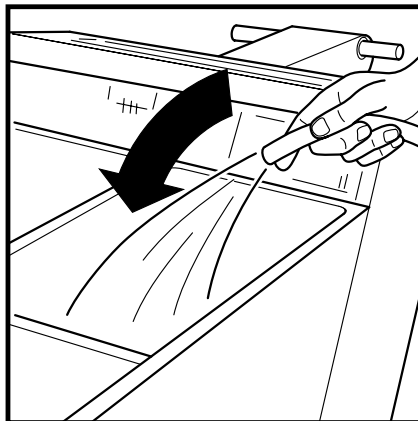
Open the tank lid.



Fill the left tank with water to about 75mm (3") from the top edge then add the scrubbing detergent in a quantity to make a dilution according to its instruction.

Too strong a mix wastes detergent, too weak a mix will not work efficiently.

The machine is now ready for use; so move off to the site to be cleaned.



## SCRUBBING AND DRYING OPERATION

The height of the handle can be adjusted using the dedicate knob **A**.

The speed range can be selected by means of switch **B**.

Switch the machine "on" by turning the key in the master key-switch a quarter turn clockwise.

Lower the brushes by pushing the relevant pedal to the right to unlatch it and bring it to the upper position: the brush motors, the electrovalves and the water pump will start automatically in a few seconds.

The relevant green light indicators will turn "on" on the control panel.

To increase or reduce the flow of the clean water to the floor the push buttons **A** (+ to increase) or **B** (- to reduce) can be used.

**NOTE:** For all the versions of models **AW445**, **AW 445 T** and **AW455 T** the membrane and the water pump are optional items.

In any case the pump green light indicator will turn "ON" when the brushes are lowered.

