

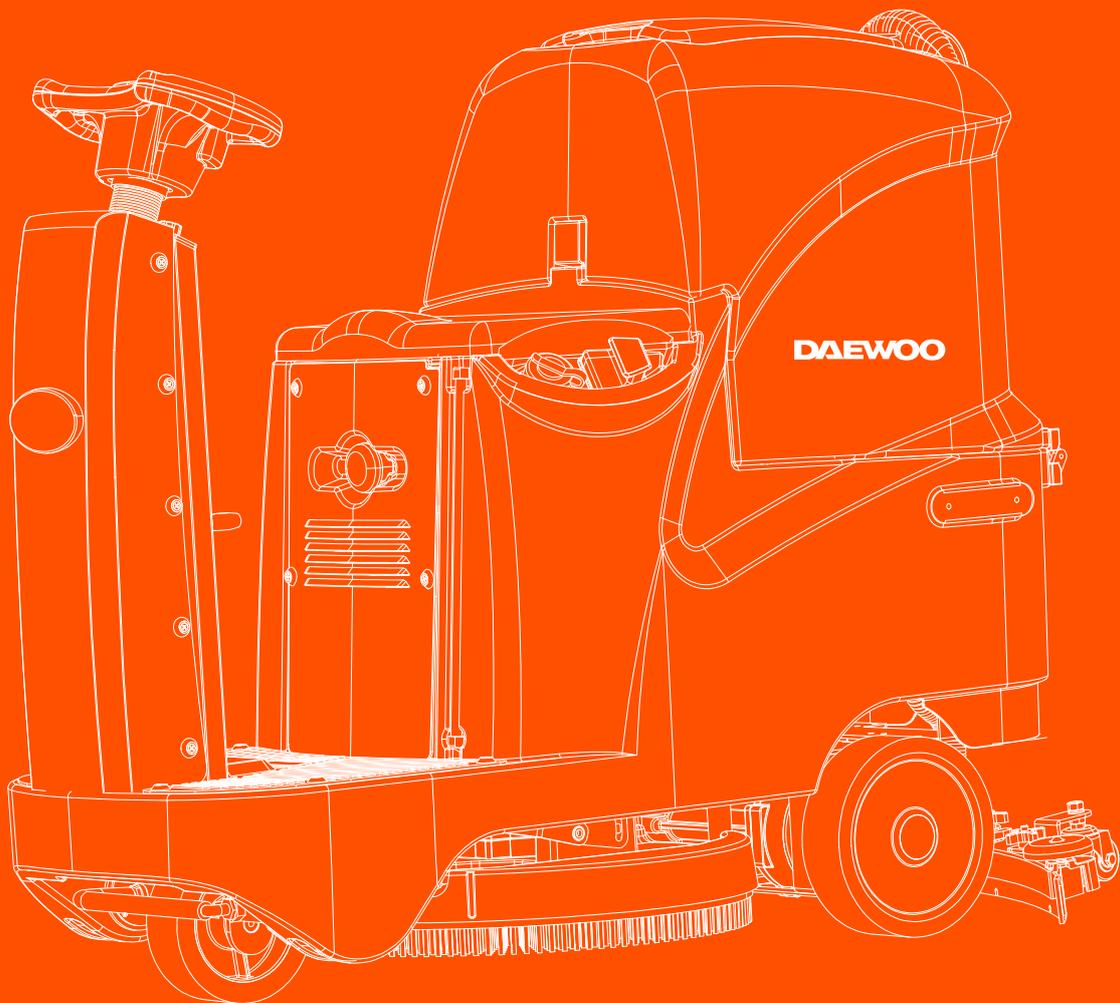


# DAEWOO

POWER PRODUCTS

## DAFR70

Scrubber dryer on seat



## USER'S MANUAL

[www.daewoopowerproducts.com](http://www.daewoopowerproducts.com)

Manufactured under license of Daewoo International Corporation, Korea

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## SYMBOLS USED IN THE MANUAL



**Open book symbol with an "i"**  
Indicates the need to consult the 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 and observe the indications, for the safety of the operator and the machine



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



**Warning symbol**  
Indicates operator should take safety measures to avoid damage to limbs.



**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



**Disposal symbol**  
Carefully read the sections marked with this symbol for machine disposal

### On consignment of machine

When the machine is consigned 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 suffered damage 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

FR70 is a floor scrubbing machine which, by means of 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 any removed dirt as well as the detergent solution not absorbed by the floor. The machine must only be used 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 customer assistance service (organised in collaboration with our dealers) is always

available for advice or direct intervention.

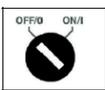
#### Intended use

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 - locations.

The machine is not suitable for use in the rain, or under water jets. It is forbidden to use the machine for picking up dangerous dusts or inflammable liquids within places with a potentially explosive atmosphere.

In addition, it is not suitable as a means of transport for people or object

### 1. SYMBOLS USED ON THE MACHINE



**Main switch or key switch symbol**

Used on the instrument panel, to indicate the key switch for machine operation on (ON-I) or off (OFF-O)



**Symbol denoting acoustic alarm**

Used to indicate the acoustic alarm button



**Symbol of the reverse movement selector**

Used to indicate the button for engaging the reverse gear



**Brush coupling/uncoupling symbol**

Used to indicate the button that couples or uncouples the brush



**Symbol indicating the maximum temperature of the water used to fill the solution tank**



**Symbol indicating the position of the solution tank drain pipe**



**Symbol indicating the position of the recovery tank drain pipe**



**Indicates the maximum gradient**

#### GENERAL SAFETY REGULATIONS

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

#### WARNING:

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 exclusively used by authorised, trained personnel.
- Do not use the machine on surfaces with an inclination greater than the one shown on the plate.
- The machine is not suitable for cleaning rough or uneven floors. Do not use the machine on slopes.
- If the power supply cable of the battery charger is damaged, contact an Authorised service centre immediately.
- In the event of danger, quickly press the emergency button on the command panel.
- For all maintenance interventions, switch off the machine and disconnect the battery connector and/or the power supply cable.
- Children must be supervised to ensure they do not play with the device.
- During the working of the machine, pay attention to other people and especially to children.
- Only use the brushes supplied with the machine, or those specified in the "CHOOSING AND USING THE BRUSHES" paragraph of the instruction manual. The use of other brushes could compromise safety levels.

#### WARNING

- The machine is not suitable for use by children and persons with reduced physical, mental and sensory capabilities, or people who lack experience and knowledge.
- The machine must not be used or stored outdoors, in damp conditions or directly exposed to rain.
- The storage temperature must be between -25 and +55 ; do not store outdoors in damp conditions.
- Conditions of use: room temperature between 0 and 40 with relative humidity between 30 and 95%.
- The socket for the machine's power cable (electric version) or for the battery charger power cable (battery version) must be correctly earthed.
- Adapt the speed to the adhesion conditions.
- Do not use the machine as a means of transport.
- The machine does not cause harmful vibrations.
- Do not use the machine in an explosive atmosphere.
- Do not vacuum inflammable liquids.
- Do not use the device to collect dangerous powders.
- Do not mix different types of detergent as this may produce harmful gases.
- The machine is not suitable for cleaning carpets.
- Do not place any liquid containers on the machine.
- Avoid working with the brushes when the machine is standing still, so as not to damage the floor.
- 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. The operator must always be equipped with the appropriate safety devices (gloves, shoes, helmet, goggles, etc.).
- The machine is designed to carry out the scrubbing and drying operations simultaneously. Different operations should only be carried out in areas where the passage of unauthorised persons is prohibited. Signal the presence of damp floors with suitable signs.
- If the machine does not work properly, check this is not caused by failure to carry out routine maintenance. Otherwise, ask for intervention of the authorised technical assistance centre.
- If you need to replace any components, request the ORIGINAL spare parts from an Authorised dealer and/or Retailer.
- Restore all electrical connections after any maintenance interventions.
- Before using the machine, check that all the hatches and covers are positioned as shown in this Use and Maintenance Manual.

- Do not remove the guards that can only be removed with the aid of tools, except for maintenance work (see the relevant paragraphs)
- Do not wash the machine with direct water jets or with pressurised water, nor with corrosive substances.
- To prevent scaling in the solution tank filter, do not fill the tank with detergent solution many hours before using the machine.
- Do not use acid or basic solutions that could damage the machine and/or harm people.
- Have the machine checked by an authorised technical assistance centre every year.
- When disposing of consumable materials, observe the laws and regulations in force.
- When your machine has reached the end of its long working life, dispose of the materials it contains (especially oils, batteries and electronic components) in an appropriate manner, taking into account that the machine itself was constructed using 100% recyclable materials.
- The batteries must be removed from the machine before its disposal. The batteries must be disposed of in a safe manner, fully observing the laws and regulations in force.

## MACHINE PREPARATION

### 1. HANDLING THE PACKAGED 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.

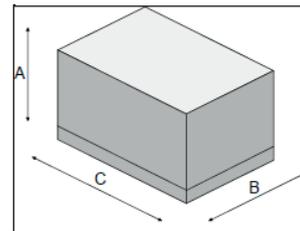
The total weight of the machine and packaging is 220 kg

The dimensions of the packaging is as follows: FR70

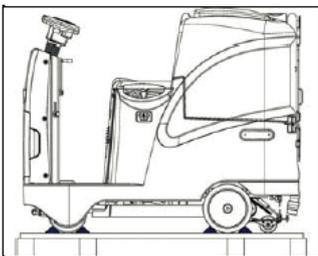
A: 1230 mm

B: 630 mm

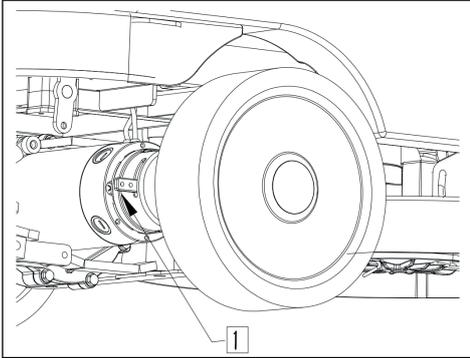
C : 1320 mm



1. Remove the outer package
2. The machine is fixed to the pallet with wedges which block the wheels
3. Disengage the electronic brake, turn the lever (1) (on the rear right-hand side of the machine) clockwise
4. Remove the wedges



5. Use a chute to get the machine down from the pallet, pushing it backwards. Do not assemble the rear squeegee before unloading the machine, and avoid violently jolting the brush head. To assemble the squeegee, read the "SSEMBLING THE SQUEEGEE" aragraph
6. Keep the pallet for any future transport needs



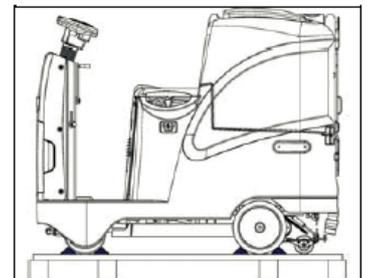
**ATTENTION:** if the product is delivered in cardboard containers, handle the packed product with suitable lifting means that comply with the legal requirements



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

## 2. HOW TO MOVE THE MACHINE

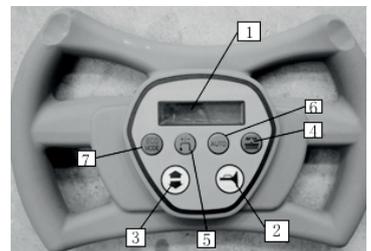
1. Check the solution tank and recovery tank are empty; if necessary, empty them
2. Check that the brush head and squeegee are in the raised position
3. Place it on a pallet using a chute
4. Check that the key switch is in the "0" position and remove the key
5. Secure the machine to the pallet using wooden wedges
6. Engage the electronic brake



## 3. INSTRUMENT PANEL ELEMENTS

The instrument panel components are identified as follows:

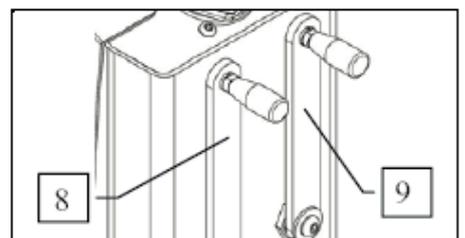
1. Level indicator for battery/hour meter
2. Horn button
3. Forward or back
4. Automatic install the brush or remove the brush
5. Control water size
6. AUTO automatic mode
7. ECO energy saving mode



## 4. STEERING COLUMN ELEMENTS

The elements on the left side of the steering column are:

8. Squeegee body lifting lever
9. Brush head body lifting lever

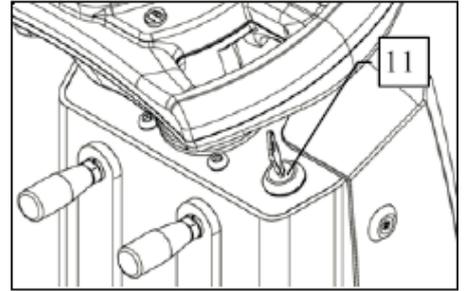


11. Main key switch

### 5. FOOTBOARD ELEMENTS

The components on the front right part of the foot board are:

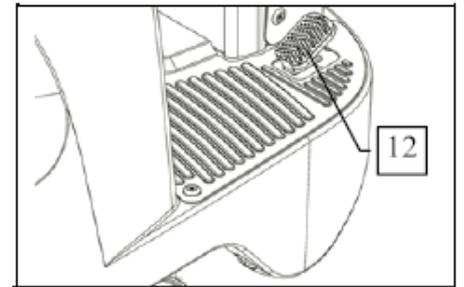
12. Drive pedal



13. Emergency button

14. Detergent solution level tube

15. Recovery tank release button

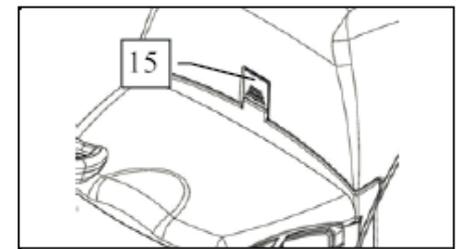


### 6. SIDE MACHINE ELEMENTS

The elements on the left-hand side of the machine are:

16. Fast filler clean water

17. Water-detergent filler cap



### 7. REAR MACHINE ELEMENTS

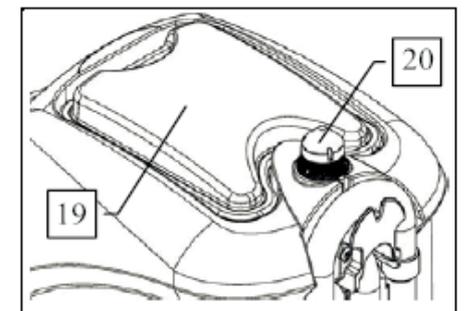
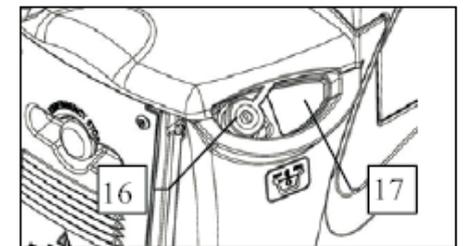
The elements on the rear of the machine are:

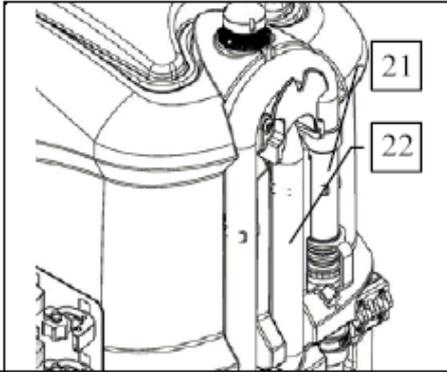
19. Recovery tank cover

20. Blinking light (optional)

21. Recovery tank drain pipe

22. Squeegee suction tube



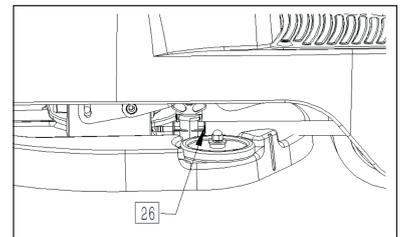
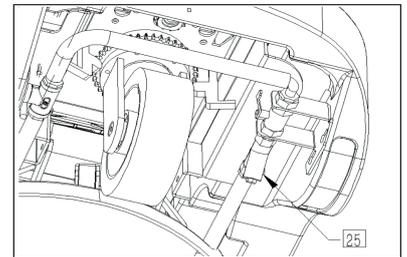


## 8. FRONT MACHINE ELEMENTS

The elements on the front of the machine are:

25. Detergent solution filter

26. Detergent tank drainage tap



## 9. TYPE OF BATTERY

To power the machine it is necessary to use:

- liquid-electrolyte lead traction batteries
  - sealed traction batteries with gas recombination or gel technology.
- OTHER TYPES MUST NOT BE USED.**



The batteries must meet the requirements laid out in the norms: CEI EN 60254-1:2005-12 (CEI 21-5) + CEI

EN 60254-2:2008-06 (CEI 21-7)

For a good operating performance, we suggest the use of four 12V - 100 Ah/C5 battery cases

## 10. BATTERY MAINTENANCE AND DISPOSAL

For maintenance and recharging, respect the instructions provided by the battery manufacturer. Particular attention must be paid when choosing the battery charger, if not supplied, since there are different kinds according to the type and capacity of the battery.

When the battery reaches the end of its working life, it must be disconnected by expert, trained personnel

then removed from the battery compartment with the aid of suitable lifting devices.

## DEAD BATTERIES

ARE CLASSIFIED AS DANGEROUS WASTE AND MUST BE DELIVERED TO THE AUTHORISED BODIES FOR CORRECT DISPOSAL.



**WARNING:** You are advised to always wear protective gloves, to avoid the risk of serious injury to your hands.



**WARNING:** You are advised to only lift and move the batteries with lifting and transportation means suitable for the specific weight and size

## 11.HANDLING - INSERTING BATTERIES

The batteries must be housed in the special compartment beneath the seat carter. They should be handled using lifting equipment that is suitable in terms of both weight and coupling system. They must also satisfy the requirements of the CEI 21-5 Standard. The dimensions of the battery compartment are: 362mm x 354mm x H290mm.



**WARNING:**For battery maintenance and daily recharging, you must carefully follow the instructions provided by the manufacturer or retailer. All installation and maintenance operations must be carried out by specialised personnel.



**WARNING:** You are advised to use airtight batteries only, to avoid the leakage of acids!

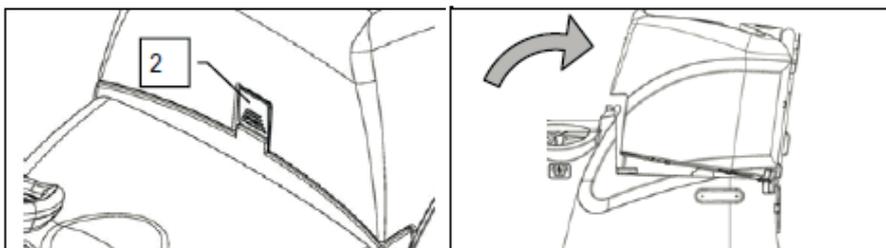
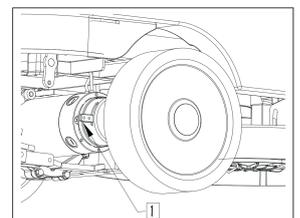


**WARNING:** You are advised to always wear protective gloves, to avoid the risk of serious injury to your hands.

To insert batteries proceed as follows:

- 1.Lock the machine by activating the electronic brake, then turn the lever (1) (on the rear right-hand side of the machine) anticlockwise
2. Make sure the recovery tank is empty, otherwise empty it completely

- 3.Press the button (2) to release and rotate the recovery tank



4. Grip the recovery tank and rotate it as far as it will go



**ATTENTION:** You are advised to only lift and move the batteries with lifting and transportation means suitable for the specific weight and size

5. House the batteries in the compartment, positioning the poles "+" and "-" opposite each other

## 12. BATTERY CONNECTION AND BATTERY CONNECTORS

1. Connect the batteries in series to the "+" and "-" poles using the supplied jumper cable

2. Connect the battery connector cable to the "+" and "-" poles in order to obtain the terminal voltage of 24V

3. Connect the battery connector cable (2) to the machine connector (1)

4. Rotate the seat support until it is in the working position



**WARNING:** All installation and maintenance operations must be carried out by expert personnel, trained at the specialized assistance centre

## 13. BATTERY CHARGER CONNECTION

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 "discharged batteries" blinking light.



**WARNING:** Never leave the batteries completely discharged, even if the machine is not being used. Check the battery charger is suitable for the batteries installed, in terms of both capacity and type.

To connect the battery charger you must:

1. Move the machine near to the battery charger

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

3. Check the key switch is on "0"; if this is not the case, turn the key of the main switch anticlockwise to "0"

4. Press the button (1) to release and rotate the recovery tank

5. Grip the recovery tank and rotate it as far as it will go

The coupling connector of the battery charger is supplied inside the bag containing this instruction booklet, and must be fitted to the battery charger cables as shown in the instructions.



**WARNING:** This process must be carried out by qualified personnel. An incorrect connection of the connector may cause problems with machine functioning.

6. Disconnect the electric system connector from the battery connector

7. Connect the battery charger cable to the battery connector

8. Connect the recently wired cable to the external battery charger



**WARNING:** Carefully read the use and maintenance instructions of the battery charger that is used for charging.

**WARNING:** Keep the recovery tank open for the duration of the battery recharging cycle to allow gas

fumes to escape

10. After the charging cycle is complete, the battery connector must be connected to the machine connector



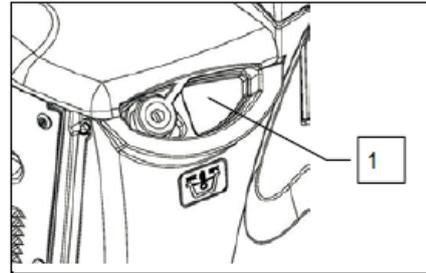
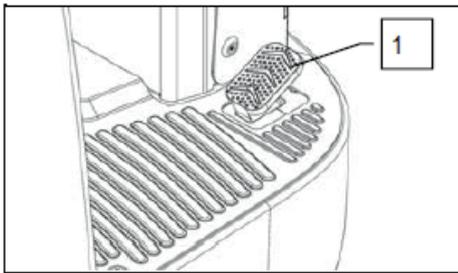
**WARNING:** Danger of gas exhalation and leakage of corrosive liquids.



**WARNING:** Danger of fire: do not go near with free flames

#### 14. FORWARD WORK SPEED

This machine is equipped with electronic traction control. To move the machine, turn the key to “ON – I” then press the drive pedal (1), adjusting the speed by altering the degree of pressure on the pedal.



To move the machine backwards, press the button (2) on the instrument panel, then immediately press the pedal (1). Adjust the speed by altering the degree of pressure on the pedal.

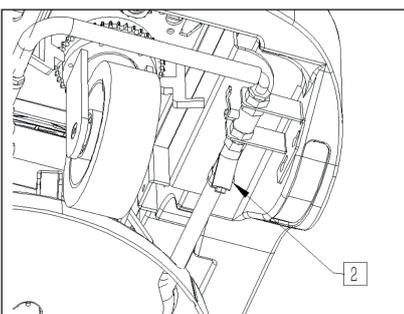
**WARNING!** The reverse speed is lower than the forward speed to comply with current health and safety standards.

#### 15. SOLUTION TANK

The recovery tank must be completely empty each time the solution tank is filled. Remove the inlet cap (1) located on the left side of the machine.

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

Check that the solution filter cap (2), under the solution tank in the front right of the machine, is properly closed.

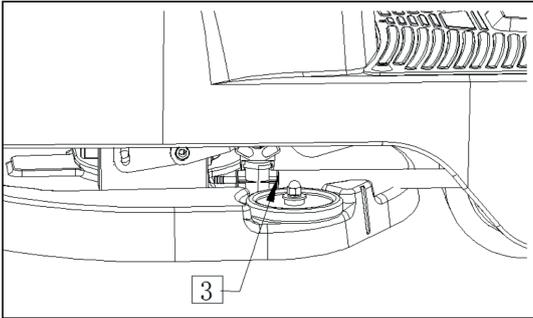


Check that the solution tank drainage tap (3) (under the solution tank in the right part of the brush head body) is well closed.

## 16. FILLING THE SOLUTION TANK

The solution tank can be filled in two different ways:

1. removing the inlet cap (1) and filling with the aid of a rubber tube
2. using the rubber cap (2); this supports the water hose on its own, but be sure to remove the inlet cap



(1) to allow the proper vent of air.

Remove the inlet cap (1) and fill with clean water at a temperature of not more than 50 °C. The amount inside the tank can be seen by means of the level pipe on the front left of the seat. The solution tank has a maximum capacity of about 65 liters. Add the liquid detergent to the tank in the concentration and manner indicated on the detergent manufacturer's label. The formation of excess foam could damage the suction motor, so use only the minimum amount of detergent that is necessary.

**WARNING:** Always use detergents whose manufacturer's label indicates their suitability for scrubbing machines. Do not use acid or alkaline products or solvents without this indication. Acid or alkaline maintenance detergents can be used, as long as they have pH values between four and ten, and do not contain oxidising agents, chlorine or bromine formaldehyde, mineral solvents.

**WARNING:** Protective gloves should always be worn before handling detergents or acidic or alkaline solutions to avoid serious injury to hands.

**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. Do not use pure acids.

## 17. RECOVERY TANK

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

Check the cap of the drainage tube (1) (on the rear of the machine) is correctly closed.

## 18. ASSEMBLING THE SQUEEGEE

The squeegee, that for reasons of packaging comes disassembled from the machine, must be assembled while assembling the machine. Proceed as follows for assembly:

1. Lift the squeegee, turning the left-hand lever (1) to move it clockwise
2. Turn the main switch key anticlockwise to the "0" position
3. Remove the key from the instrument panel
4. Loosen the knobs (2) and (3) in the squeegee pre-assembly

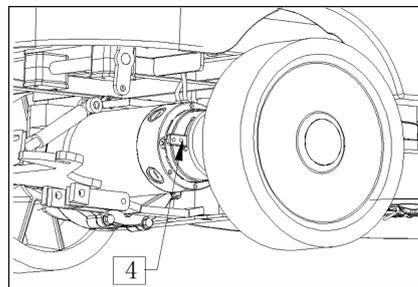
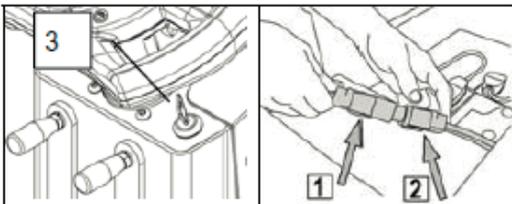
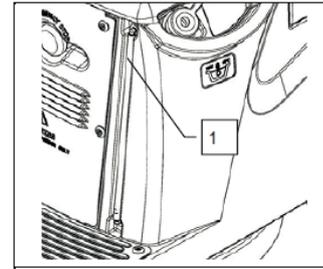
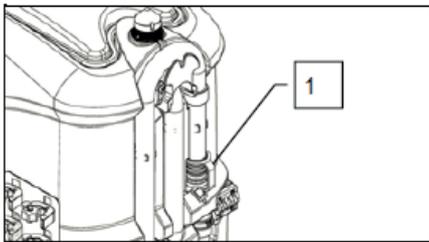
- 5.(2), making sure the washer and spring adhere in the upper part of the squeegee support
- 6.knob (3), making sure the washer and spring adhere in the upper part of the squeegee support
- 7.Insert the suction hose (4) in the squeegee sleeve

**ATTENTION:** these operations must be carried out using protective gloves to avoid any possible contact with the edges or tips of metal objects.

## 19. ADJUSTING THE SQUEEGEE INCLINATION

the squeegee body as follows:

- 1.Loosen the lock nut (1)
- 2.Turn the screw (2) clockwise to increase the bend of the rubber in the central part of the squeegee.
- 3.When fully adjusted, fix the lock nut (1)



## 20. EMPTY SOLUTION TANK DEVICE

To check the quantity of water in the solution tank there is a suitable level indicator tube (1) placed in front of the driver's seat.

## WORK

### 21.WORK

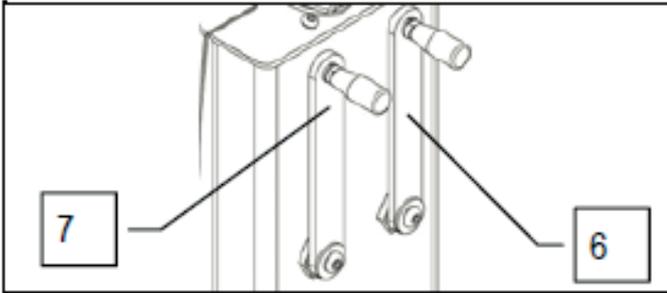
Before beginning to work, it is necessary to:

- 1.make sure the recovery tank is empty, otherwise empty it completely
- 2.check the key switch (3) is on "0"; if this is not the case, turn the key of the main switch anticlockwise to "0"
- 3.connect the battery connector (2) to the electric system connector (1)
- 4.check the electronic brake (4) is engaged
- 5.sit on the driver's seat

6.Turn the key of the main switch a quarter of a rotation clockwise (to position ON). The display on the instrument panel will immediately come on.

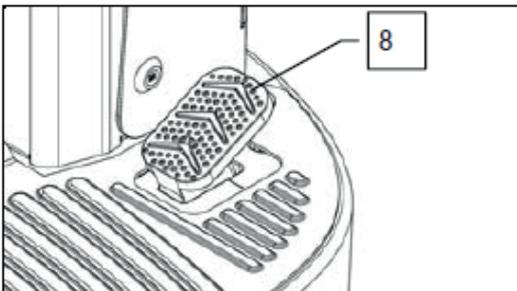
11. Lower the brush head by turning the right level (6) clockwise, then lower the squeegee turning the left lever (7) anticlockwise.

**WARNING:** As soon as the forward movement pedal is activated with the brush head in its work position, the solenoid valve will start working and will begin dispensing detergent solution. As soon as the squeegee is in its work position, the vacuum motor will switch on and begin working.



12. Press the accelerator pedal (8) to start moving the machine

**WARNING:** To stop the machine, remove your foot from the accelerator (8). The machine will begin to stop.



13. To make a reverse movement, press the reverse button on the steering wheel simultaneously with the pedal (8).

**WARNING:** During reverse movements, the squeegee must be lifted off the floor. To do this, turn the lever (7) clockwise.

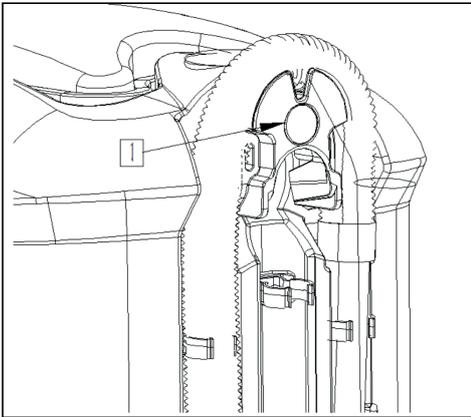
During the first metres, check there is sufficient solution and that the squeegee dries perfectly. The machine will now begin to work with full efficiency until the battery is flat or until the detergent solution has finished.

## 22. OVERFLOW DEVICE

The machine is NOT equipped with an overflow device, because the capacity of the recovery tank is greater than the capacity of the solution tank. In extraordinary cases, there is a mechanical device (float) on the lid that, when the recovery tank is full, shuts off the air to the suction motor intake to protect it; the sound of the vacuum motor will then be deeper. In this case, raise the brush head and squeegee off the floor by means of the respective knobs on the steering column. After about 15-25 seconds, the vacuum

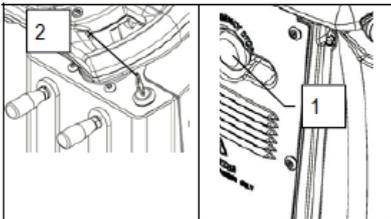
motor will switch off. Then empty the recovery tank via the drainage hose (1). It is good practice when restoring the level of the solution tank, to empty the

recovery tank through the special drainage pipe (1).



### 23. EMERGENCY BUTTON

If there are any problems while you are working, press the emergency button (1) beneath the seat. This command interrupts the electric circuit between the batteries and the machine system, so the machine stops and the electric brake is triggered. To resume work (after resolving the problem), switch off the key (2), move the button (1) to its standard position, then switch the key (2) back on again.

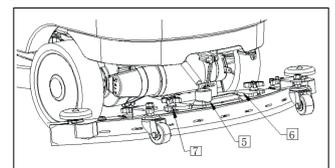
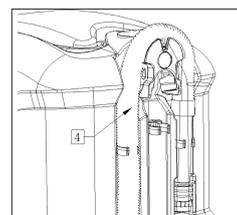
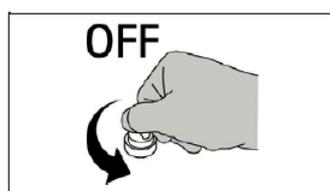
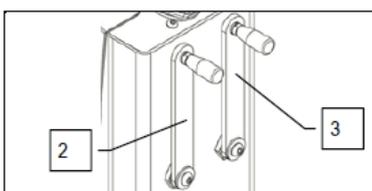


### AT THE END OF WORK

#### 24. AT THE END OF WORK

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

1. Lift the brush head by turning the right lever (2) anticlockwise, then lift the squeegee turning the left lever (3) clockwise. The vacuum motor switches off after a few seconds.



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

3. Turn the machine off by turning the key one quarter turn anticlockwise and remove it from the panel.

**WARNING:** Before performing any maintenance, remove the keys from the panel and disconnect the battery connector of the machine.

4. Disconnect the tube (4) from its seat, unscrew the drainage cap and empty the recovery tank.

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

5. Slide the suction tube (5) from the squeegee sleeve

6. Remove the squeegee from the support arm (6) by unscrewing the hand wheels (7).

7. Clean well both the squeegee and the rubbers with a jet of water.

8. After cleaning the squeegee and rubbers, replace the squeegee on the initial support, firstly inserting the left pin of the squeegee in the left slot of the arm, then the right pin in the right slot, being careful to keep the spring and washer on the plate of the arm. This can be simplified by first loosening the hand wheel on the pin. Tighten the hand wheel to lock the squeegee in place.

9. Finally insert the squeegee tube in the special sleeve.

10. If you need to empty the solution tank, move the knob downwards

11. Lower the brush head body by means of the relevant lever on the steering column

12. Move the tap (8) outside the brush head body

13. Rotate the tap (8) anticlockwise and wait until the solution tank is empty

14. Close the tap (8) and reposition it on the brush head body

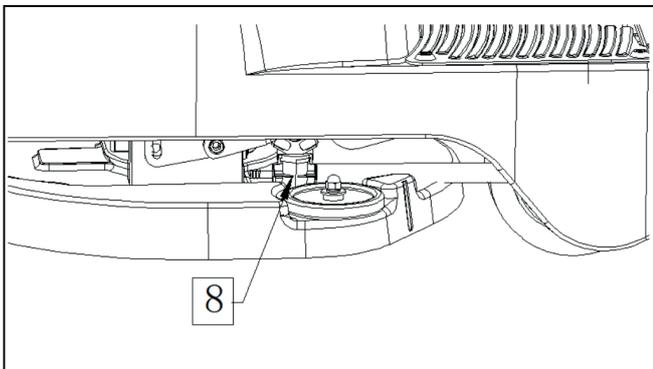
15. Raise the brush head body by means of the relevant lever on the steering column

16. Sit on the driver's seat

17. Insert the key into the ignition switch and turn it a quarter turn clockwise (to position ON)

18. Park the machine in a closed place, in an area where it cannot cause damage to people or other property, but also be protected from an accidental fall of objects.

19. Turn the ignition key a quarter turn anticlockwise (OFF position) and remove the key



20. Lift the recovery tank and disconnect the battery connector

**ATTENTION:** do not leave the machine unattended without first removing the start-up switch key and applying the parking brake. In addition, do not park the machine in open places or on sloping floors.

## DAILY MAINTENANCE

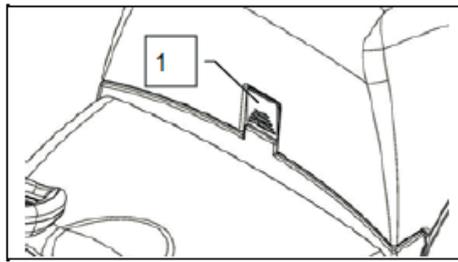
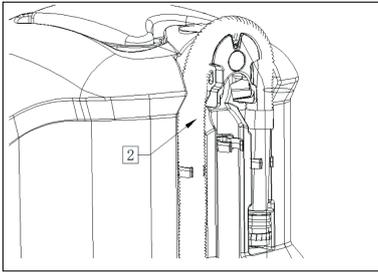
### PERFORM ALL MAINTENANCE OPERATIONS IN SEQUENCE

#### 25. CLEANING THE RECOVERY TANK

1. Disconnect the tube (1) from its seat, unscrew the drainage cap and empty the recovery tank.
2. Press the button (1) to release and rotate the recovery tank

**WARNING:** Before performing any maintenance, remove the keys from the panel and disconnect the battery connector of the machine.

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

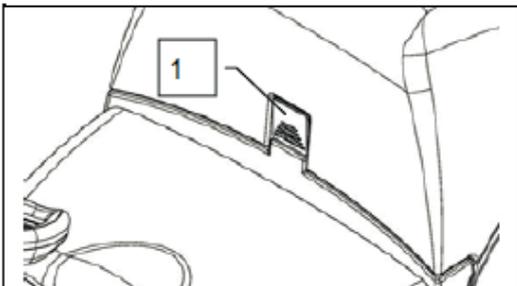


3. Grip the recovery tank and rotate it until the gas spring is resting on the solution tank
4. Remove the vacuum cover and place it in the rear part of the machine
5. Clean and rinse the recovery tank.
6. Replace the cap on the drainage hose, then replace the vacuum cover.
7. Rotate the recovery tank to its standard position

**WARNING:** Be careful not to hit the recovery tank float directly, as this would enable water to enter the vacuum motor connected to it.

#### 26. CLEANING THE RECOVERY TANK FLOAT

1. Press the button (1) to release and rotate the recovery tank

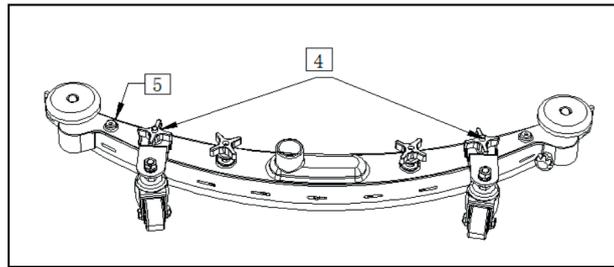
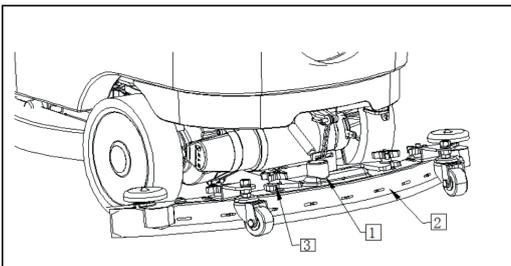


2. Grip the recovery tank and rotate it until the gas spring is resting on the solution tank
  3. Remove the vacuum cover and place it in the rear part of the machine
- Wash the recovery tank.

## 27.CLEANING THE SQUEEGEE

The careful cleaning of the whole vacuum unit ensures better drying and cleaning of the floor as well as greater duration of the suction motor. Proceed as follows for cleaning:

- 1.Slide the suction tube (1) from the squeegee sleeve.
- 2.Remove the squeegee (2) from the support arm by unscrewing the hand wheel (3).
- 3.Use a damp cloth to clean the front and rear rubbers, and also clean the vacuum chamber of the squeegee body

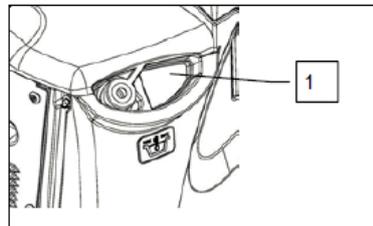
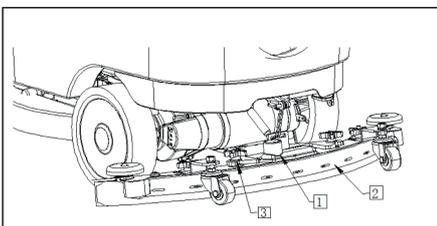


**ATTENTION:** this operation must be carried out using gloves to protect against contact with dangerous solutions.

-Check the rubber edge, if the rubber edge is severely damaged, you can replace a rubber surface. If the rubber is completely worn, it needs to be replaced. First unscrew the nut (4), remove the suction cover (5) and then remove the rubber for replacement.

6.Reassemble the vacuum nozzle on the squeegee body

7.After cleaning, replace the squeegee (2) on the initial support, firstly inserting the left pin of the squeegee in the left slot of the arm, then the right pin in the right slot, being careful to keep the spring and washer on the plate of the arm. This can be simplified by first loosening the hand wheel (3) on the pin. Then tighten the Hand wheel (3) to lock the squeegee in place



8.Insert the squeegee tube in the appropriate sleeve (1).

## 28.CLEANING THE SOLUTION TANK FILTER

Careful cleaning of the detergent/water solution filter ensures a better working capacity. Proceed as follows for cleaning:

- 1.Check the main switch is on "0" (turn it to this position if necessary)

2. Open the filler cap (1)



**WARNING:** before performing any maintenance, remove the keys from the panel and disconnect the battery connector



**WARNING:** these operations must be carried out using gloves to protect against contact with dangerous solutions.

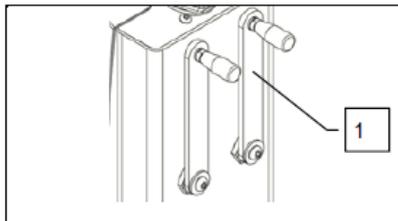
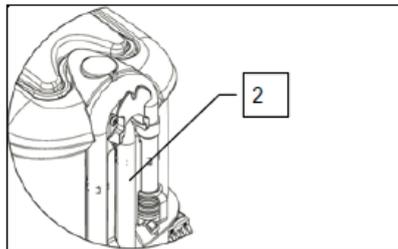
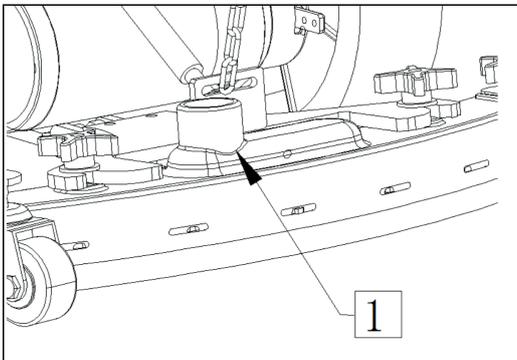
3. Close the water tap by shifting the relevant knob (on the left part of the steering column) upwards

4. Loosen the filter cap (2) on the front of the machine

5. Remove the internal filter cartridge and rinse everything thoroughly with running water

6. Reassemble all the elements

### WEEKLY MAINTENANCE



### 29. CLEANING THE SUCTION HOSE

Whenever suction seems to be unsatisfactory, check that the suction tube is not obstructed. If necessary

clean with a jet of water as follows:

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

2. Check the main switch is on "0" (turn it to this position if necessary)

3. Disconnect the suction hose from the squeegee nozzle (1)

**WARNING:**

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

4. Detach the aspiration tube from the seat on the recuperation tank (2)

5. Clean it with a water jet introduced from the side where it is connected to the tank

6. Reassemble all the elements

### 30. CLEANING THE BRUSH

Thorough cleaning of the brush will guarantee a better working capacity. Proceed as follows for cleaning:

1. Check the main switch is on "1" (turn it to this position if necessary)

2. Raise the brush head by turning the right-hand lever (1) anticlockwise

3. Press the brush release button (2) on the steering wheel
4. As soon as the button is pressed, you will see the question "RELEASE" on the screen
5. Press the brush release button (2) on the steering wheel again, to confirm



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

6. Take the brush and clean it under a flowing jet of water
  7. Reassemble it on the brush head body
- EXTRAORDINARY MAINTENANCE**

connector

1. Turn the wing nuts (2) in the horizontal position
2. Remove the front rubber-pressing blades (3)
3. Remove the rubber (4) and replace it
4. To replace the rubber, proceed in reverse order

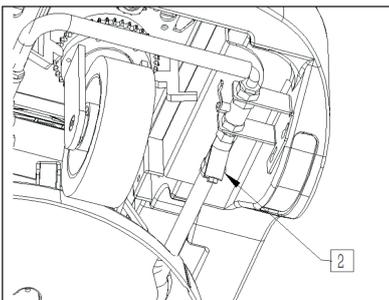


**WARNING:** These operations must be carried out using gloves to protect against contact with dangerous solutions.

## TROUBLESHOOTING

### 31. THE MACHINE DOES NOT START

1. Check that batteries are charged
2. Make sure the electric system connector is connected to the battery connector
3. Check the key switch is ON/I



### 32. INSUFFICIENT WATER ON THE BRUSHES

1. Check there is water in the solution tank
2. Check that the water/detergent solution release adjustment knob (1) is open
3. Clean the solution filter (2) located at the front of the machine

### 33. THE SQUEEGEE DOES NOT DRY PERFECTLY

1. Check the squeegee is clean
2. Check the squeegee settings (see "MACHINE PREPARATION")
3. Clean the entire vacuum unit (see "WEEKLY MAINTENANCE")
4. Replace the rubbers, if worn

### 34. THE MACHINE DOES NOT CLEAN WELL

1. Check the state of wear and tear of the brushes and, if necessary, replace them. The brushes should be changed when the bristles are about 15 mm long. To replace them, see “REPLACING THE BRUSHES”, or “DISASSEMBLING THE BRUSHES” and “ASSEMBLING THE BRUSHES”. Working with over-worn brushes may cause damage to the floor.
2. 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”).

### 35. EXCESSIVE FOAM PRODUCTION

Check that a low foam detergent has been used. If necessary, add a small quantity of antifoam liquid to the recovery tank. Remember that, when the floor is not very dirty, more foam is generated. In this case the detergent solution

### 36. THE SUCTION MOTOR DOES NOT FUNCTION

1. Check whether the recovery tank is full and, if necessary, empty it
2. Check the float switch on the suction cap (see also “CLEANING THE RECOVERY TANK” in the paragraph “DAILY MAINTENANCE”)

### 37. THE BRUSH MOTOR DOES NOT WORK

**WARNING:** To avoid damaging the floor, the motor only starts up when the machine is moved forwards

1. Check that the base is lowered during start-up
2. The operator must be properly seated in the driving position
3. Check no thermal protection device has intervened.
4. Check the correct connection of the motor to the terminal under the footboards.

## 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.

### 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.

### PAD HOLDER

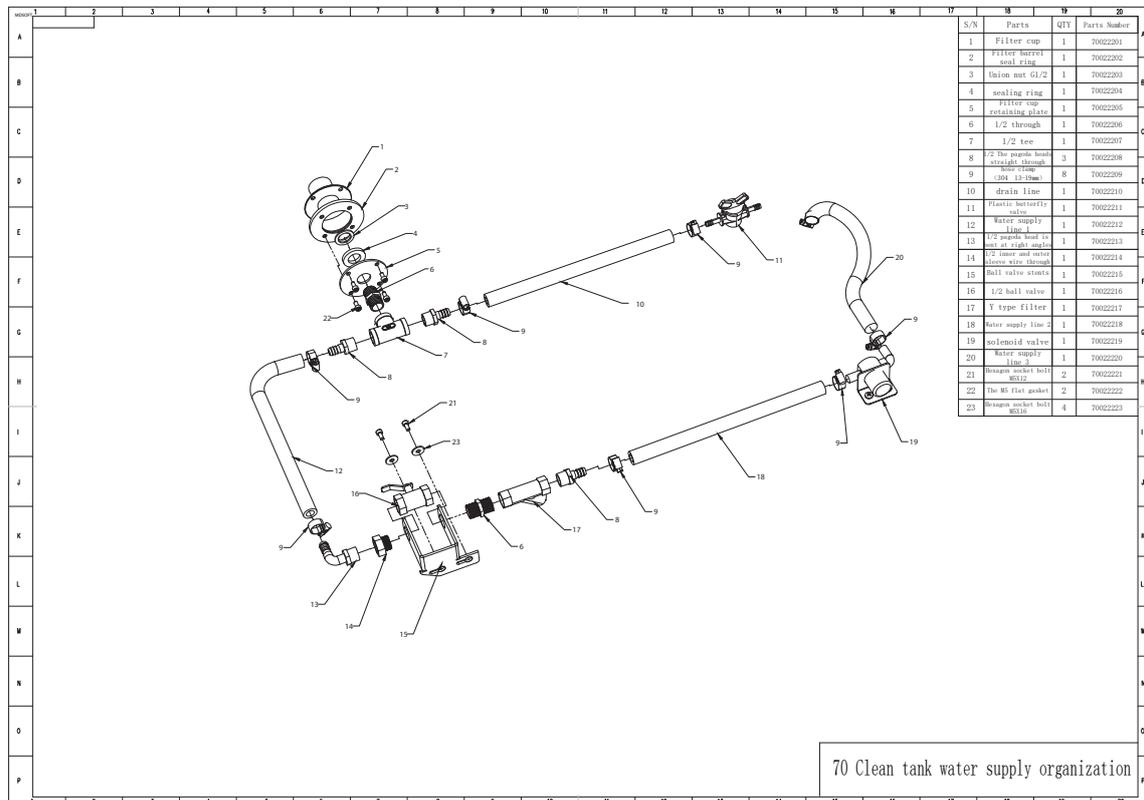
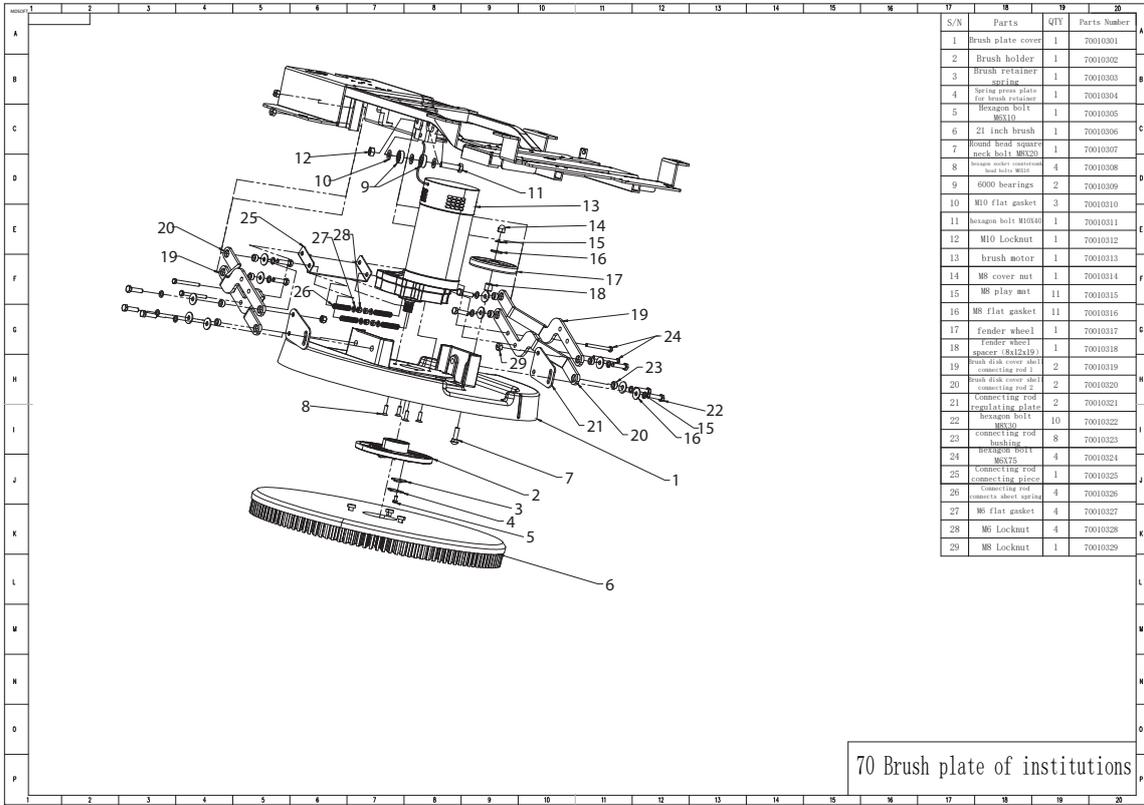
The pad holder is recommended for cleaning shiny surfaces. There are two types of pad holder:

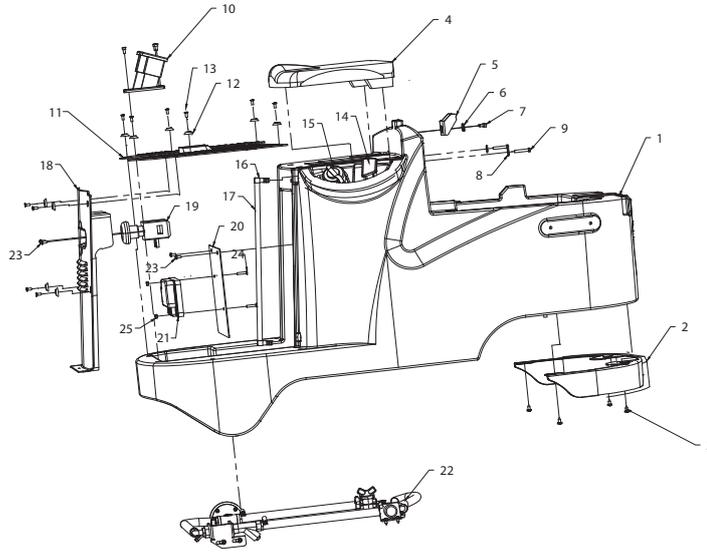
- 1.The traditional pad holder is fitted with a series of anchor points that allow the abrasive floor pad to be held and dragged while working.
- 2.The centre lock type pad holder not only has anchor points, but also a snap-type central locking system in plastic that allows the abrasive floor pad to be perfectly centred and held without any risk of it becoming detached. This type of holder is especially suitable for machines with several brushes, where the centring of the abrasive floor pads is difficult

## 8. TECHNICAL DATA

Working width: mm 560  
 Squeegee width: mm 800  
 Working capacity: 3500 m<sup>2</sup>/h  
 Disc brush: No. / Ø mm 1 / 560  
 Disc brush rotations RPM 200  
 Brush motor V/W 24/550  
 Maximum pressure on the brushes KG 23  
 Traction motor: 24/500 V/W  
 Traction wheel (number / diameter / width) No. / (Ømm / mm) 2 / (225 / 64)  
 Maximum forward speed km/h 0-5.5  
 Maximum gradient with full load % 10  
 Suction vacuum: No. / (V/W) 1 / (24 / 500)  
 Solution tank: Mbar 700  
 Front elastic wheel (diameter / width) Ømm / mm 175/60  
 Solution tank L 70  
 Recovery tank L 70  
 Steering diameter mm 1980  
 Machine length mm 1265  
 Machine length with optional item-holder tray mm 1320  
 Machine height mm 1030  
 Machine height with optional blinking light kit mm 1230  
 Machine width (without squeegee) mm 600  
 Machine width (without squeegee) with optional tool-holder kit mm 630  
 Battery compartment(L\*W\*H) mm 362x354x290  
 Rated battery voltage V/Ah 12/100  
 Battery weight (max) KG 80  
 Machine weight (empty and without batteries) 110 Kg  
 Gross weight in running order (machine + batteries + water + operator) 220 Kg  
 pressure level : 65 dB (A)

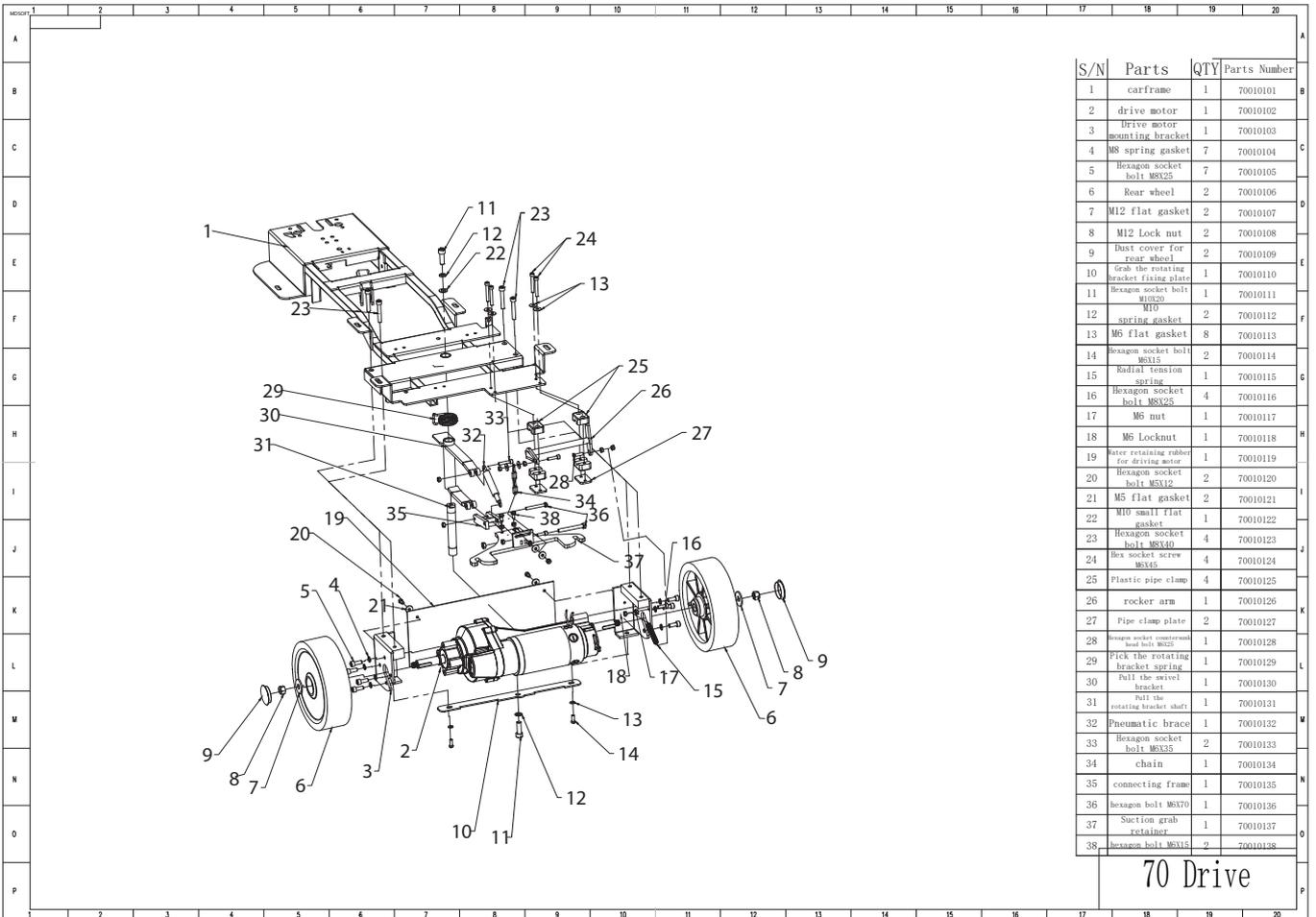
### 10. EXPLODED VIEW





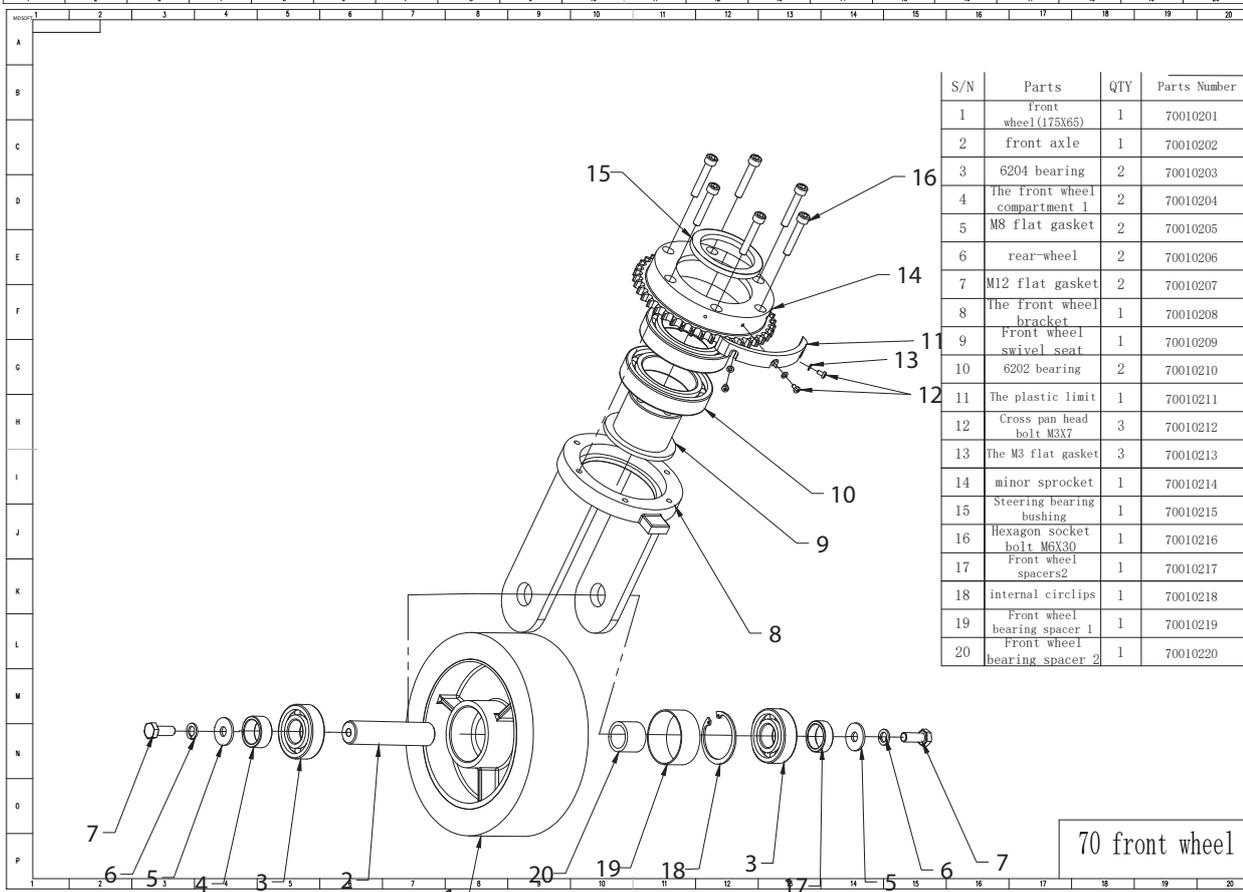
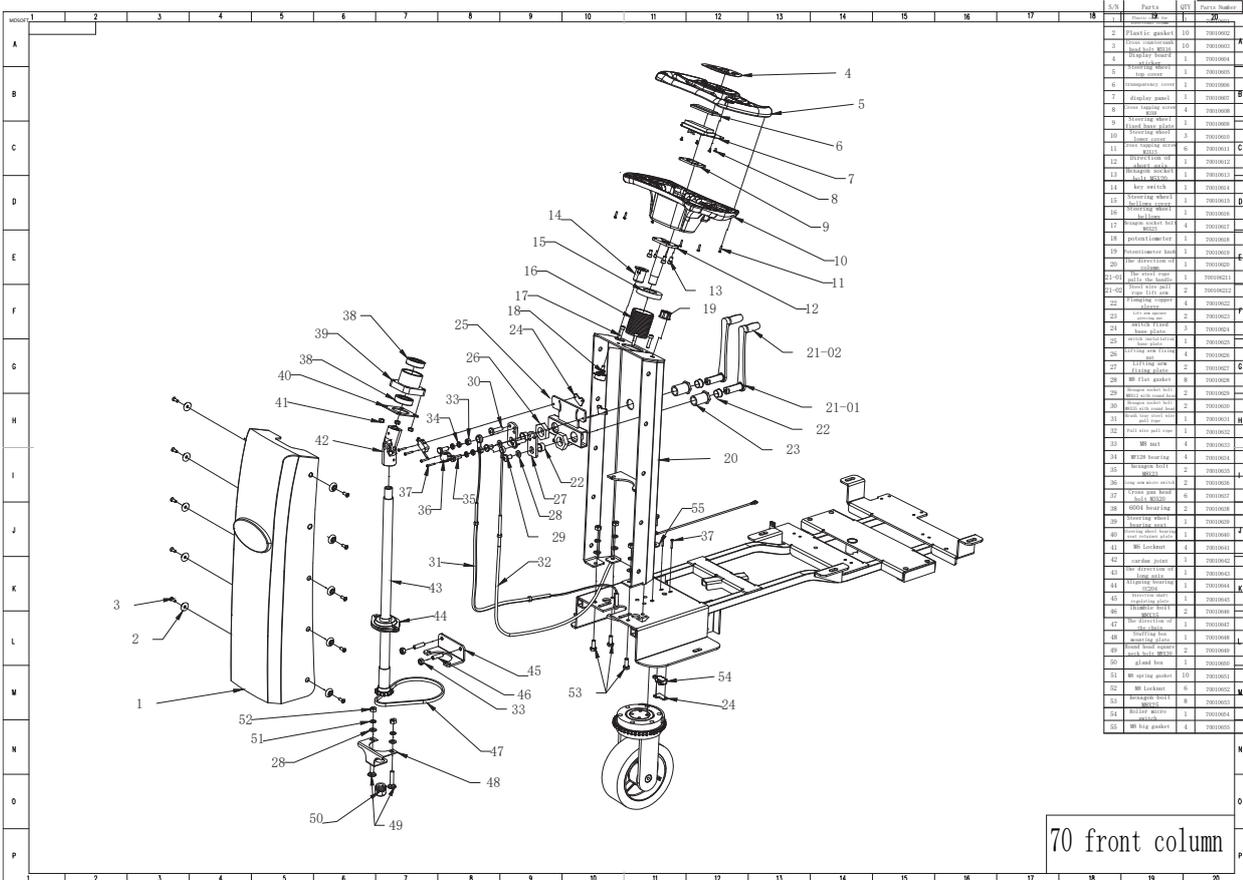
S/N	Parts	QTY	Parts Number
1	Clear water tank	1	700201
2	Clear water tank back	1	700202
3	cross screw/bush bolt M5x16	1	700203
4	cushion	1	700204
5	seepage tank bushes	1	700205
6	M5 flat gasket	2	700206
7	Hexagon socket bolt M5x12	2	700207
8	M5 flat gasket	4	700208
9	Hexagon socket bolt M5x20	4	700209
10	foot accelerator	1	700210
11	foot rest	1	700211
12	Plastic Chips	10	700212
13	cross counterwash head bolt M5x16	10	700213
14	measuring glass	1	700214
15	Add water pipe	1	700215
16	right angle copper joint Ø10	2	700216
17	liquid level tube	1	700217
18	controller ventilation cover plate	1	700218
19	emergency stop switch	1	700219
20	controller ventilation fan	1	700220
21	controller	1	700221
22	water support	1	700222
23	cross pin head bolt M5x10	2	700223
24	cross counterwash head bolt M5x15	2	700224
25	M4 nut	2	700225

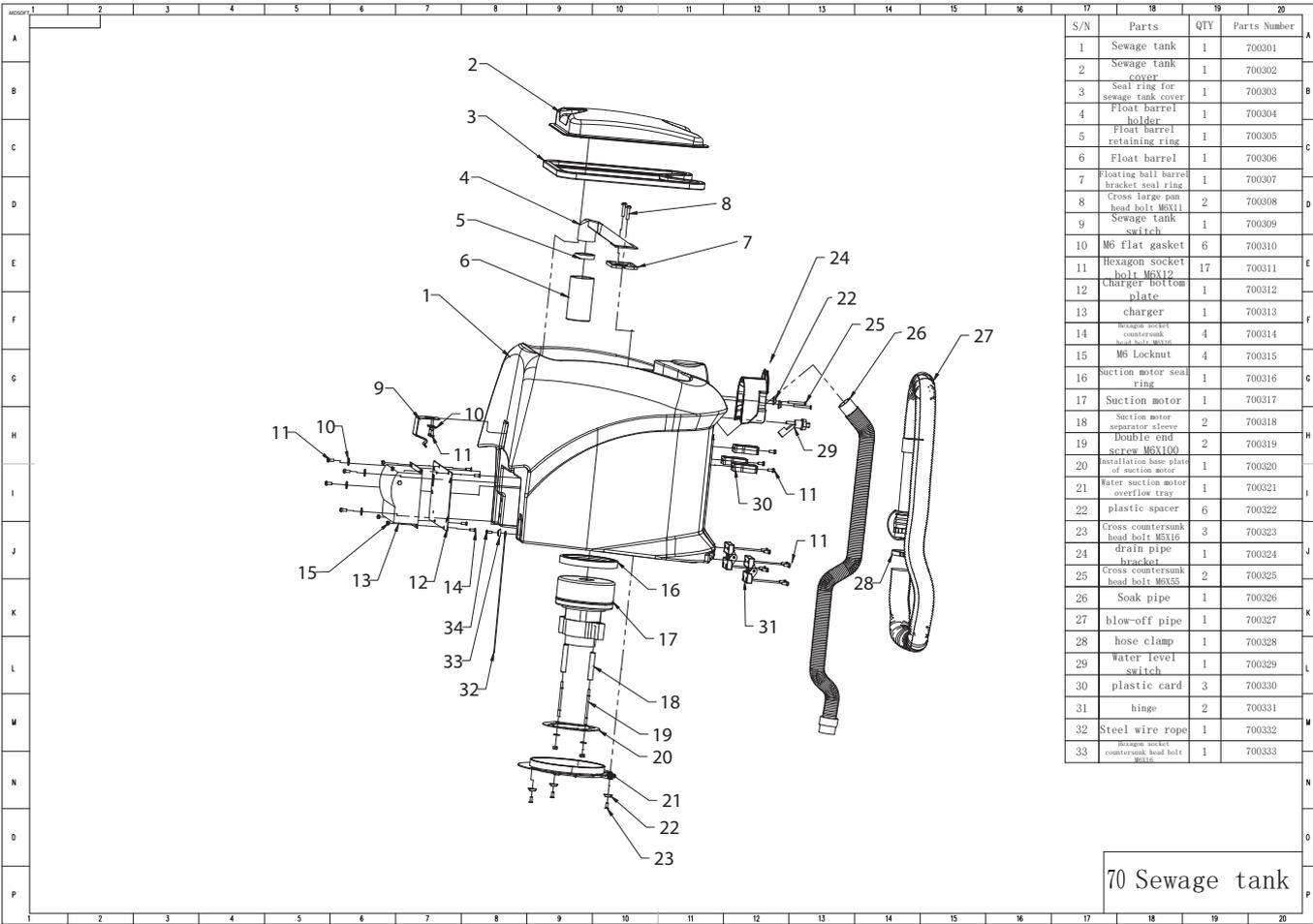
Clear water tank



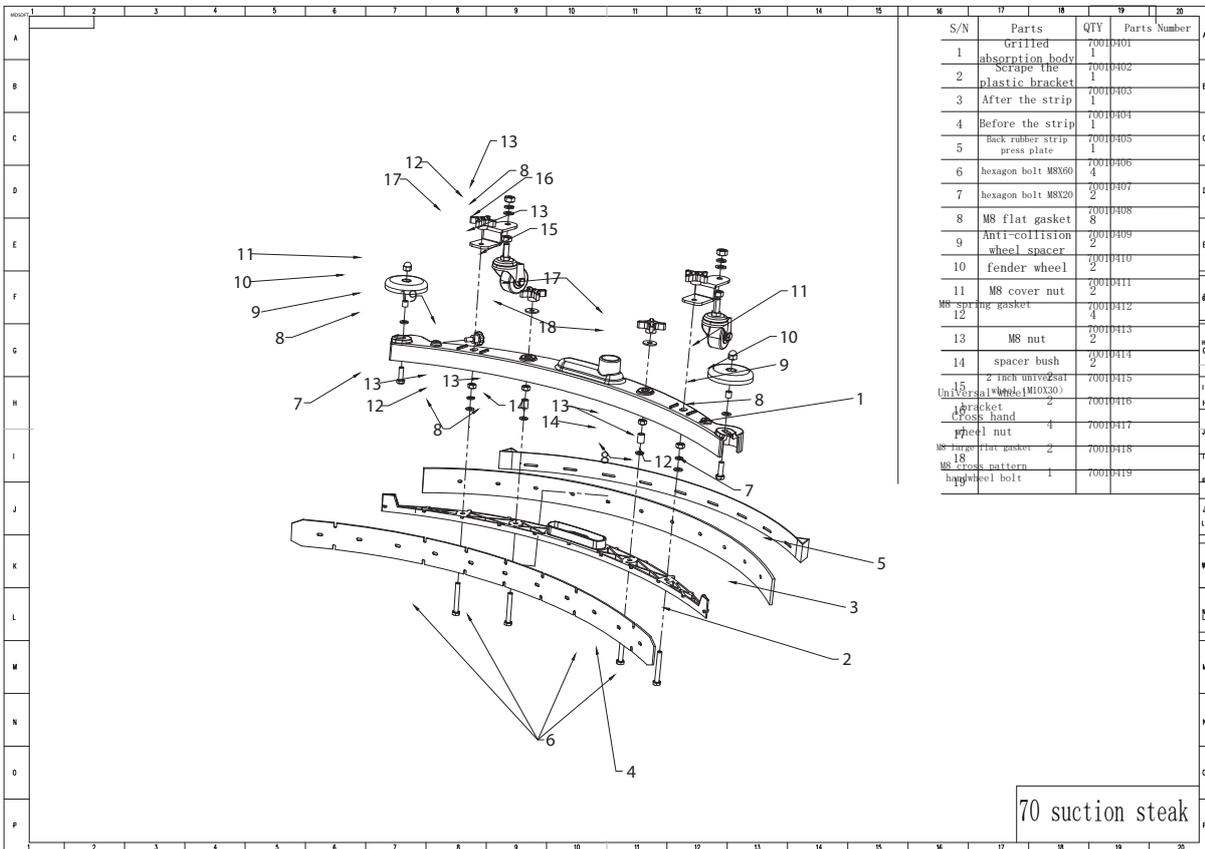
S/N	Parts	QTY	Parts Number
1	carframe	1	70010101
2	drive motor	1	70010102
3	drive motor mounting bracket	1	70010103
4	M8 spring gasket	7	70010104
5	Hexagon socket bolt M8x25	7	70010105
6	Rear wheel	2	70010106
7	M12 flat gasket	2	70010107
8	M12 Lock nut	2	70010108
9	Dust cover for rear wheel	2	70010109
10	Grab the rotating bracket fixing plate	1	70010110
11	Hexagon socket bolt M10x20	1	70010111
12	M10 spring gasket	2	70010112
13	M6 flat gasket	8	70010113
14	Hexagon socket bolt M5x12	2	70010114
15	Radial tension spring	1	70010115
16	Hexagon socket bolt M8x25	4	70010116
17	M6 nut	1	70010117
18	M5 Locknut	1	70010118
19	Water retaining rubber for driving motor	1	70010119
20	Hexagon socket bolt M5x12	2	70010120
21	M5 flat gasket	2	70010121
22	M10 small flat gasket	1	70010122
23	Hexagon socket bolt M5x10	4	70010123
24	Hex socket screw M5x5	4	70010124
25	Plastic pipe clamp	4	70010125
26	rocker arm	1	70010126
27	Pipe clamp plate	2	70010127
28	Hexagon socket counterhead bolt M5x5	1	70010128
29	Pick the rotating bracket spring	1	70010129
30	Put the swivel bracket	1	70010130
31	Put the rotating bracket shaft	1	70010131
32	Pneumatic brace	1	70010132
33	Hexagon socket bolt M3x35	2	70010133
34	chain	1	70010134
35	connecting frame	1	70010135
36	hexagon bolt M5x70	1	70010136
37	Suction grab retainer	1	70010137
38	hexagon bolt M5x15	2	70010138

70 Drive

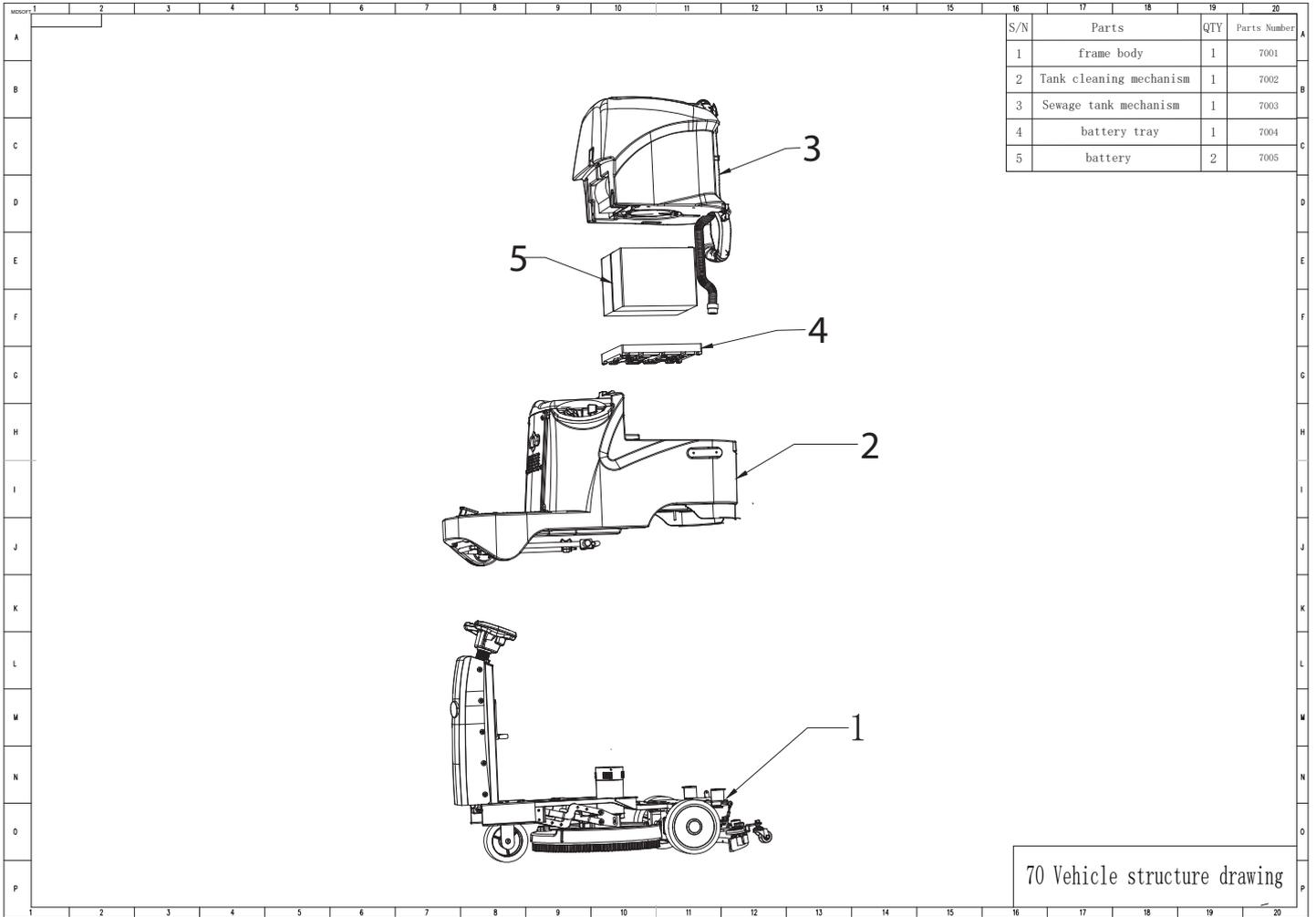




70 Sewage tank



70 suction steak



## EC DECLARATION OF CONFORMITY

Model Name: Scrubber dryer on seat  
Model Code: DAFR70  
Brand: Daewoo

We GBR Corp. LTD, Room 1002, 10/F., David House, 8-20 Nanking Street, Jordan, Kowloon, Hong Kong, China, declare under our sole responsibility that this product is in conformity and accordance with the following standards and regulations.  
The undersigned is responsible for the compilation of technical documentation.

Satisfies the requirement of the Council Directives:

Machinery Directive 2014/30/EU

Electromagnetic Compatibility Directive EMC 2014/35/EU

Noise Directive 2006/42/EC (Measured sound power level: Unlimited dB (A),

Guaranteed sound power level: 65dB (A))

and conforms to the norms:

EN ISO 60204-1: 2006+A1:2009

EN ISO 12100: 2010

Signature and Stamp on undersigned responsible.

Date: 14-10-2022

A handwritten signature in blue ink is written over a circular blue stamp. The stamp contains the text "GBR" at the top and "DAEWOO" at the bottom, with a central design.

## WARRANTY CARD

Product model	Date of sale
Serial number	Company
Username	Client's signature

The product is in good conditions and fully complete. Read and agree the terms of the warranty.

## GUARANTEE

The warranty period starts from the date of sale of the products and covers 2 years for all power products.

During the warranty period, free failures caused due to the use of poor-quality materials in the production and manufacturer workmanship admitted fault are removed. The guarantee comes into force only when warranty card and cutting coupons are properly filled. The product is accepted for repair in its pure form and full completeness.

## WARRANTY DOES NOT COVER

- Mechanical damage (cracks, chips, etc.) and damage caused by exposure to aggressive media, foreign objects inside the unit and air vents, as well as for damage occurred as a result of improper storage (corrosion of metal parts);
- Failures caused by overloading or product misuse, use of the product for other purposes. A sure sign of overload products is melting or discoloration of parts due to the high temperature, simultaneous failure of two or more nodes, teaser on the surfaces of the cylinder and the piston or destruction of piston rings. Also, the warranty does not cover failure of the automatic voltage regulator due to incorrect operation;
- Failure caused by clogging of the fuel and cooling systems;
- Wearing parts (carbon brushes, belts, rubber seals, oil seals, shock absorbers, springs, clutches, spark plugs, mufflers, nozzles, pulleys, guide rollers, cables, recoil starter, chucks, collets, removable batteries, filters and safety elements, grease, removable devices, equipment, knives, drills, etc.);
- Electrical cables with mechanical and thermal damage;
- Product opened or repaired by a non-authorized service center.
- Prevention, care products (cleaning, washing, lubrication, etc.), installation and configuration of the product;
- Natural wear products (production share);
- Failures caused by using the product for the needs related to business activities;
- If the warranty card is empty or missing seal (stamp) of the Seller;
- The absence of the holder's signature on the warranty card.

DAEWOO
DAEWOO
DAEWOO

Product _____ Model _____ Company _____ Date of sale _____	Product _____ Model _____ Company _____ Date of sale _____	Product _____ Model _____ Company _____ Date of sale _____
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**DAEWOO**  
POWER PRODUCTS

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