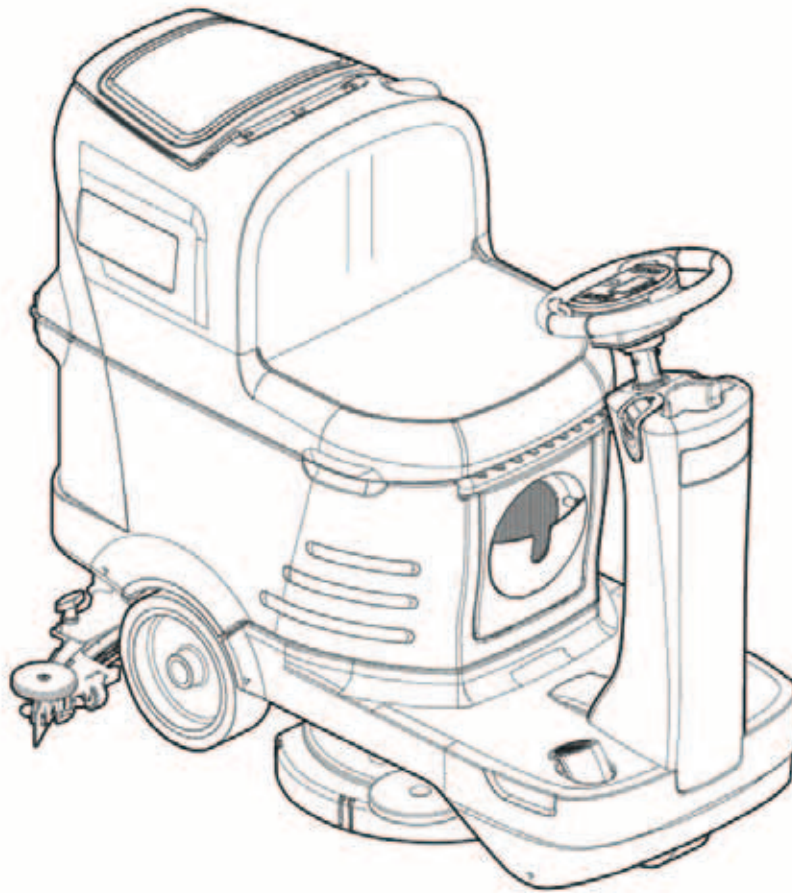
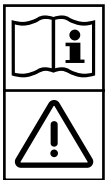


Clarke®

RA40



Instructions For Use - Original Instructions / Instrucciones de uso / Mode d'emploi
Model: 9087363020



READ THIS BOOK

LEA ESTE MANUAL

LISEZ CE MANUEL

EN English (1 - 26)

ES Español (27 - 52)

FR Français (53 - 78)

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your Clarke machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If your operator(s) cannot read this manual, have it explained fully before attempting to operate this machine.

All directions given in this book are as seen from the operator's position on the driver's seat.

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INTRODUCTION

**NOTE**

The numbers in brackets refer to the components shown in Machine Description chapter.

MANUAL PURPOSE AND CONTENTS

The purpose of this Manual is to provide the operator with all necessary information to use the machine properly, in a safe and autonomous way. It contains information about technical data, safety, operation, storage, maintenance, spare parts and disposal. Before performing any procedure on the machine, the operators and qualified technicians must read this Manual carefully. Contact Clarke in case of doubts concerning the interpretation of the instructions and for any further information.

TARGET

This Manual is intended for operators and technicians qualified to perform the machine maintenance.

The operators must not perform procedures reserved for qualified technicians. Clarke will not be answerable for damages coming from the non-observance of this prohibition.

HOW TO KEEP THIS MANUAL

The Instructions for Use Manual must be kept near the machine, inside an adequate case, away from liquids and other substances that can cause damage to it.

IDENTIFICATION DATA

The machine serial number and model name are marked on the plate (23).

Product number and year of production are marked on the same plate.

This information is useful when requiring machine spare parts. Use the following table to write down the machine identification data.

MACHINE model
PRODUCT code
MACHINE serial number

OTHER REFERENCE MANUALS

- Electronic battery charger Manual, to be considered as integral part of this Manual
- Spare Parts List (supplied with the machine)
- Service Manual (that can be consulted at Clarke Service Centers)

SPARE PARTS AND MAINTENANCE

All necessary operating, maintenance and repair procedures must be performed by qualified personnel or by Clarke Service Centers. Only original spare parts and accessories must be used.

Contact Clarke for service or to order spare parts and accessories, specifying the machine model, product code and serial number.

CHANGES AND IMPROVEMENTS

Clarke constantly improves its products and reserves the right to make changes and improvements at its discretion without being obliged to apply such benefits to the machines that were previously sold.

Any change and/or addition of accessories must be approved and performed by Clarke.

OPERATION CAPABILITIES

The RA40 scrubber-dryer is used to clean (scrubbing and drying) smooth and solid floors, in civil or industrial environment, under safe operation conditions by a qualified operator.

The scrubber-dryer cannot be used for fitted carpet and carpet cleaning.

CONVENTIONS

Forward, backward, front, rear, left or right are intended with reference to the operator's position, that is to say on the driver's seat (12).

UNPACKING/DELIVERY

To unpack the machine, carefully follow the instructions on the packing.

To move the machine manually, see the Pushing/Towing The Machine paragraph.

When the machine is delivered, check that the packing and the machine were not damaged during transportation.

In case of visible damages, keep the packing and have it checked by the carrier that delivered it. Call the carrier immediately to fill in a damage claim.

Please check that the following items have been supplied with the machine:

- Technical documents:
 - Scrubber-dryer Instructions for Use Manual
 - Scrubber-dryer Spare Parts List
- No. 2 lamellar fuses
- No. 1 splash guard



WARNING!

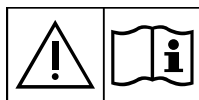
The Products sold with this Manual contain or may contain chemicals that are known to certain governments (such as the State of California, as identified in its Proposition 65 Regulatory Warning Law) to cause cancer, birth defects or other reproductive harm. In certain locations (including the State of California) purchasers of these Products that place them in service at an employment job site or a publicly accessible space are required by regulation to make certain notices, warnings or disclosures regarding the chemicals that are or may be contained in the Products at or about such work sites. It is the purchaser's responsibility to know the content of, and to comply with, any laws and regulations relating to the use of these Products in such environments. The Manufacturer disclaims any responsibility to advise purchasers of any specific requirements that may be applicable to the use of the Products in such environments.

SAFETY

The following symbols indicate potentially dangerous situations. Always read this information carefully and take all necessary precautions to safeguard people and property.

The operator's cooperation is essential in order to prevent injury. No accident prevention program is effective without the total cooperation of the person responsible for the machine operation. Most of the accidents that may occur in a factory, while working or moving around, are caused by failure to comply with the simplest rules for exercising prudence. A careful and prudent operator is the best guarantee against accidents and is essential for successful completion of any prevention program.

VISIBLE SYMBOLS ON THE MACHINE



WARNING!

Carefully read all the instructions before performing any operation on the machine.



WARNING!

Do not wash the machine with direct or pressurized water jets.



WARNING!

Do not use the machine on slopes with a gradient exceeding the specifications.

SYMBOLS THAT APPEAR ON THIS MANUAL

**DANGER!**

It indicates a dangerous situation with risk of death for the operator.

**WARNING!**

It indicates a potential risk of injury for people.

**CAUTION!**

It indicates a caution or a remark related to important or useful functions. Pay careful attention to the paragraphs marked by this symbol.

**NOTE**

It indicates a remark related to important or useful functions.

**CONSULTATION**

It indicates the necessity to refer to the Instructions for Use Manual before performing any procedure.

GENERAL INSTRUCTIONS

Specific warnings and cautions to inform about potential damages to people and machine are shown below.

**DANGER!**

- *Before performing any maintenance, repair, cleaning or replacement procedure, remove the ignition key and disconnect the battery connector.*
- *This machine must be used by properly trained operators only.*
- *Do not wear jewels when working near electrical components.*
- *Do not work under the lifted machine without supporting it with safety stands.*
- *Do not operate the machine near toxic, dangerous, flammable and/or explosive powders, liquids or vapors. This machine is not suitable for collecting dangerous powders.*
- *When using lead (WET) batteries, keep sparks, flames and smoking materials away from the batteries. During the normal operation explosive gases are released.*
- *When using lead (WET) batteries, battery charging produces highly explosive hydrogen gas. During battery charging, lift the recovery tank and perform this procedure in well-ventilated areas and away from naked flames.*

**WARNING!**

- *Carefully read all the instructions before performing any maintenance/repair procedure.*
- *Before using the battery charger, ensure that frequency and voltage values, indicated on the machine serial number plate, match the electrical mains voltage.*
- *Do not pull or carry the machine by the battery charger cable and never use the battery charger cable as a handle. Do not close a door on the battery charger cable, or pull the battery charger cable around sharp edges or corners. Do not run the machine on the battery charger cable.*
- *Keep the battery charger cable away from heated surfaces.*
- *Do not charge the batteries if the battery charger cable or the plug are damaged.*
- *To reduce the risk of fire, electric shock, or injury, do not leave the machine unattended when it is plugged in. Before performing any maintenance procedure, disconnect the battery charger cable from the electrical mains.*
- *Do not smoke while charging the batteries.*
- *To avoid any unauthorized use of the machine, remove the ignition key.*
- *Do not leave the machine unattended without being sure that it cannot move independently.*

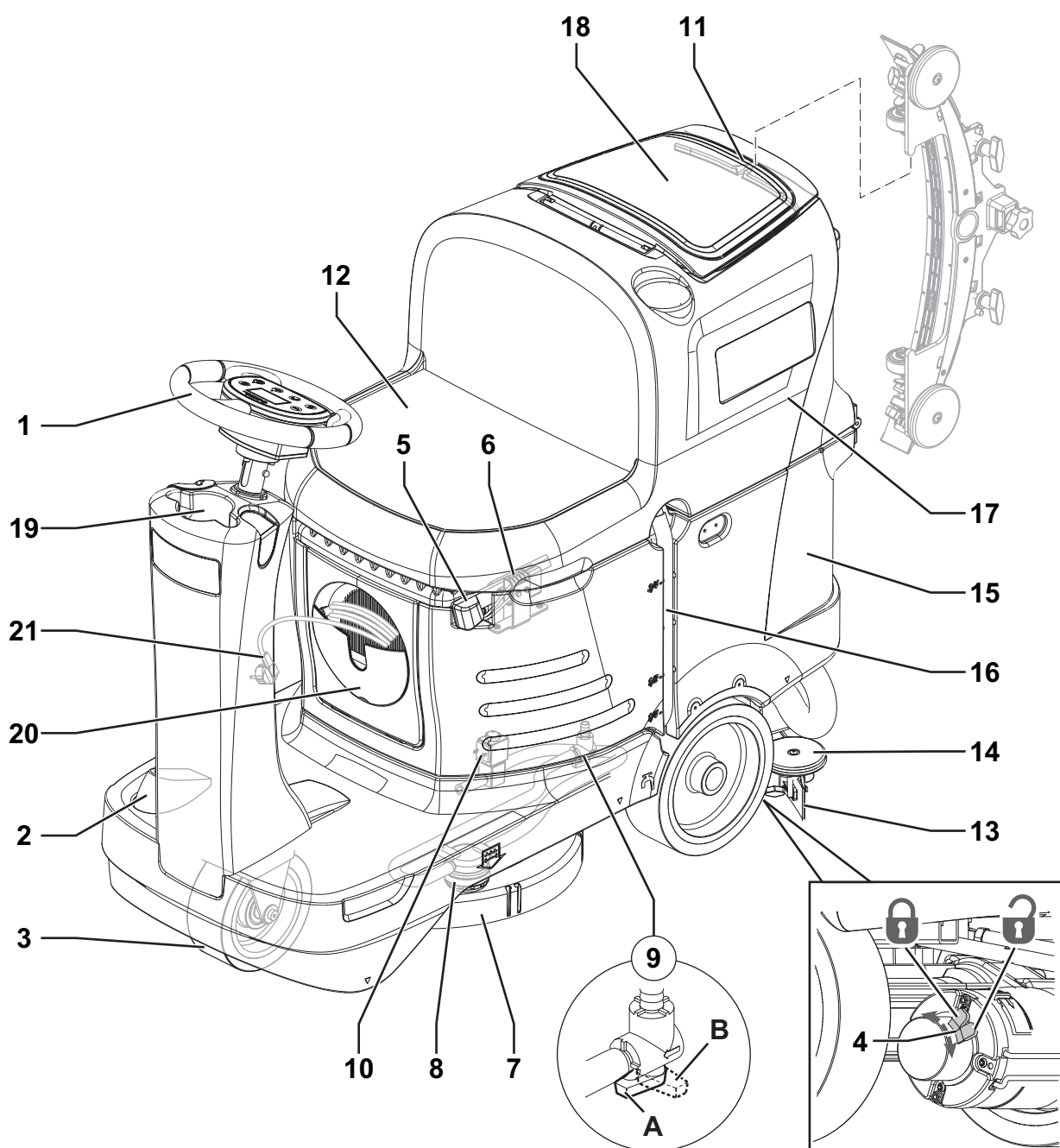
**WARNING!**

- Always protect the machine against the sun, rain and bad weather, both under operation and inactivity condition. This machine must be used in dry conditions, it must not be used or kept outdoors in wet conditions.
- Before using the machine, close all doors and/or covers as shown in the Instructions for Use Manual.
- This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the machine by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the machine.
- Close attention is necessary when used near children. Use only as shown in this Manual. Only Clarke recommended accessories must be used.
- Check the machine carefully before each use, always check that all the components have been properly assembled before use. If the machine is not perfectly assembled it can cause damages to people and properties.
- Take all necessary precautions to prevent hair, jewels and loose clothes from being caught by the machine moving parts.
- Do not use the machine on incline.
- Do not tilt the machine more than the angle indicated on the machine itself, in order to prevent instability.
- Do not use the machine in particularly dusty areas.
- Use the machine only where a proper lighting is provided.
- If the machine is to be used where there are other people besides the operator, it is necessary to install the pivoting light (optional).
- While using this machine, take care not to cause damage to people or objects.
- Do not bump into shelves or scaffoldings, especially where there is a risk of falling objects.
- Do not lean liquid containers on the machine, use the relevant can holder.
- The machine operating temperature must be between +32 °F and 104 °F (0 °C and +40 °C).
- The machine storage temperature must be between +32 °F and 104 °F (0 °C and +40 °C).
- The humidity must be between 30 % and 95 %.
- When using floor cleaning detergents, follow the instructions on the labels of the detergent bottles.
- To handle floor cleaning detergents, wear suitable gloves and protections.
- Do not use the machine as a means of transport.
- Do not allow the brush/pad to operate while the machine is stationary to avoid damaging the floor.
- In case of fire, use a powder fire extinguisher, not a water one.
- Do not tamper with the machine safety guards and follow the ordinary maintenance instructions scrupulously.
- Do not allow any object to enter into the openings. Do not use the machine if the openings are clogged. Always keep the openings free from dust, hairs and any other foreign material which could reduce the air flow.
- Do not remove or modify the plates affixed to the machine.
- To manually move the machine, the electromagnetic brake must be disengaged. After moving the machine manually, engage the electromagnetic brake again. Do not use the machine when the electromagnetic brake handwheel is screwed down.
- When the machine is to be pushed for service reasons (missing or discharged batteries, etc.), the speed must not exceed 2.5 mi/h (4 km/h).
- This machine cannot be used on roads or public streets.
- Pay attention during machine transportation when temperature is below freezing point. The water in the recovery tank or in the hoses could freeze and seriously damage the machine.
- Use brushes and pads supplied with the machine or those specified in the Instructions for Use Manual. Using other brushes or pads could reduce safety.
- In case of machine malfunctions, ensure that these are not due to lack of maintenance. If necessary, request assistance from the authorised personnel or from an authorised Service Center.
- If parts must be replaced, require ORIGINAL spare parts from an Authorised Dealer or Retailer.
- To ensure machine proper and safe operation, the scheduled maintenance shown in the relevant chapter of this Manual, must be performed by the authorised personnel or by an authorised Service Center.
- Do not wash the machine with direct or pressurised water jets, or with corrosive substances.
- The machine must be disposed of properly, because of the presence of toxic-harmful materials (batteries, etc.), which are subject to standards that require disposal in special centres (see Scrapping chapter).

MACHINE DESCRIPTION

MACHINE STRUCTURE

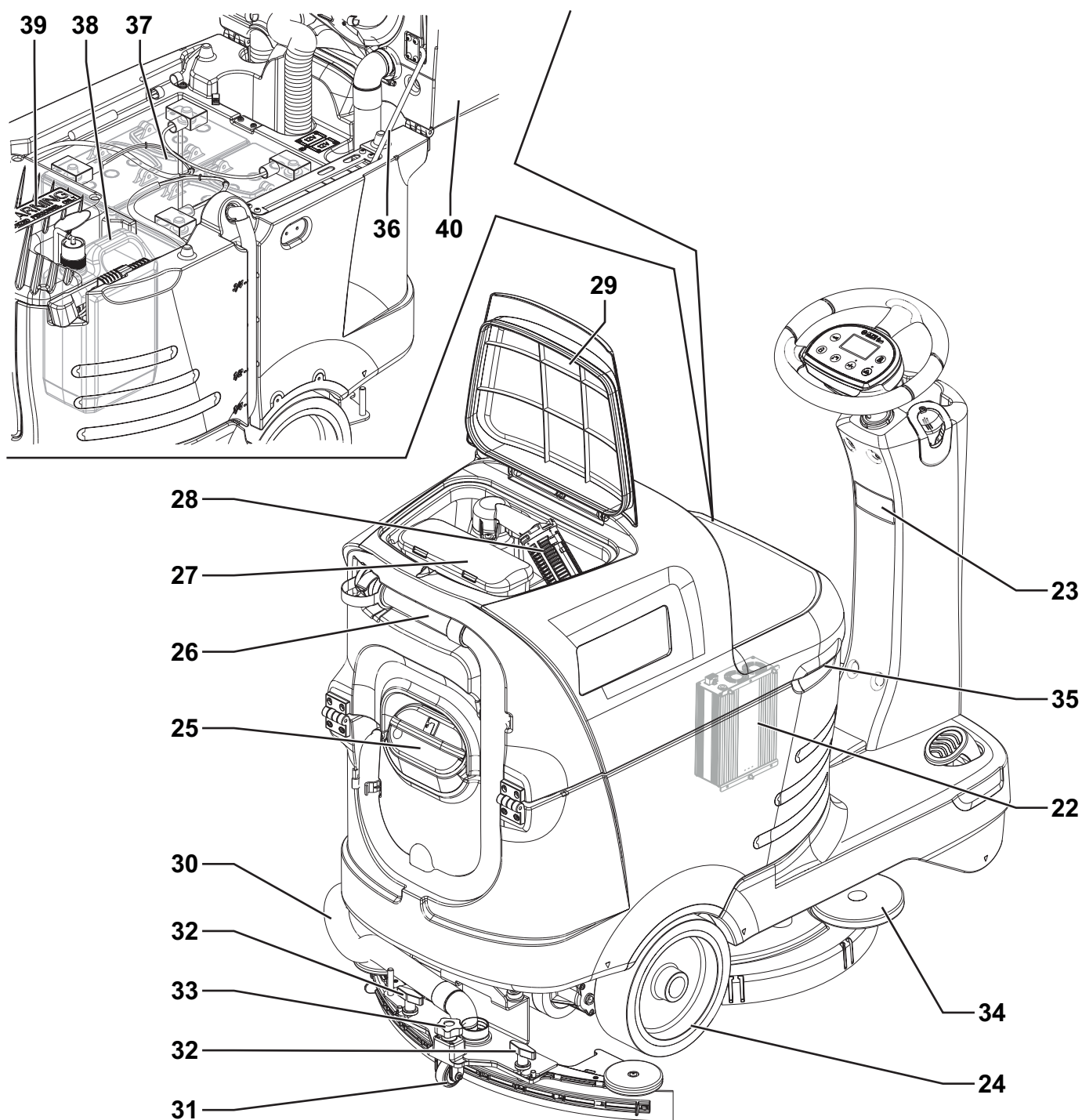
- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Steering wheel with control panel (see the following paragraph) 2. Drive pedal 3. Front steering wheel 4. Electromagnetic brake locking/unlocking lever 5. EMERGENCY push-button, to stop immediately all functions 6. Battery connector 7. Brush deck 8. Solution filter 9. Solution valve <ol style="list-style-type: none"> A) Open valve B) Closed valve | <ol style="list-style-type: none"> 10. Solenoid valve 11. Squeegee hook 12. Seat 13. Squeegee 14. Squeegee bumper wheels 15. Solution tank 16. Solution drain and level check hose 17. Dumping recovery tank assembly 18. Recovery tank cover 19. Can holder 20. Battery charger cable housing and document holder 21. Battery charger cable |
|--|--|



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MACHINE STRUCTURE (Continues)

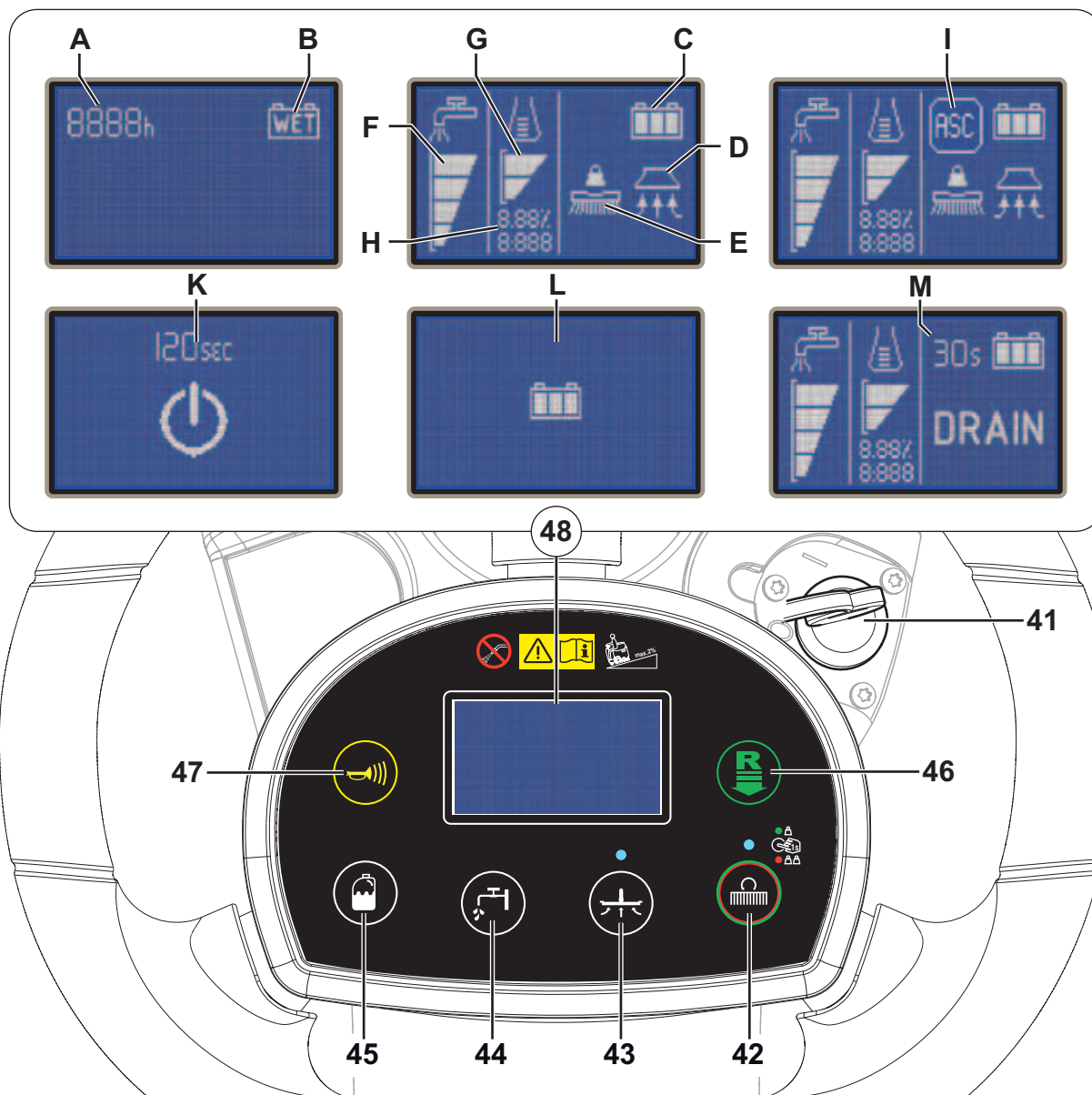
- 22. Battery charger
 - 23. Serial number plate/technical data/conformity certification
 - 24. Rear driving wheels
 - 25. Solution tank filler neck
 - 26. Recovery water drain hose
 - 27. Container with debris collection grid
 - 28. Vacuum grid with automatic shut-off float
 - 29. Recovery water tank cover (open)
 - 30. Squeegee vacuum hose
 - 31. Squeegee support wheel
 - 32. Squeegee mounting handwheels
 - 33. Squeegee adjusting knob
 - 34. Brush deck bumper wheel
 - 35. Tank assembly and seat lifting handle
 - 36. Tank assembly and seat support rod
 - 37. Batteries (*)
 - 38. Chemical Mixing System detergent tank (*)
 - 39. Electronic component compartment cover
 - 40. Lifted recovery tank assembly and driver's seat
- (*) Optional



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CONTROL PANEL

41. Machine ignition key
 42. "One Touch" Scrub ON/OFF push-button
 • Flashing green LED: Brush deck moving up/down
 • Steady green LED: Ready for work
 • Steady red LED: Extra pressure active (hold for one second)
 43. Vacuum system adjustment/deactivation push-button:
 • LED on - solution flow activated
 44. Detergent flow adjustment push-button
 45. Detergent percentage adjustment push-button (*)
 46. Reverse gear activation/deactivation push-button
 47. Horn switch
 48. Multifunction display
 Items displayed:
 A) Hours worked
 B) Battery type
 C) Battery charge level
 D) Vacuum system activation
 E) Brush activation
 F) Detergent solution flow quantity
 G) Detergent quantity (*)
 H) Percentages of detergent in the washing water (*)
 I) Anti-skid control
 K) Auto shut-off timer
 L) Battery charging with on-board battery charger (*)
 M) Chemical Mixing System draining activation (*)
- (*) Optional



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ACCESSORIES/OPTIONS

In addition to the standard components, the machine can be equipped with the following accessories/options, according to the machine specific use:

- GEL/AGM batteries
- Brushes of different materials
- Pads of different materials
- Squeegee blades of different materials
- Filling hose
- Chemical Mixing System
- Pivoting light
- Mop a trash kit
- USB port

For further information concerning the optional accessories, contact an authorised Retailer.

TECHNICAL DATA

Model	RA40
Solution tank capacity	18.5 US gal (70 liters)
Recovery tank capacity	18.5 US gal (70 liters)
Machine length	50 in (1,270 mm)
Machine width with squeegee	28.3 in (720 mm)
Machine width without squeegee	21.6 in (550 mm)
Machine height	40.1 in (1,020 mm)
Turning space for U-turns	71 in (1,800 mm)
Cleaning width	21 in (530 mm)
Rear driving wheel diameter	10 in (254 mm)
Rear driving wheel specific pressure on the floor	145 psi (1.0 N/mm ²)
Front steering wheel diameter	7.9 in (200 mm)
Front wheel specific pressure on the floor	188 psi (1.3 N/mm ²)
Brush/pad diameter	21 in (530 / 508 mm)
Brush pressure with extra-pressure function turned off	33 lb (15 kg)
Brush pressure with extra-pressure function turned on	66 lb (30 kg)
Solution flow values	0.75 cl/m / 1.5 cl/m / 3.0 cl/m / (2.8 l/min, if enabled)
Chemical Mixing System detergent percentage (optional)	0.25 % - 3 %
Sound pressure level at workstation (ISO 11201, ISO 4871, EN 60335-2-72) (LpA)	68 ± 3 dB(A)
Sound pressure level at workstation in silent mode (LpA)	62 ± 3 dB(A)
Machine sound power level (ISO 3744, ISO 4871, EN 60335-2-72) (LwA)	84 dB(A)
Vibration level at the operator's arms (ISO 5349-1, EN 60335-2-72)	130 in/s ² (3.3 m/s ²)
Vibration level at the operator's body (ISO 5349-1, EN 60335-2-72)	35.4 in/s ² (0.9 m/s ²)
Maximum gradient when working	2 %
Drive system motor power	0.53 hp (400 W)
Drive speed (variable)	0 - 3.7 mi/h (0 - 6 km/h)
Vacuum system motor power	0.4 hp (310 W)
Vacuum system circuit capacity	39 in H ₂ O (1,000 mm H ₂ O)
Brush motor power	0.6 hp (450 W)
Brush motor speed	155 rpm
Total absorbed power	26 A (620 W)
IP protection class	X4
Protection class (electric)	III (I for the battery charger)
Battery compartment size	13.8x14.2x11 in (350x360x280 mm)
System voltage	24V
Standard batteries (2)	Discover 12V-105Ah
Battery charger	100-240Vac 50-60Hz, 24Vdc 13A
Work autonomy (standard batteries)	2.5 hour
Weight without batteries and with empty tanks	267 lb (121 kg)
Gross vehicle weight (GVW)	754 lb (342 kg)
Shipping weight	342 lb (155 kg)

WIRING DIAGRAM

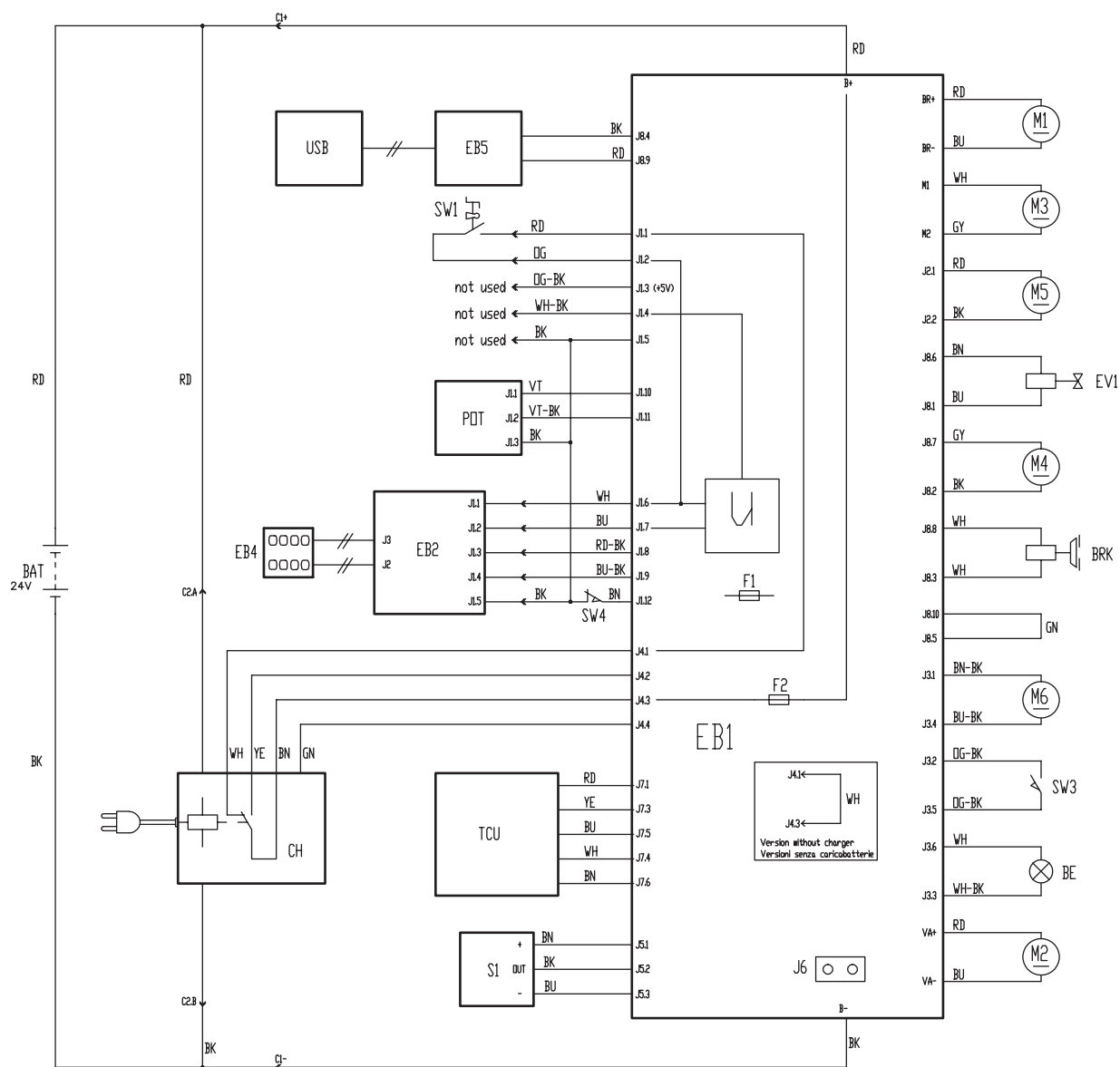
Key

BAT	24V batteries
BE	Pivoting light (optional)
BRK	Electromagnetic brake
C1	Battery connector
C2	Battery charger connector
CH	Battery charger
EB1	Function electronic board
EB2	Display electronic board
EB4	Dashboard instrument electronic board
EB5	5V power unit (optional)
EV1	Solenoid valve
F1	Main electronic board fuse
F2	Signal circuit fuse
M1	Brush motor
M2	Vacuum system motor
M3	Drive system motor
M4	Chemical Mixing System pump (optional)
M5	Brush deck actuator motor
M6	Squeegee actuator motor
POT	Drive pedal potentiometer
S1	Solution level sensor

SW1	Key
SW3	Seat microswitch
SW4	Anti-skid control sensor
TCU	TrackClean™ (optional)
USB	USB port (optional)

Color codes

BK	Black
BU	Blue
BN	Brown
GN	Green
GY	Grey
OG	Orange
PK	Pink
RD	Red
VT	Violet
WH	White
YE	Yellow



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USE



WARNING!

On some points of the machine there are some adhesive plates indicating:

- **DANGER**
- **WARNING**
- **CAUTION**
- **CONSULTATION**

While reading this Manual, the operator must pay particular attention to the symbols shown on the plates (see Visible Symbols On The Machine paragraph).

Do not cover these plates for any reason and immediately replace them if damaged.

BATTERY CHECK/SETTING ON A NEW MACHINE



WARNING!

The electric components of the machine can be seriously damaged if the batteries are either improperly installed or connected. The batteries must be installed by qualified personnel only.

Set the machine according to the type of batteries used.

Check the batteries for damage before installation.

Disconnect the battery connector and the battery charger plug.

Handle the batteries with great care.

Install the battery terminal protection caps supplied with the machine.

The machine requires 2 12V batteries, connected according to the diagram shown in Figure 1.

The machine can be supplied in one of the following modes:

Batteries already installed on the machine

1. Ensure that the battery connector (6) is connected.
2. When first using the machine with new batteries, perform a full charging cycle (see the procedure in Maintenance chapter).

Without batteries

1. Buy appropriate batteries (see "Technical Data" paragraph). For battery choice and installation, apply to qualified battery Retailers.
2. Set the machine according to the type of batteries installed as shown in the Service key paragraph, in Maintenance chapter.

BATTERY INSTALLATION

Battery Installation

1. Turn the ignition key (41) to "O" to turn off the machine.
2. Disconnect the battery connector by pressing the emergency push-button (5).
3. Lift the cover (18) and check that the recovery tank (17) is empty, otherwise empty it with the drain hose (26).
4. Close the cover (18).
5. Grasp the handle (35) and carefully lift the recovery tank assembly (17).
6. The machine is supplied with cables suitable to install 2 12V batteries.
7. Carefully lift the batteries until the relevant compartment, then place them properly.
8. Route and install the battery cable as shown in Figure 1, then carefully tighten the nut on each battery terminal.
9. Place the protection cap on each terminal, then connect the battery connector (6).
10. Disengage the support rod (36), then grasp the handle (35) and carefully lower the recovery tank assembly (17).

Battery Charging

11. Fully charge the batteries (see the procedure in Maintenance chapter).

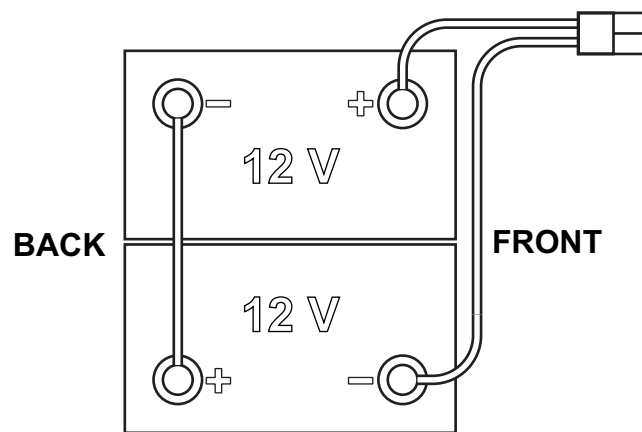


Figure 1

P100863

BEFORE MACHINE START-UP



WARNING!

When starting the machine, or before operating the “One Touch” button (42), make sure that there is no foreign material between the deck and the tank assembly which could obstruct the deck movement. If the machine has been turned off without lifting the deck, the deck would lift automatically at next machine start-up.

Brush or pad-holder removal/installation

1. According to the kind of cleaning to be performed, the machine can be equipped either with the brush (A, Fig. 2) or the pad-holder (B) with pad (C) together with the appropriate deck.
2. Place the brush (A) or the pad-holder (B) under the deck (7).
3. Turn the ignition key (41) to “I”.
4. Press the push-button (42) to lower the deck on the brush.
5. To engage the brush, press the drive pedal (2) shortly, if necessary repeat the procedure until the brush is engaged.
6. To remove the brush, lift the deck by pressing the push-button (42), then manually release the brush from the hub by turning it abruptly in its normal rotation direction (D).

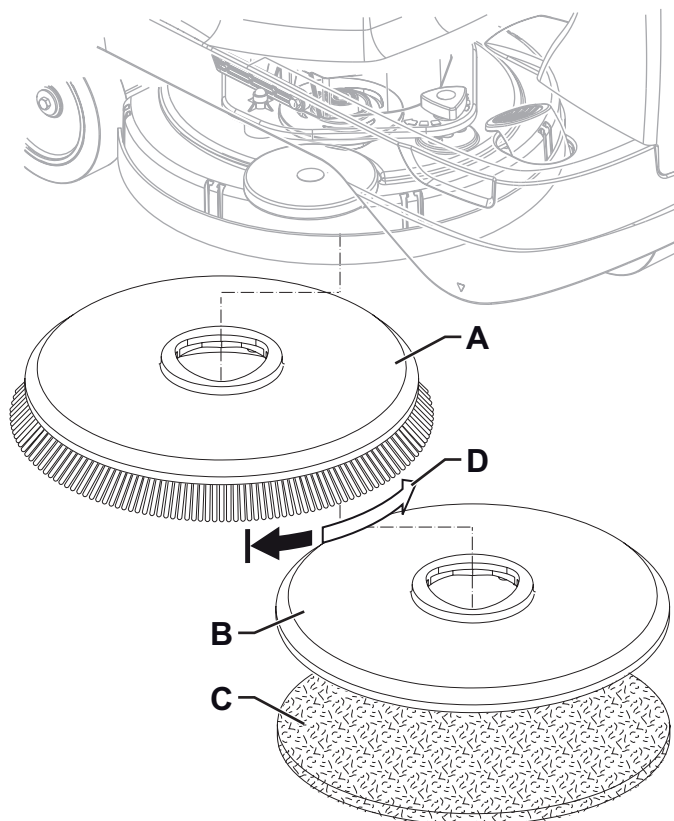


Figure 2

P100864

Available brushes and their relevant application guides (suggestions only)

Models	46 GRIT	80 GRIT	180 GRIT	240 GRIT	500 GRIT	PROLENE	PROLITE	UNION MIX
General cleaning:								
Concrete								
Terrazzo floor								
Ceramic tiles/quarystones								
Marble								
Vinyl tiles								
Rubber tiles								
Polishing:								
Rubber tiles								
Marble								
Vinyl tiles								

Squeegee installation

1. Install the squeegee (A, Fig. 3) and fasten it to the bracket (C) with the handwheels (B).
2. If necessary, adjust the squeegee with the knob (D) so that the rear blade (E) and front blade (F) touch the floor as shown in the figure.

Solution tank filling



CAUTION!

Use only low-foam and non-flammable detergents, intended for automatic scrubber applications.



WARNING!

When using floor cleaning detergents, follow the instructions on the labels of the detergent bottles.

To handle floor cleaning detergents, wear suitable gloves and protections.



NOTE

If the machine is equipped with Chemical Mixing System (optional) pour clean water in the tank, otherwise pour solution.

1. Ensure that the solution valve (9) is open (9-A).
2. To fill the solution tank (15) remove the filler neck plug (25).

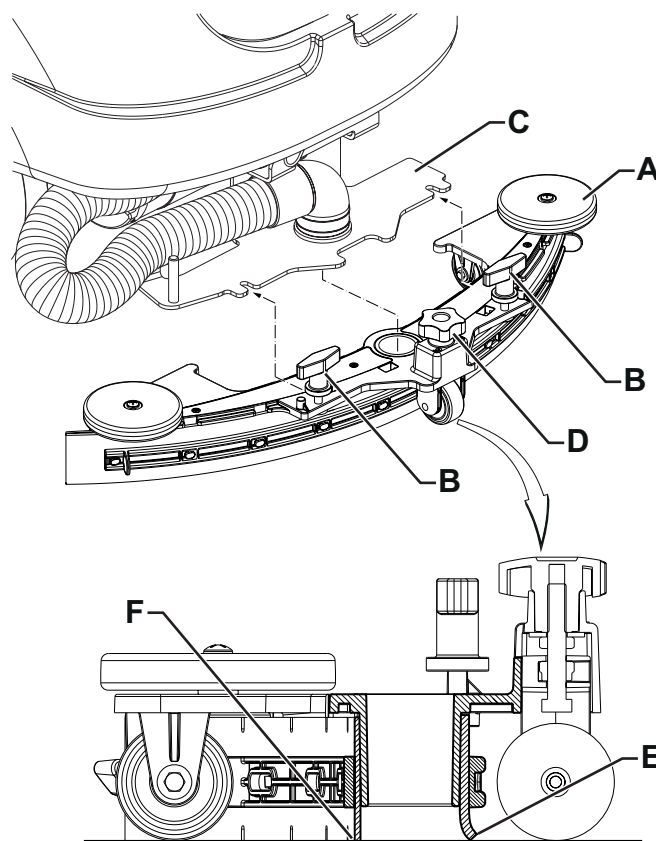


Figure 3

P100865

(For machines without Chemical Mixing System)

3. Fill the tank (15) with a solution suitable for the work to be performed.
Do not fill the tank completely, leave a few inches from the edge. Use the level hose (16) as reference.
Always follow the dilution instructions on the label of the chemical product used to prepare the solution.
The solution temperature must not exceed 40 °C.

(For machines with Chemical Mixing System)

4. Fill the tank (15) with clean water. If equipped, use the water filler hose (optional) located in the filler neck (25).
Do not fill the tank completely, leave a few inches from the edge. Use the level hose (16) as reference.
The water temperature must not exceed 40 °C.

Detergent tank replacement (For machines with Chemical Mixing System)

5. Lift the cover (18) and check that the recovery tank (17) is empty, otherwise empty it with the drain hose (26).
6. Close the cover (18).
7. Grasp the handle (35) and carefully lift the recovery tank assembly (17).
8. Unscrew the plug with hose on the detergent container (38).
9. Remove the empty container from its housing and replace it with a new one.
10. Insert the hose properly and screw down the plug on the detergent container.



CAUTION!

For the supply and the type of detergent to use, contact an authorized Service Center.



NOTE

In case of new system, system emptied for cleaning, etc., wait for the hoses to fill up completely before turning on. In order to fill the Chemical Mixing System quickly it may be useful to drain it once or several times (see the procedure in Maintenance chapter).

MACHINE START AND STOP

Starting the machine

1. Prepare the machine as shown in the previous paragraph.
2. Turn the ignition key (41) to "I" without pressing the drive pedal (2).
3. In the first 2 seconds after machine start-up, the multifunction display (58) indicates the machine working hours (48-A) and the type of batteries installed (48-B).



NOTE

Check the battery charge level.

When the multifunction display shows at least one segment of the battery symbol (48-C) which is on but not flashing, the machine is ready for use.

When the battery symbol (48-C) shows just one segment flashing, the batteries have to be charged (see the procedure in Maintenance chapter).

4. Drive the machine to the working place, by starting it with both hands on the steering wheel (1) and by pressing the drive pedal (2).

The drive speed can be adjusted from zero to maximum speed according to the pressure on the drive pedal (2).

5. The forward/reverse gear is selected with the relevant push-button (46).



NOTE

The driver's seat (12) is equipped with a safety sensor, which allows the machine to be driven by pressing the pedal (2) only when the operator is on the driver's seat.



NOTE

The machine is equipped with an anti-skid safety system (display icon (48-I)) that reduces the speed when turning and when the machine tilts laterally, irrespectively of the pressure on the pedal.

In this case, the reduction of speed is not a malfunction but a characteristic that improves the machine stability and safety in every condition.

Stopping the machine

6. Stop the machine by releasing the drive paddle (2). It is not necessary to lock the machine during stopping or parking, because the electromagnetic brake on the wheels turn on automatically when the drive pedal is not pressed.
7. Turn off the machine by turning the ignition key (41) to "O".



NOTE

If the machine is on but not working, it automatically turns off after 2 minutes.

Turn on the machine by turning the ignition key to "O" and then to "I".



CAUTION!

In the event of an emergency, to stop all machine functions immediately, press the push-button (5).

To reset the machine functions, connect the connector (6) again.

MACHINE OPERATION (SCRUBBING/DRYING)

1. Start the machine as shown in the previous paragraph.
2. Press the "One Touch" button (42) to lower the brush deck (7) and the squeegee (13) and start scrubbing and drying.
3. Start scrubbing, by starting it with both hands on the steering wheel (1) and by pressing the drive pedal (2) as necessary.
4. If necessary, to reduce the noise, turn on the vacuum system mute function by pressing the push-button (44).



NOTE

The machine is equipped with a safety system that turns on the brush and vacuum system only when the machine is moving.

5. Adjust the solution flow by pressing the push-button (44) as necessary, depending on the type of cleaning to be performed.

**NOTE**

For the first 3 flow levels (Fig. 4), the amount of solution dispensed is automatically adjusted according to the machine speed, in order to obtain a constant amount of solution per linear meter of cleaning.
 Level 4 (when enabled) supplies the maximum possible quantity of detergent solution, regardless of the machine speed (to enable or disable this, see the Super User key section in the Maintenance chapter).
 The level 0 closes the solution flow completely.

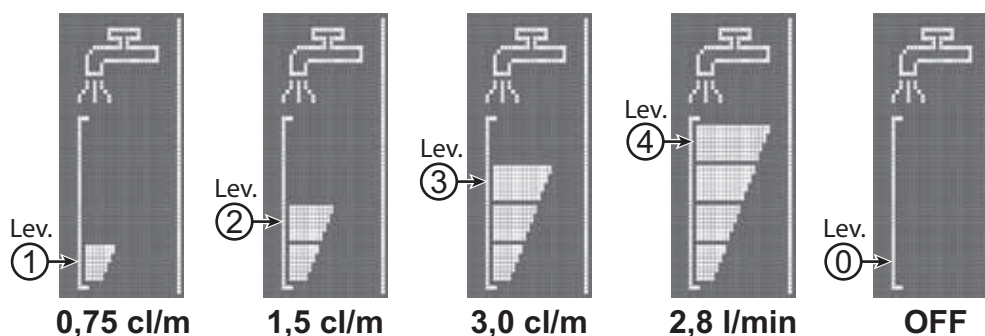


Figure 4

P100866

**NOTE**

For correct scrubbing/drying of floors at the sides of the walls, Clarke suggests to go near the walls with the right side of the machine as shown in figure 5.

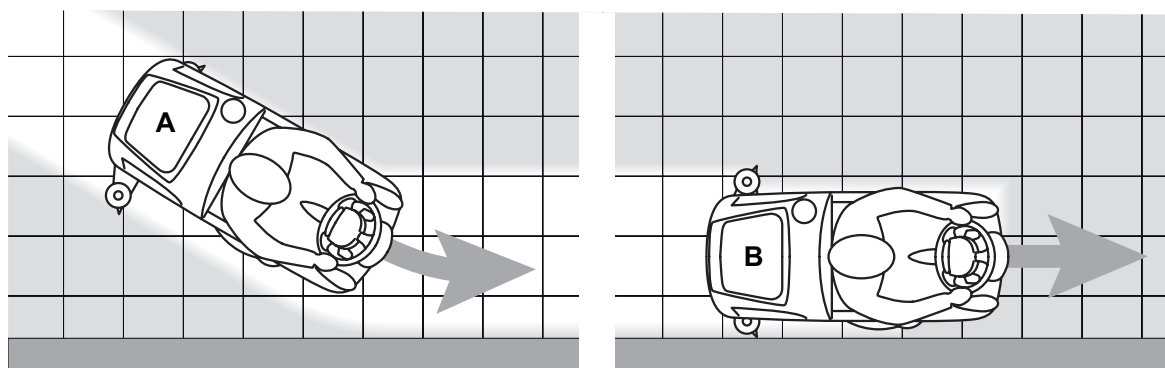


Figure 5

P100867

6. To stop scrubbing/drying, press the push-button (42) and wait for the brush deck (7) to lift. After 10 seconds, the vacuum system turns off too and the squeegee (13) lifts.

Adjusting of detergent concentration in the washing water

(For machines with Chemical Mixing System)

The system for mixing the detergent in the washing water is automatically activated when the brush is running.

The percentage of detergent added to the washing water is set to level 1 (Fig. 6).

By pressing the push-button (46), it is possible to set the percentage level to 2, or reset it to level 0.

The set percentages are shown on the multifunction display (48-G).

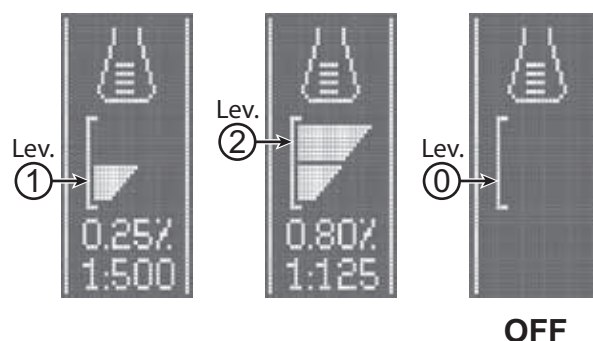


Figure 6

P100868




NOTE

All of the above solution flow and detergent concentration values are factory settings. To change the settings, see the Service key paragraph, in Maintenance chapter.

Working with brush extra pressure function turned on

If the floor proves to be particularly difficult to clean, it is possible to turn on the brush extra pressure function, according to the following procedure:

1. Press the push-button (42) to lower the brush deck as shown in "Starting The Machine" paragraph.
2. Press and hold the push-button (42) for more than 1 second. The extra pressure function activation is shown by LED which turns from green to red, and by the icon  on the display (48).
3. To return to normal pressure, press and hold the push-button (42) for more than 1 second.
4. To lift the brush deck without returning to the normal pressure, press the push-button (42) and release it immediately.



CAUTION!

In case of brush motor overload, due to foreign bodies which prevent them from turning, or to excessively aggressive floors/brushes, the safety system stops the brush after about one minute of continuous overload. If the overload takes place when the extra pressure function is on, the system automatically turns the extra pressure function off.

If the overload persists, the brush stops.

To start scrubbing again after a brush stop due to overload, stop the machine by turning the ignition key (41) to "0". Turn on the machine by turning the ignition key (41) to "I".

Battery discharge during operation

When there is only one segment turned on and flashing on the battery symbol (48-C), it is advisable to charge the batteries, because the residual autonomy will last for a few minutes (depending on battery characteristics and work to be performed).

When the battery symbol (48-C) is flashing and no segment is turned on, the battery autonomy is over. After a few seconds, the brush is automatically tuned off, while the vacuum system and the drive system stay on, to finish drying the floor and drive the machine to the appointed recharging area.



CAUTION!

Do not use the machine with discharged batteries, to avoid damaging the batteries and reducing the battery life.



NOTE

In case the machine drive system cannot be used in order to move the machine, see Pushing/Towing The Machine paragraph.

TANK EMPTYING

An automatic float shut-off system (28) turns off the vacuum system when the recovery tank (17) is full.

The vacuum system deactivation is signalled by a sudden increase in the vacuum system motor noise, and the floor is not dried.



CAUTION!

If the vacuum system turns off accidentally (for example, when the float is activated because of a sudden machine movement), to resume the operation: turn off the vacuum system by pressing the push-button (44), then open the cover (18) and check that the float inside the grid (28) has gone down. Then close the cover (18) and turn on the vacuum system by pressing the push-button (43).

When the recovery tank (17) is full, empty it according to the following procedure.

Recovery tank emptying

1. Lift the brush deck and the squeegee by pressing the push-button (42).
2. Drive the machine to the appointed disposal area.
3. Turn off the machine by turning the ignition key (41) to "O".
4. Empty the recovery tank (17) with the drain hose (26). Then, rinse the tank with clean water.

Solution tank emptying

5. Perform steps 1 to 3.
6. Empty the detergent solution tank (15) using the level hose (16). Then, rinse the tank with clean water.

AFTER USING THE MACHINE

After working, before leaving the machine:

1. Remove the brush as shown in the relevant paragraph.
2. Empty the tanks (17 and 15) as shown in the previous paragraph.
3. Remove the squeegee (13) and clean it with hot water. Open the recovery tank cover (18) and hang the squeegee on the tank hook (11).
4. Perform the daily maintenance procedures (see the Maintenance chapter).
5. Store the machine in a clean and dry place, with the brush and the squeegee lifted or removed.

PUSHING/TOWING THE MACHINE

To push/tow the machine easily when the drive system cannot be used (for example in case of missing batteries, discharged batteries, etc.), disengage the electromagnetic brake with the lever (4).

When pushing/towing procedure is over, turn the lever (4) to the original position, to engage the electromagnetic brake again.



WARNING!

If the lever (4) is not repositioned after pushing/towing the machine, the electromagnetic brake is disengaged.



WARNING!

Do not start the machine when the electromagnetic brake is disengaged.

For safety reasons, it is recommended to disengage the electromagnetic brake only for the time necessary to manually move the machine.

MACHINE LONG INACTIVITY

If the machine is not going to be used for more than 30 days, proceed as follows:

1. Perform the procedures shown in After using the machine paragraph.
2. For versions with Chemical Mixing System, empty the detergent tank (38) and clean the system with a draining cycle (see the procedure in Maintenance chapter).
3. Close the solution tank valve (9-B).
4. Press the emergency push-button (5) to disconnect the battery connector (6).

MAINTENANCE

The lifespan of the machine and its maximum operating safety are ensured by correct and regular maintenance.

The following table provides the scheduled maintenance. The intervals shown may vary according to particular working conditions, which are to be defined by the person in charge of the maintenance.



WARNING!

The procedures must be performed with the machine off and the battery disconnected.

Moreover, read carefully the instructions in the Safety chapter before performing any maintenance procedure.

All scheduled or extraordinary maintenance procedures must be performed by qualified personnel, or by an authorised Service Center.



CAUTION!



When the Service icon appears on the display (48), contact an authorised Clarke Service Centre for scheduled maintenance.

This Manual describes only the simplest and most common maintenance procedures.

For other maintenance procedures shown in the Scheduled Maintenance Table, refer to the Service Manual that can be consulted at any Service Center.

SCHEDULED MAINTENANCE TABLE

Procedure	Daily, after using the machine	Weekly	Every six months	Yearly
Battery Charging				
Squeegee Cleaning				
Brush/pad cleaning				
Recovery tank and debris tray cleaning, and cover gasket check				
Chemical Mixing System cleaning and draining (optional)				
Squeegee blade check				
Solution Filter Cleaning				
Battery (WET) fluid level check				
Squeegee blade replacement				
Electromagnetic brake efficiency check			(1)	
Brush/pad-holder motor carbon brush check or replacement				(1)
Drive system motor carbon brush check or replacement				(1)

(1) This maintenance procedure must be performed by an authorised Clarke Service Center.

BATTERY CHARGING



NOTE

Charge the batteries when there is only one flashing segment displayed in the battery symbol (48-C), or at the end of the shift.

Keeping the batteries charged make their life last longer.



CAUTION!

When the batteries are discharged, charge them as soon as possible, as that condition makes their life shorter. Check for battery charge at least once a week.



WARNING!

When using lead (WET) batteries, battery charging produces highly explosive hydrogen gas. Charge the batteries in well-ventilated areas and away from naked flames.

Do not smoke while charging the batteries.

Keep the recovery tank raised until the battery charging cycle is over.



WARNING!

Pay close attention when charging WET CELL batteries, as there may be battery fluid leakages. The battery fluid is corrosive. If it comes in contact with skin or eyes, rinse thoroughly with water and consult a physician.

1. Drive the machine to the appointed recharging area.
2. Ensure that the machine is off and the operator key (41) is turned to "O".
3. Lift the cover (29) and check that the recovery tank (17) is empty; if not, empty it using the drain hose (26).
4. Close the cover (18).
5. Grasp the handle (35) and carefully lift the recovery tank assembly (17).
6. (For WET CELL batteries only) Check the level of electrolyte inside the batteries. If necessary, unscrew the caps and top up. When the correct level is restored, close the caps and clean the tops of the batteries.
7. Plug the battery charger cable (21) into the electrical mains (the mains voltage and frequency must be compatible with the battery charger values shown on the machine serial number plate).



NOTE

When the battery charger is connected to the electrical mains, all machine functions are automatically cut off.

When the first or second segment from the left in the battery symbol (48-L) is flashing, this means that the battery charger is charging the batteries.

When the third segment from the left in the battery symbol (48-L) is flashing, this means that the battery charger is finishing the battery charging cycle.

8. When all segments of the battery symbol (48-L) are steadily lit, the battery charging cycle is complete.
9. Disconnect the battery charger cable plug (21) from the mains and place it in its holder (20).
10. Disengage the support rod (36), then grasp the handle (35) and carefully lower the recovery tank assembly (17).
11. Now the machine is ready to be used.



NOTE

For further information about the operation of the battery charger (22), see the relevant Manual.

CHANGE OF OPERATING PARAMETERS

This function allows you to enter the screen (F, Fig. 7) to customise some parameter values described in the following table of modifiable parameters.

1. Turn the ignition key (41) to "I" by pressing and holding the push-buttons (A) and (B).
2. Press push-button (C) to increase the value of the current parameter.
Press push-button (D) to decrease the value of the current parameter.
3. Press push-button (E) to move to the next parameter.
4. To return to the main screen, press and hold the push-button (E) for more than 2 seconds.

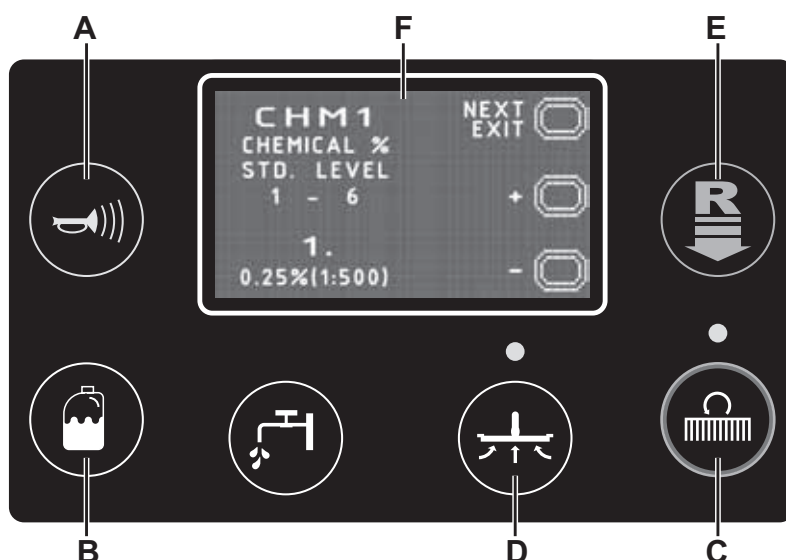


Figure 7

P100879

TABLE OF MODIFIABLE PARAMETERS		Values		
Code	Description	Minimum	Factory Setting	Maximum
P1/P3	Level 1 solution flow rate in relation to level 3	0 %	25 %	100 %
P2/P3	Level 2 solution flow rate in relation to level 3	0 %	50 %	100 %
P3	Level 3 solution flow rate (flow rate as function of speed)	1.0 cl/m	3.0 cl/m	5.0 cl/m
P4	Enablement of level 4 (2.8 l/min regardless of speed)	OFF	OFF	ON
XPRES	Brush deck extra pressure enablement	OFF	ON	ON
FVMAX	Maximum forward speed	10 %	100 %	100 %
RVMAX	Maximum reverse speed	10 %	40 %	50 %
WSMIN	Minimum working speed	10 %	25 %	100 %
WSMAX	Maximum working speed	10 %	100 %	100 %
BRK	Electromagnetic brake activation delay	0 sec.	3 sec.	5 sec.
BAT (*)	Installed battery type (see table)	0	1	5
TOFF	Automatic shut-off time	0 (disabled)	300 sec.	600 sec.
BRGH	Display contrast	5	20	50
RPM (**)	Reduced brush rpm activation threshold	5	9	20
RESET	Restore factory settings for all parameters	OFF	OFF	ON

(*) As described in the Use chapter, set the machine and the on-board battery charger on the basis of the type of battery to be installed by modifying the BAT parameter from the table below:

Installed battery type		Value
WET	Wet cell batteries	0
GEL / AGM	Generic GEL or AGM batteries	1
GEL EXIDE	GEL batteries or EXIDE®/SONNENSHINE brand	2
GEL OPTIMA	GEL batteries or OPTIMA™ brand	3
GEL DISCOVER	GEL batteries or DISCOVER® brand	4
GEL FULLRIVER	GEL batteries or FULLRIVER® brand	5

(**) Increase the value of this parameter to reduce the brush motor speed in a wider range of applications and vice versa.

SQUEEGEE CLEANING



NOTE

The squeegee must be clean and its blades must be in good conditions in order to get a good drying.



CAUTION!

It is advisable to wear protective gloves when cleaning the squeegee because there may be sharp debris.

1. Drive the machine on a level floor.
2. Ensure that the machine is off and the operator key (41) is turned to "O".
3. Loosen the handwheels (32) and remove the squeegee (13).
4. Wash and clean the squeegee. In particular, clean the compartments (A, Fig. 8) and the vacuum hole (B). Check the condition of the front (C) and rear (D) blades, ensuring there are no cuts and tears; if necessary, replace them as shown below.
5. Install the squeegee in the reverse order of removal.

SQUEEGEE BLADE CHECK AND REPLACEMENT

1. Clean the squeegee as shown in the previous paragraph.
2. Check the condition of the front (C, Fig. 8) and rear (D) blades, ensuring there are no cuts and tears; if necessary, replace them as shown below. Check that the front corner (E) of the rear blade is not worn; otherwise, turn the blade to replace the worn corner with one of the three remaining intact corners. If the other corners are worn too, replace the blade according to the following procedure:
 - Using the tab (F), release and remove the elastic strap (G) from the fasteners (H), then turn or replace the rear blade (D).
 - Install the blade in the reverse order of removal.
 - Unscrew the handwheels (I) and remove the strap (J), then turn or replace the front blade (C).
 - Install the blade in the reverse order of removal.
3. Install the squeegee (13) and screw down the handwheels (32).
4. Lower the squeegee to the floor to check the height of the blades, proceeding as follows:
 - Check that the lip (K) of the front blade (C) and the lip (L) of the rear blade (D) are resting as shown in the figure.
 - Use the knob (33) to make adjustments.

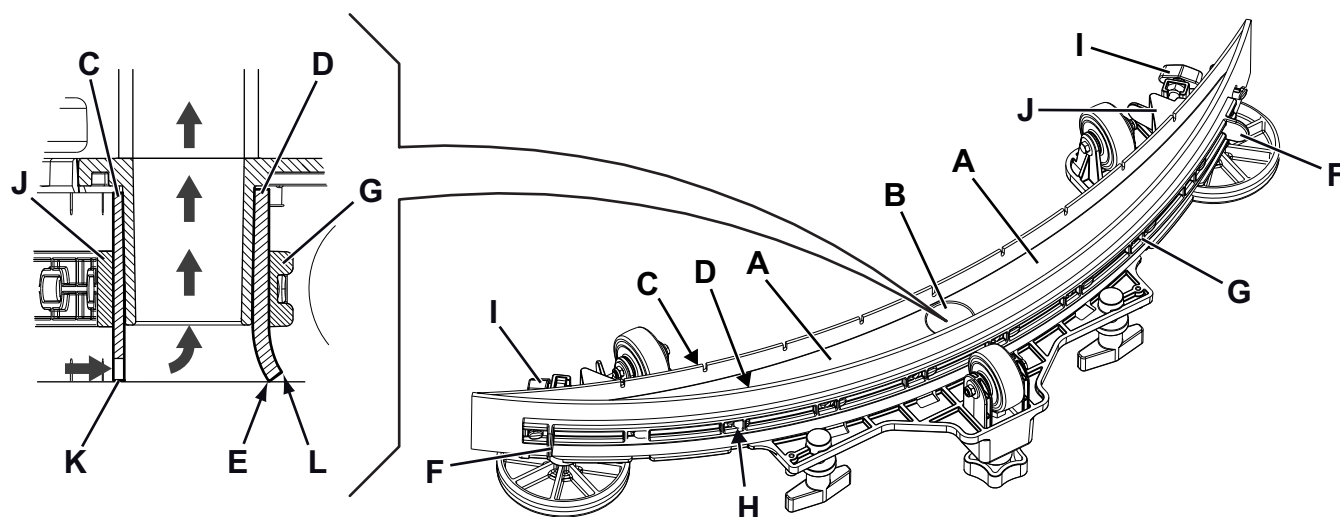


Figure 8

P100872

CLEANING THE BRUSH



CAUTION!

It is advisable to wear protective gloves when cleaning the brush because there may be sharp debris.

1. Remove the brush as shown in Use chapter.
2. Clean the brush with water and detergent.
3. Check the condition of the brush bristles, ensuring they are not excessively worn; if necessary, replace the brush.

RECOVERY TANK CLEANING

1. Drive the machine to the appointed disposal area.
2. Ensure that the machine is off and the operator key (41) is turned to "O".
3. Raise the cover (18).
4. Wash the inside of the tank (17) and the cover with clean water.
5. Drain the water in the tank through the hose (26).
6. Clean the vacuum grid (28), release the fasteners (A, Fig. 9), open the grid (B) and recover the float (C) then clean it carefully and reinstall it.
7. Remove the debris collection tank (D) and open its cover, then clean it carefully and reinstall it on the vacuum hose.
8. Check the condition of the tank cover gasket (E).



NOTE

The gasket (E) allows the creation of a vacuum in the tank, which is necessary to suck up the recovery water.

If necessary, replace the gasket (E) by removing it from its housing (F). When fitting the new gasket, position the joint (G) in the lower area, as shown in the figure.

9. Check that the seating surface (H) of the gasket (E) is in good condition, clean and suitable to form a seal with the gasket itself.
10. Close the cover (18).

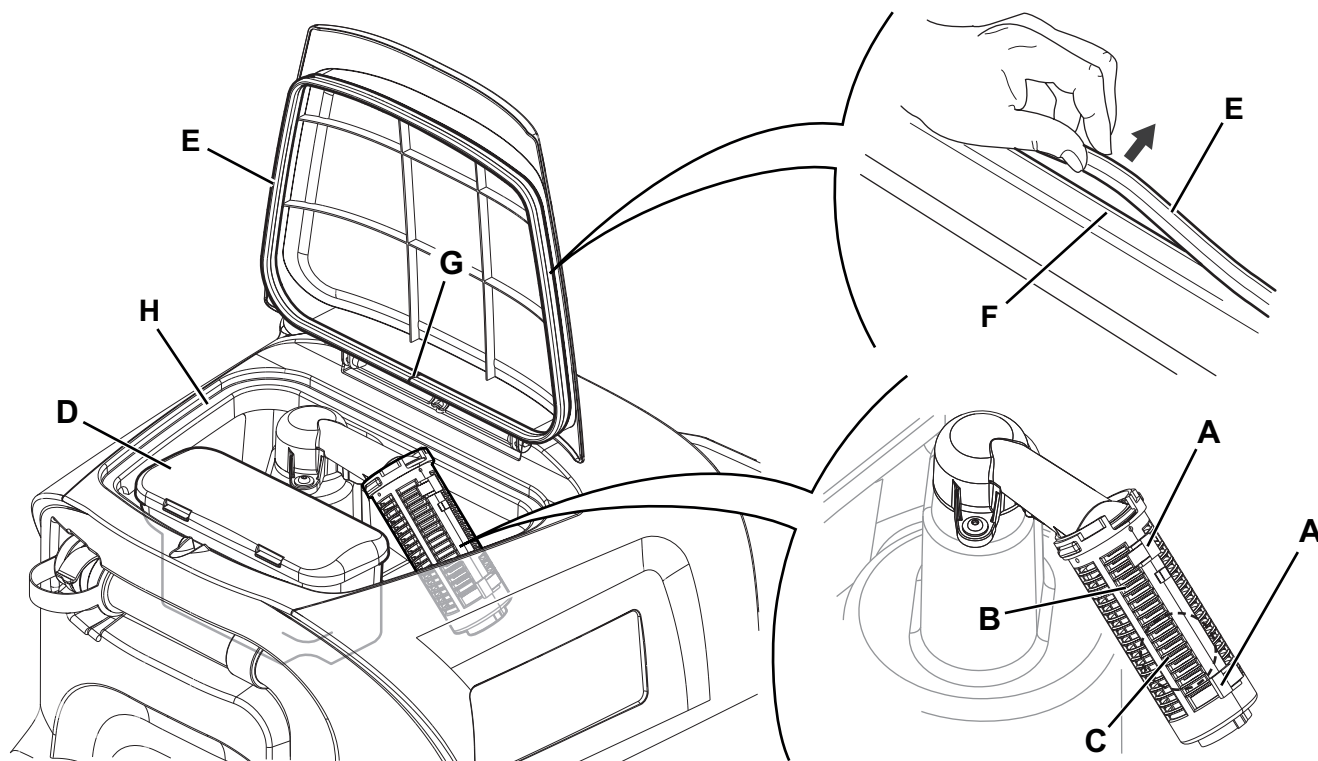


Figure 9

P100873

SOLUTION FILTER CLEANING

1. Drive the machine on a level floor.
2. Ensure that the machine is off and the operator key (41) is turned to "O".
3. Close the solution tank valve (9). The valve is closed when it is in position (9-B) and it is open when it is in position (9-A).
4. Remove the transparent cover (A, Fig. 10), retrieve the gasket (B), then remove the filter strainer (C). Wash and rinse them with clean water, then refit them carefully onto the filter support (D).
5. Open the valve (9-A).

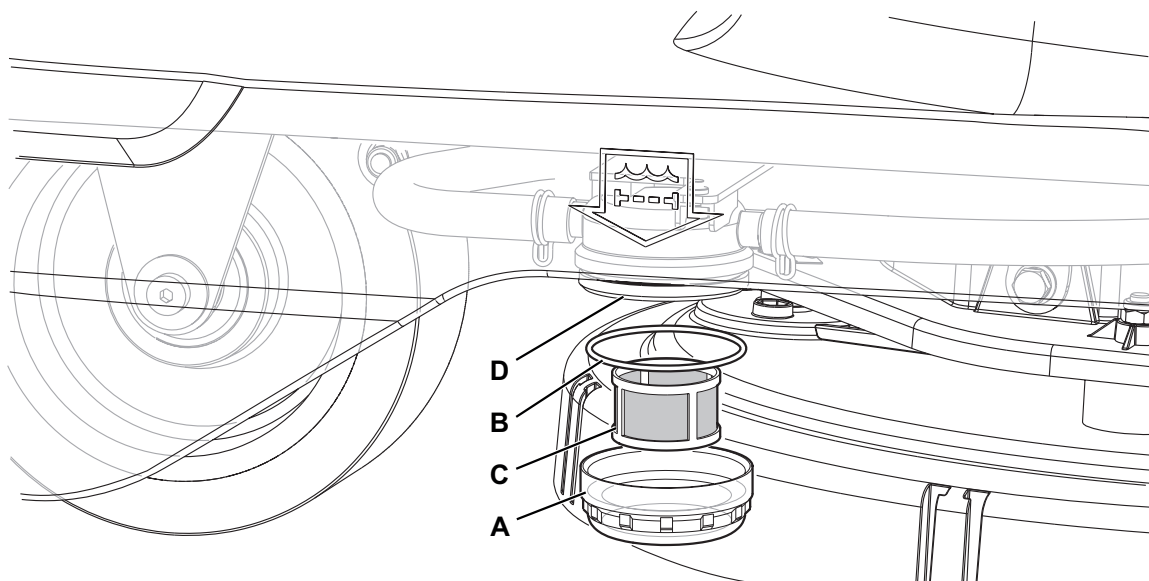


Figure 10

P100874

CHEMICAL MIXING SYSTEM DRAINING

(For machines with Chemical Mixing System)

To remove residual detergent from the detergent hoses and pump, proceed as follows.

6. Turn on the machine by turning the ignition key (41) to "I".
7. Press the push-button (42). Check that the detergent quantity indicator (48-G) on the display has at least one segment lit.
8. Press and hold buttons (44) and (45) at the same time until screen (48-M) appears on the display (after approximately 5 seconds).
9. Release buttons (44) and (45) and wait for the countdown timer on the display to finish and the vacuum system to be activated.
10. Collect the detergent remained on the floor.
11. Turn off the machine by turning the ignition key (41) to "O".
12. Lift the recovery tank assembly (17), then check that the detergent tank hose (38) is empty, otherwise perform steps 3 to 7 again.



NOTE

The draining cycle lasts about 30 seconds, then the vacuum function automatically turns on, which allows to remove the detergent remained.

The draining cycle can also be performed with the detergent tank (38) full of water, thus cleaning the system thoroughly. It is advisable to perform this type of draining to clean the Chemical Mixing System from dirt and deposits if the machine has not been used/cleaned for a long time.

The draining cycle can also be performed to quickly fill the detergent supply hose when the tank (38) is full but the system is still empty.

If necessary, the draining cycle can be performed several times in succession.

FUSE CHECK/REPLACEMENT



NOTE

All machine electrical circuits are protected by auto-resettable electronic devices. The safety fuses activates only in case of serious damage.

It is recommended to have the fuses replaced by qualified personnel only.

Refer to the Service Manual available at any Clarke Retailer.

SAFETY FUNCTIONS

The machine is equipped with the following safety functions.

EMERGENCY PUSH-BUTTON

The emergency push-button (5) is located in an easily accessible position. Press it firmly in case of immediate necessity to stop all machine functions.

To reset the machine operation, lift the recovery tank assembly (17) and reconnect the battery connector (6).

ANTI-SKID SAFETY SYSTEM

This system reduces the speed when turning and when the machine tilts laterally to avoid sudden skids, this increasing the machine stability in any condition. The system activation is shown by the icon (48-I) on the display.

DRIVER'S SEAT MICROSWITCH

It is located inside the driver's seat (12) and it does not allow the machine drive system to operate if the operator is not seated on the driver's seat.

ELECTROMAGNETIC BRAKE

It is built-in the rear driving wheels (24) and keeps the machine braked when the machine is off or stopped.

TROUBLESHOOTING

TROUBLE	POSSIBLE CAUSE	REMEDY
The motors are not operating; the display (48) and button LEDs do not turn on.	The battery connector is disconnected.	Connect.
	The batteries are completely discharged.	Charge the batteries.
The machine does not move and the display (48) shows the alarm: WARNING ALARM T3	Machine turned on with paddle pressed.	Release the paddle. If the problem persists, contact an authorised Service Center.
At machine start-up, the button (42) LED flashes and the brushes do not work.	Machine switched off without first raising the brush deck.	Wait for the deck to raise before turning the brushes on again by pressing the switch.
The brush does not operate; the battery symbol (48-C) border flashes and the display shows the alarm message: WARNING ALARM G4	The batteries are discharged.	Charge the batteries. If the problem persists, replace the batteries.
When working, the display shows the alarm message: WARNING ALARM F2	Brush motor overload.	Use a different/less aggressive brush and/or avoid working with extra pressure turned on.
	There are foreign materials (tangled threads, etc.) preventing the brush from rotating.	Clean the brush hub.
The display (48) shows the alarm message: WARNING ALARM T2	Drive motor overload.	Turn off the machine and then turn it on again. Avoid using the machine on slopes greater than those indicated or going over excessively tall obstacles.
While recharging the batteries with the on-board battery charger, the display (48) shows the alarm message: WARNING ALARM C4 or C5	Battery charger not able to correctly recharge the batteries within the maximum time.	Run the battery charging cycle again. If the problem persists, replace the batteries.
The display (48) shows an alarm message of the following type: WARNING ALARM XX Where "XX" is a code other than those listed above.	The machine electronic control system is in alarm condition.	Turn off the machine and then turn it on again. If the problem persists, contact an authorised Service Center.
The dirty water vacuuming is insufficient.	The recovery tank is full.	Empty the tank.
	The vacuum grid is clogged or the float is stuck closed.	Clean the vacuum grid.
	Debris collection filter container clogged.	Clean.
	The hose is disconnected from the squeegee.	Connect.
	The squeegee is dirty or the squeegee blades are worn or damaged.	Clean the squeegee or overturn/replace the blades.
	The tank cover is not properly closed, or the gasket is damaged.	Correctly close the cover or clean/replace the gasket.
The solution flow is insufficient.	Empty detergent solution tank.	Refill.
	The solution filter is dirty.	Clean the filter.
	The Chemical Mixing System tank (optional) is dirty/clogged.	Clean with the drain cycle.
The squeegee leaves marks on the floor.	There is debris under the squeegee blades.	Remove the debris.
	The squeegee blades are worn, chipped or torn.	Overturn or replace the blades.
	The squeegee has not been balanced with the handwheel.	Adjust the squeegee.



NOTE

*The machine is inoperative without the battery charger.
In case of battery charger malfunction, contact an authorised Service Center.*

For any further information, contact Clarke Service Centres.

SCRAPPING

Have the machine scrapped by a qualified scrapper.

Before scrapping the machine, remove and separate the following materials, which must be disposed of properly according to the Law in force:

- Batteries
- Brushes
- Plastic hoses and components
- Electrical and electronic components (*)

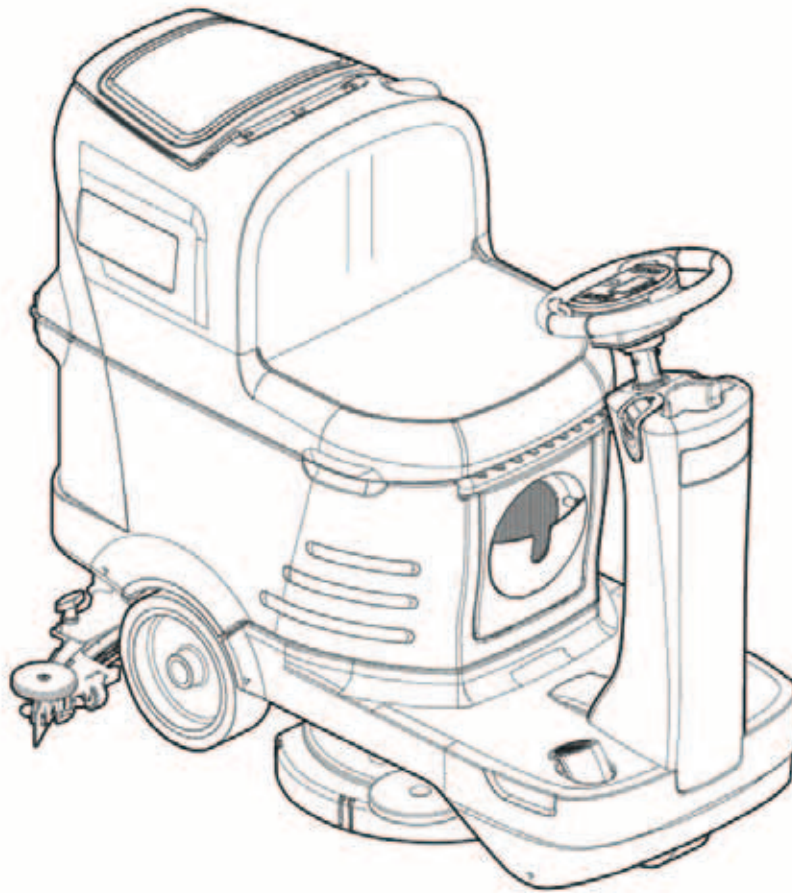
(*) Refer to the nearest Clarke Center especially when scrapping electrical and electronic components.

Machine material composition and recyclability

Type	Recyclable percentage	RA40 weight percentage
Aluminium	100 %	3 %
Electric motors - various	29 %	32 %
Ferrous materials	100 %	23 %
Wiring harness	80 %	7 %
Liquids	100 %	0 %
Plastic - non-recyclable material	0 %	3 %
Plastic - recyclable material	100 %	3 %
Polyethylene	92 %	26 %
Rubber	20 %	2 %

Clarke®

RA40



WHEN ORDERING PARTS

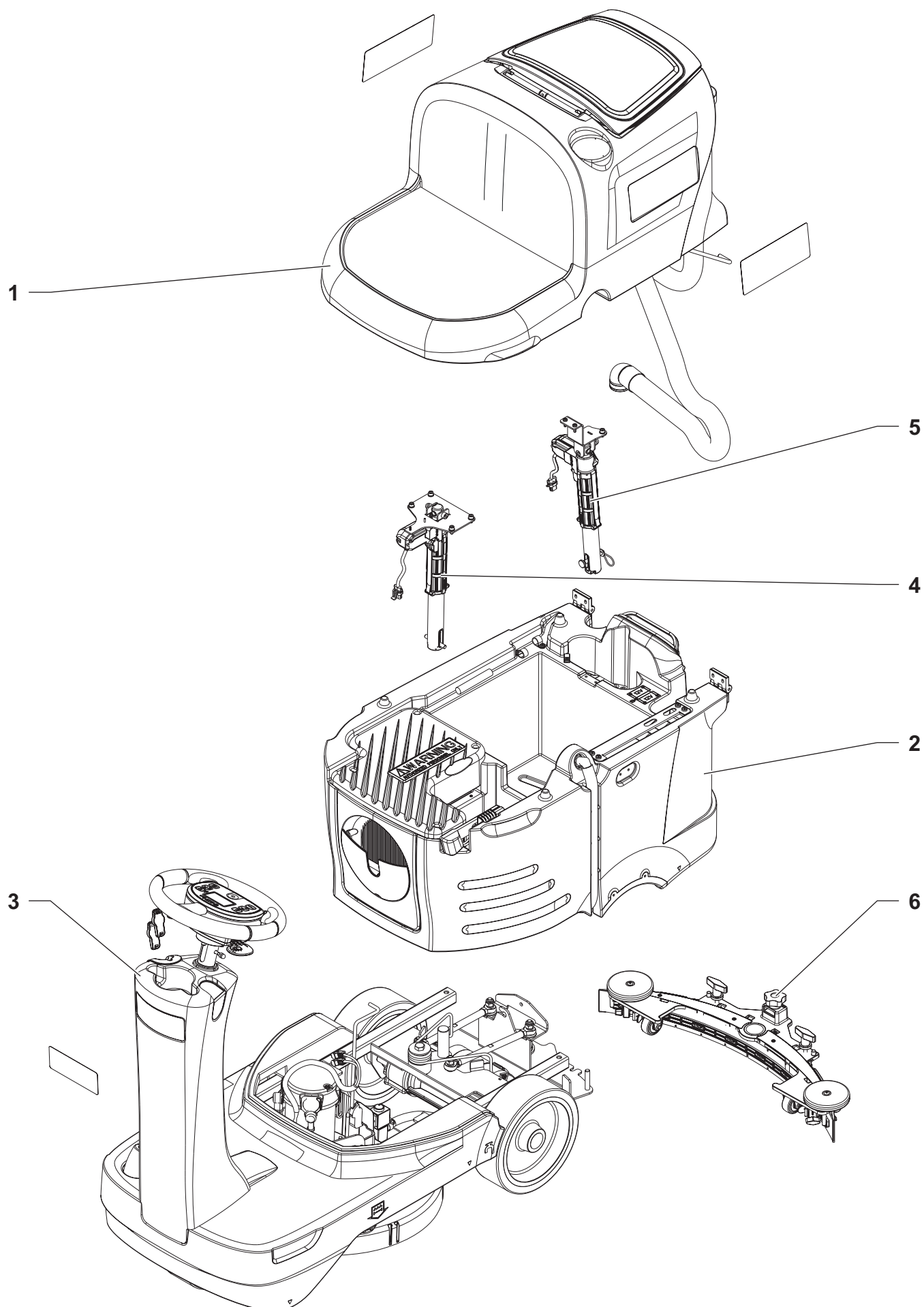
- Use the part numbers from the “REF. NO.” columns in this parts list. If the “REF. NO.” column is blank; look under the “KIT” column to identify which kit contains the part in question, then use the kit callout, for example “K1”, to find the “REF. NO.” for that kit.
- Specify the model and serial number of the machine.
- Use the space below to record the model and serial number for future reference.

Model

Serial No.

- * = Optional
- # = Modified item No. or New item No.
- [] = Not shown

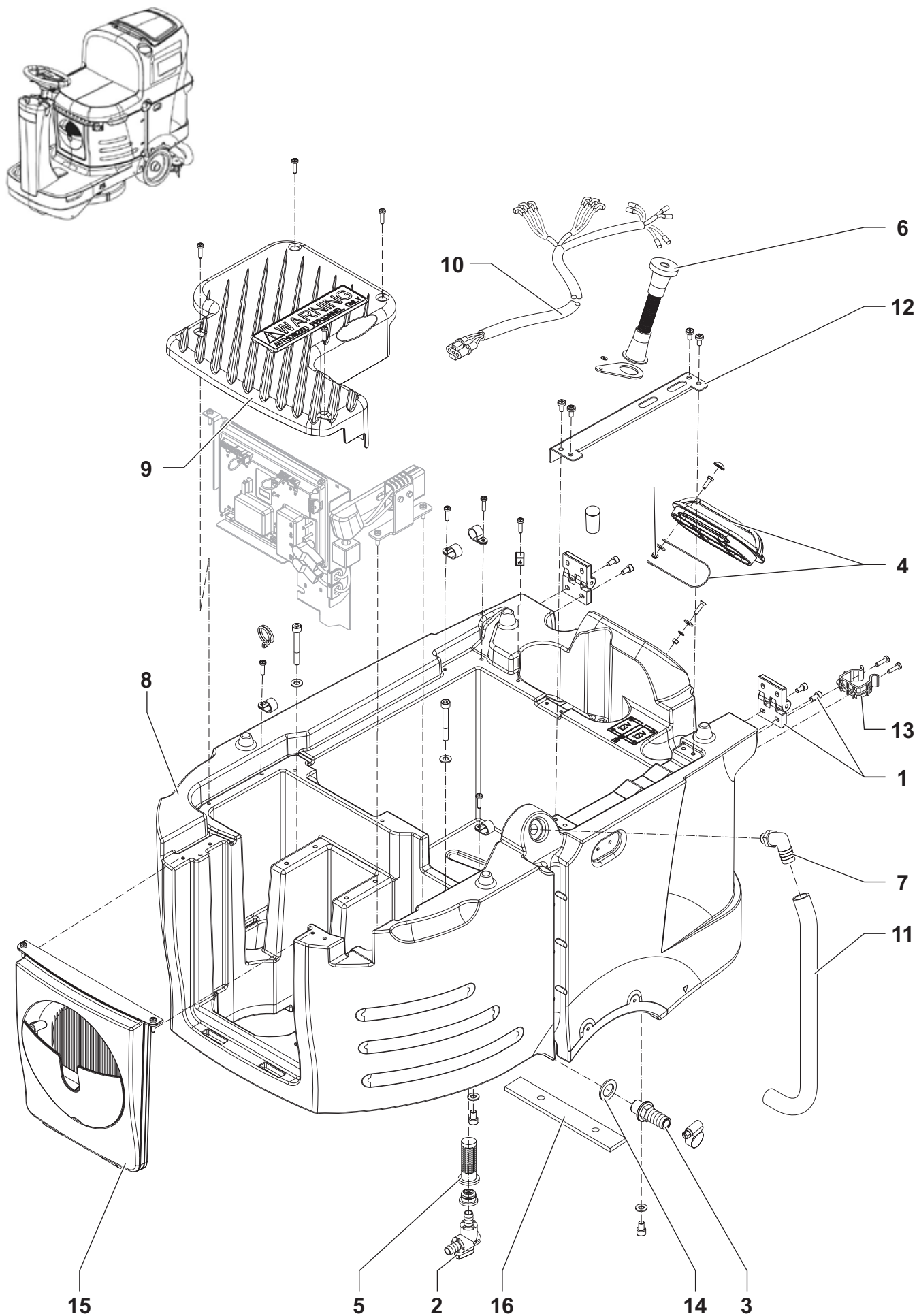
GENERAL VIEW



GENERAL VIEW

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1		1	RECOVERY ASSEMBLY ASSIEME
	2		1	SOLUTION NILFISK ASSEMBLY
	3		1	BODY MACHINE NILFISK ASSEMBLY
	4		1	ACTUATOR FRONT ASSEMBLY
	5		1	ACTUATOR REAR ASSEMBLY
	6		1	SQUEEGEE ASSEMBLY

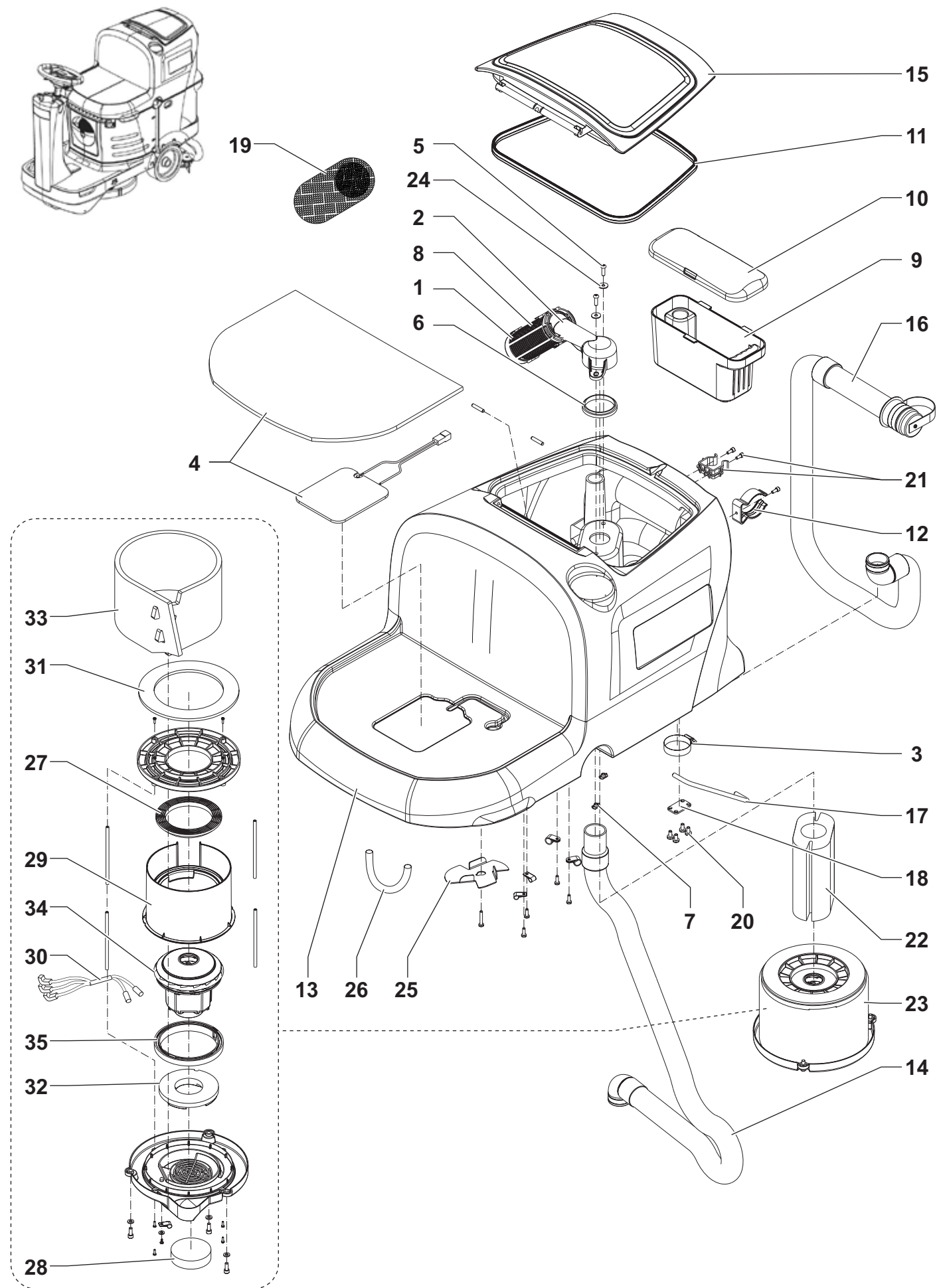
SOLUTION TANK



SOLUTION TANK

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1	9098329000	1	HINGES KIT
	2	9100000803	1	VALVE ELBOW PKD
	3	9100000574	1	FITTING STRAIGHT G1/2 D.20 KIT
	4	1465355000	1	CAP SOLUTION TANK KIT
	5*	9100001192	1	FILTER SOLUTION TANK PKD
	6*	9100000952	1	FILLING HOSE
		9100001072	1	INSTRUCTIONS INSTALL. KIT 9100000952
	7	9100000771	1	FITTING 90. M 3/8-18 NPT HOSE D.19 PKD
	8	9100001134	1	TANK SOLUTION 70 LT BLUE PKD
	9	9100001102	1	COVER BATTERY CHARGER PKD
	10	9100001120	1	HARNESS TANK PKD
	11	9100001128	1	HOSE FRESH WATER LEVEL PKD
	12	9100001129	1	SUPPORT F SAFETY BAR PKD
	13	9100001164	1	CLAMP HOSE D.40 BLACK
	14	9100001139	2	GASKET RUBBER D.21X33X2.5 BLACK PKD
	15	9100001182	1	COVER FUNCTIONS CARD KIT
	16	9100001150	1	PROTECTION RUBBER ADHESIVE F TANK PKD

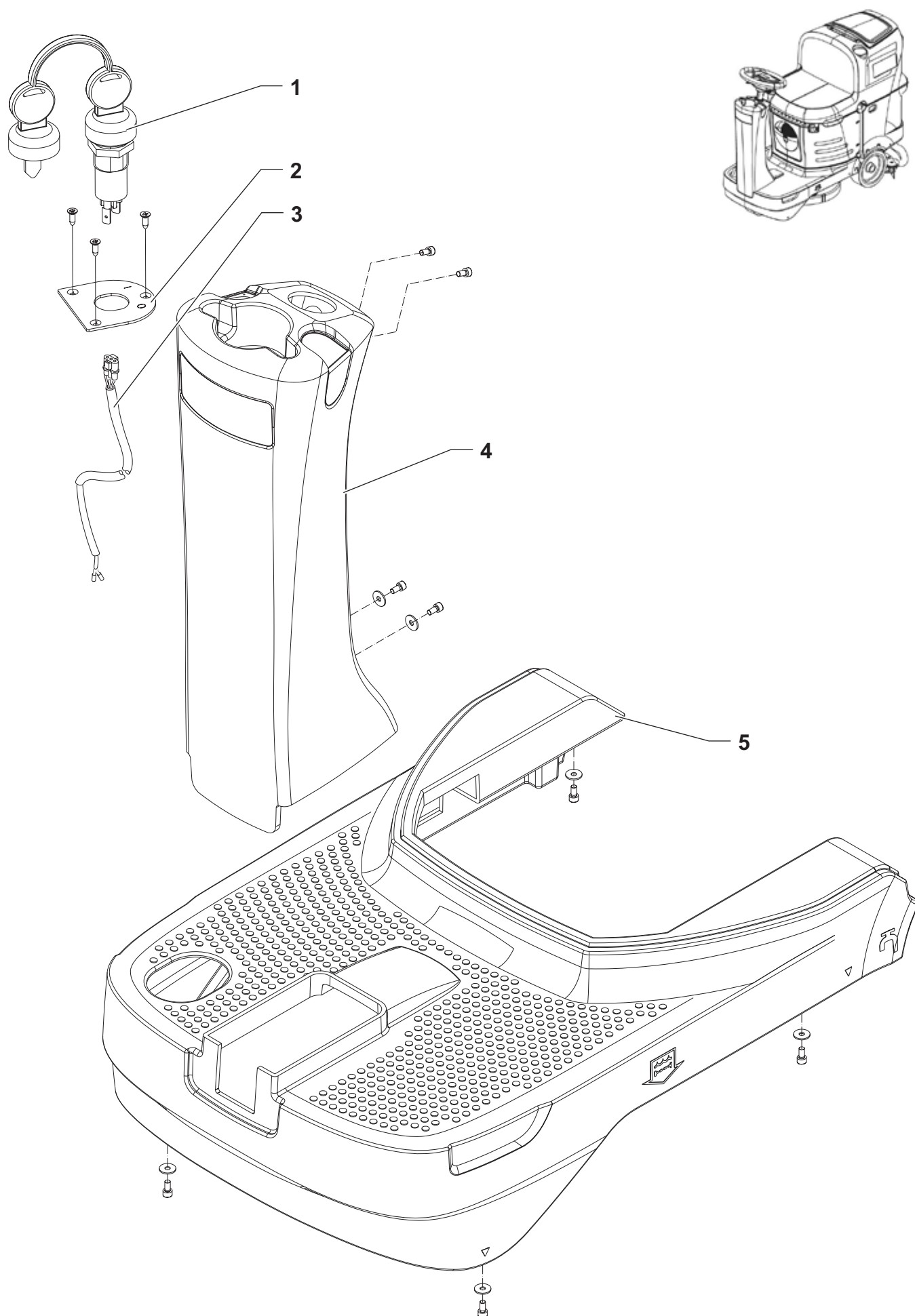
RECOVERY TANK



RECOVERY TANK

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1	9100000817	1	BALL FLOATING PKD
K1	2		1	CAGE FLOAT
	3	9100001187	1	CLAMP 14/32-52 10 PCS SET
	4	9100001130	1	CUSHION SEAT W. MICROSWITCH PKD
K1	5		2	SCREW M6X20 ISO7380 SS
K1	6	9100000928	1	GASKET FLOAT SUPPORT PKD
K1	7		2	NUT JAW M6X6 INOX SS
	8	9100000818	1	CAGE FLOAT HALF 2 PCS SET
	9	9100001091	1	TRAY DEBRIS PKD
	10	9100001092	1	COVER TRAY DEBRIS PKD
	11	9100001153	1	GASKET RUBBER L.1200MM PKD
	12	909 6380 000	1	CLAMP KIT
	13	9100001135	1	TANK RECOVERY 70 LT BLUE PKD
	14	9100001106	1	HOSE SUCTION BLACK PKD
	15	9100001111	1	COVER RECOVERY TANK PKD
	16	9100001113	1	HOSE DRAIN BLACK PKD
K2	17		1	BAR SAFETY F TANK
K2	18		1	PLATE F SAFETY BAR
	19*	909 5065 000	1	FILTER ANTIFOAMING
K2	20		4	SCREW M6X12 ISO7380
	21	9100001164	1	CLAMP HOSE D.40 BLACK
	22	9100001143	1	SOUNDPROOFING UPPER VACUUM MOT. PKD
	23	9100001181	1	MOTOR VACUUM 24V 310W KIT
K1	24		2	WASHER 6X18X1.5 UNI6593 SS
	25	9100001146	1	PLATE HARNESS PROTECTION PKD
	26	9100001154	1	HOSE CORRUGATED BLACK D.6 L.150MM PKD
K3	27		1	MOTOR GASKET LOWER DOMEL
K3	28		1	FILTER
	29	9100000822	1	SUPPORT INT. INSULATION VAC. MOTOR PKD
	30	9100001116	1	HARNESS VACUUM MOTOR PKD
K3	31		1	GASKET F VACUUM UPPER COVER
K3	32		1	GASKET F VACUUM LOWER COVER
	33	9100001142	1	SOUNDPROOFING VACUUM MOTOR PKD
	34	9100001144	1	MOTOR VACUUM 24V 310W PKD
K3	35		1	RUBBER SEALING DOMEL UPPER
	[K1]	9099767000	1	SUPPORT FLOAT KIT
	[K2]	9100001165	1	BAR SAFETY F TANK KIT
	[K3]	9100001166	1	GASKETS VACUUM MOTOR KIT

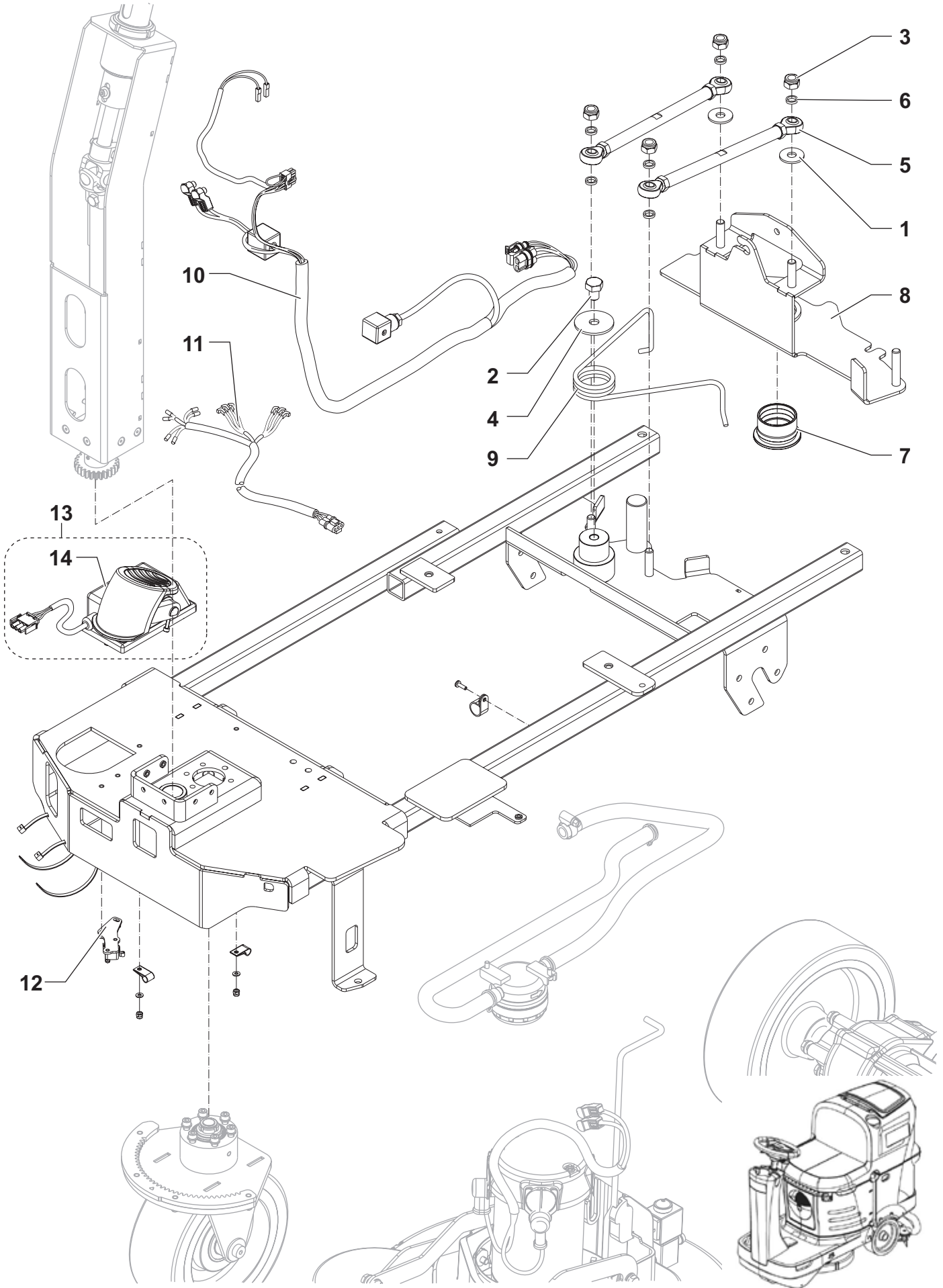
FOOTBOARD, COLUMN AND KEY HOUSING



FOOTBOARD, COLUMN AND KEY HOUSING

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1	9100001193	1	SWITCH KEY WITH CAP PKD
	2	9100001138	1	PLATE SWITCH KEY FIXING PKD
	3	9100001147	3	HARNESS SWITCH KEY PKD
	4	9100001137	1	COLUMN STEERING BLUE PKD
	5	9100001136	1	FOOTBOARD BLUE PKD

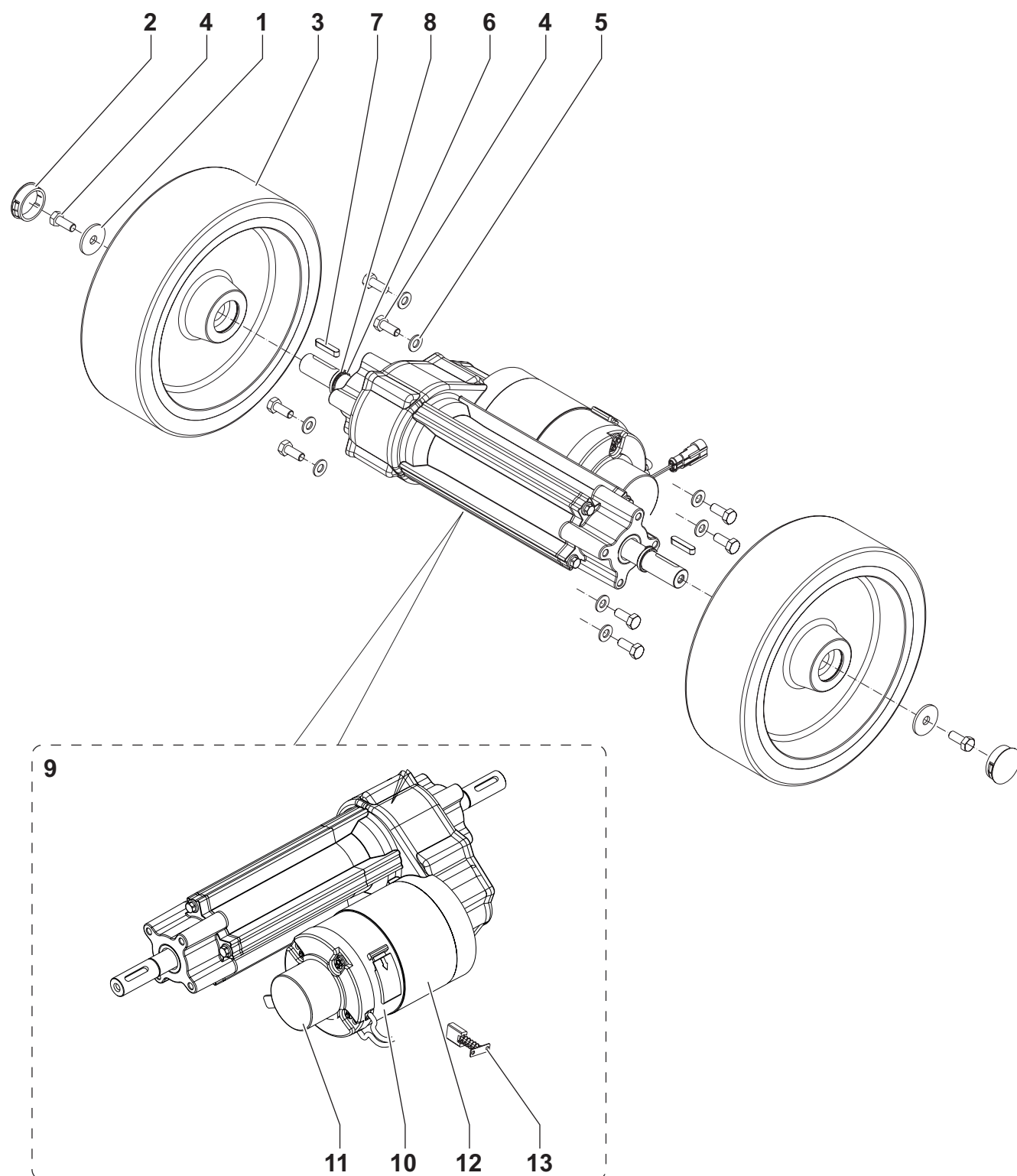
CHASSIS



CHASSIS

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K1	1		2	WASHER 10X30 UNI6593
K2	2		1	SCREW M12X16 UNI5739
K1	3		4	NUT SELF L. M10 UNI7473
K2	4		1	WASHER 12X48X3 UNI6593
	5	9100001090	2	ROD EYE M10 PKD
K1	6		6	SPACER D.10.5X14X3MM
	7	9100001096	1	SLEEVE SUCTION HOSE PKD
	8	9100001108	1	SUPPORT SQUEEGEE PKD
K2	9		1	SPRING ZERO SETTING SQUEEGEE
	10	9100001119	1	HARNESS MACHINE PKD
	11	9100001121	1	HARNESS FOOTBOARD PKD
	12	9100001183	1	MICROSWITCH KIT
	13	9100001180	1	THROTTLE KIT
	14	9100001140	1	THROTTLE ELECTRONIC PKD
[K1]		9100001167	1	HARDWARE SAFETY BAR KIT
[K2]		9100001168	1	SPRING ZERO SETTING SQUEEGEE KIT

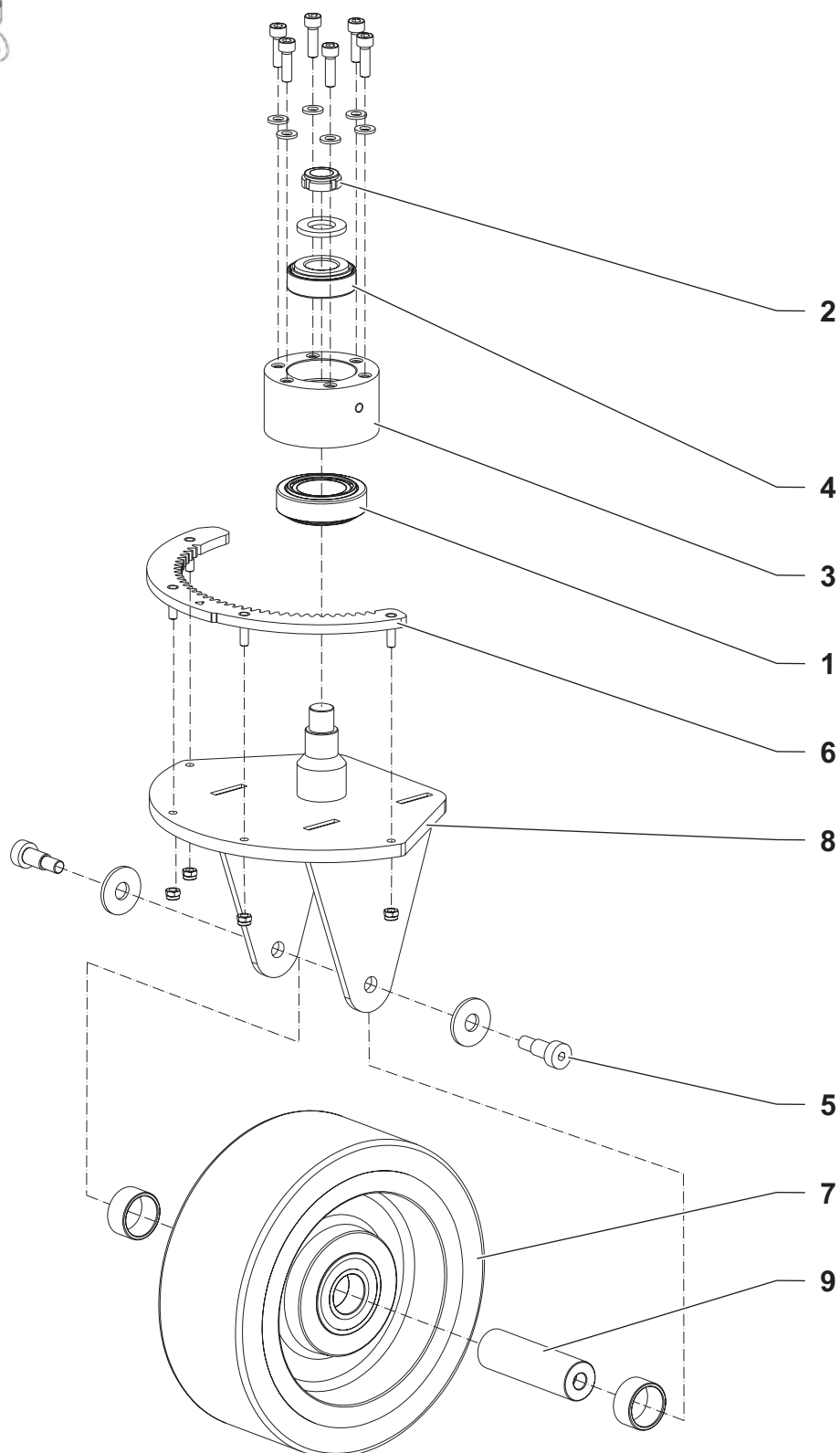
MOTOR DRIVE



MOTOR DRIVE

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K1	1		2	WASHER 8.5X32X2 SS
K1	2		2	CAP D.38.1
	3	9100001162	1	WHEEL D.254X80 GREY-BLACK 2 PCS SET
K1	4		10	SCREW M8X20 UNI5739 SS
	5	9100001190	1	WASHER M8 UNI6592 SS10 PCS SET
	6	9100001185	1	RING D 20 UNI7435 10 PCS SET
	7	9100001156	1	KEY JOINT 6X30 UNI6604A 10 PCS SET
	8	9100001161	1	SPACER 20.5X25X4 10 PCS SET
	9	9100001099	1	MOTOR DRIVE 400W 24V 125RPM PKD
	10	9100001198	1	BAND METAL F ELECTRIC MOTOR FIXING KIT
	11	9100001199	1	ELECTROMAGNETIC BRAKE PKD
	12	9100001200	1	MOTOR ELECTRIC 400W 24V PKD
	13	1464432000	1	CARBON BRUSHES KIT 4 PCS
	[K1]	9100001169	1	HARDWARE WHEEL D.254X80 KIT

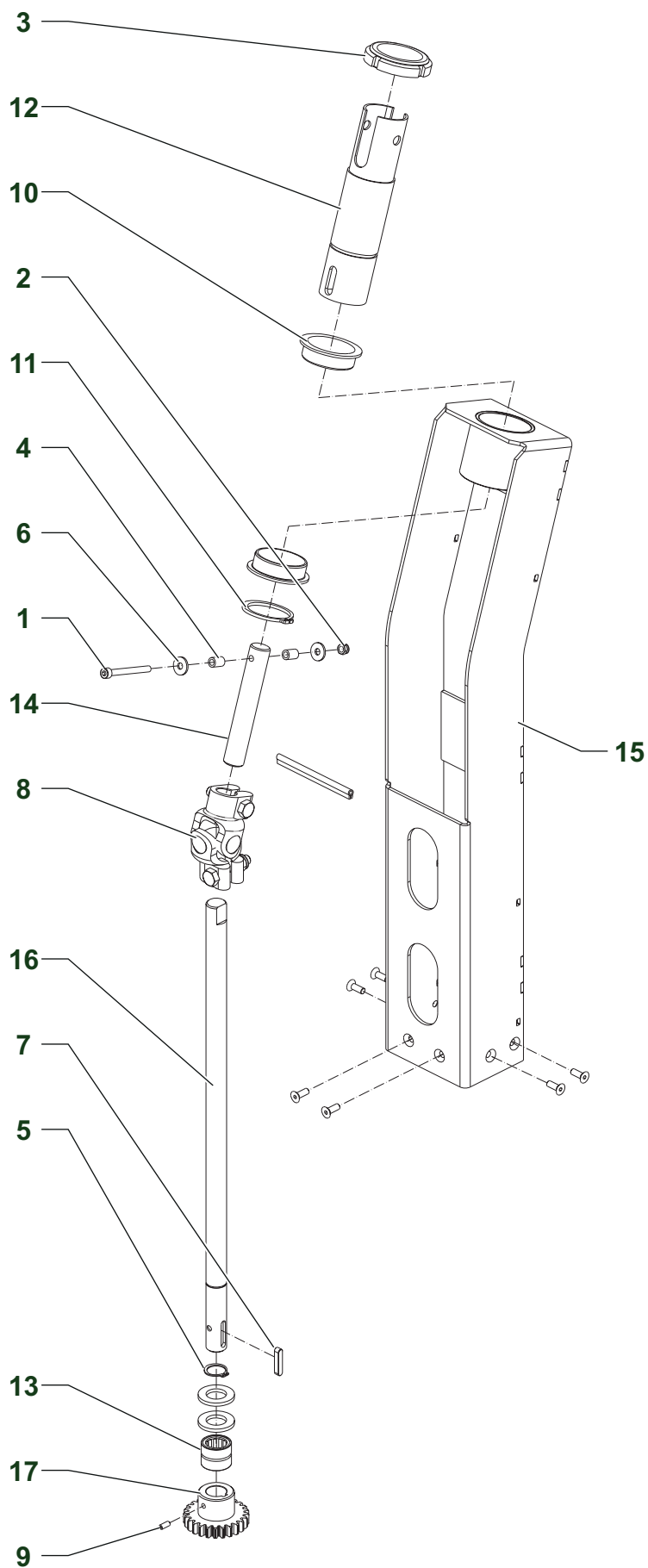
FRONT WHEEL SYSTEM



FRONT WHEEL SYSTEM

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1	145 4691 000	1	BEARING TAPER ROLLER 32006
	2	9100001188	1	NUT RING M15X1 KMA2 LIGHT S. 10 PCS SET
	3	909 5941 000	1	SUPPORT BALL BEARING
	4	909 5942 000	1	BEARING TAPER ROLLER 32004X
	5	9100001160	1	SCREW 10X16 M8 ISO7379 12.9 10 PCS SET
	6	9100001112	1	CROWN STEERING PKD
	7	9100001098	1	WHEEL D.200X76 GREY-BLACK PKD
	8	9100001100	1	SUPPORT WHEEL PKD
	9	9100001101	1	PIN WHEEL PKD

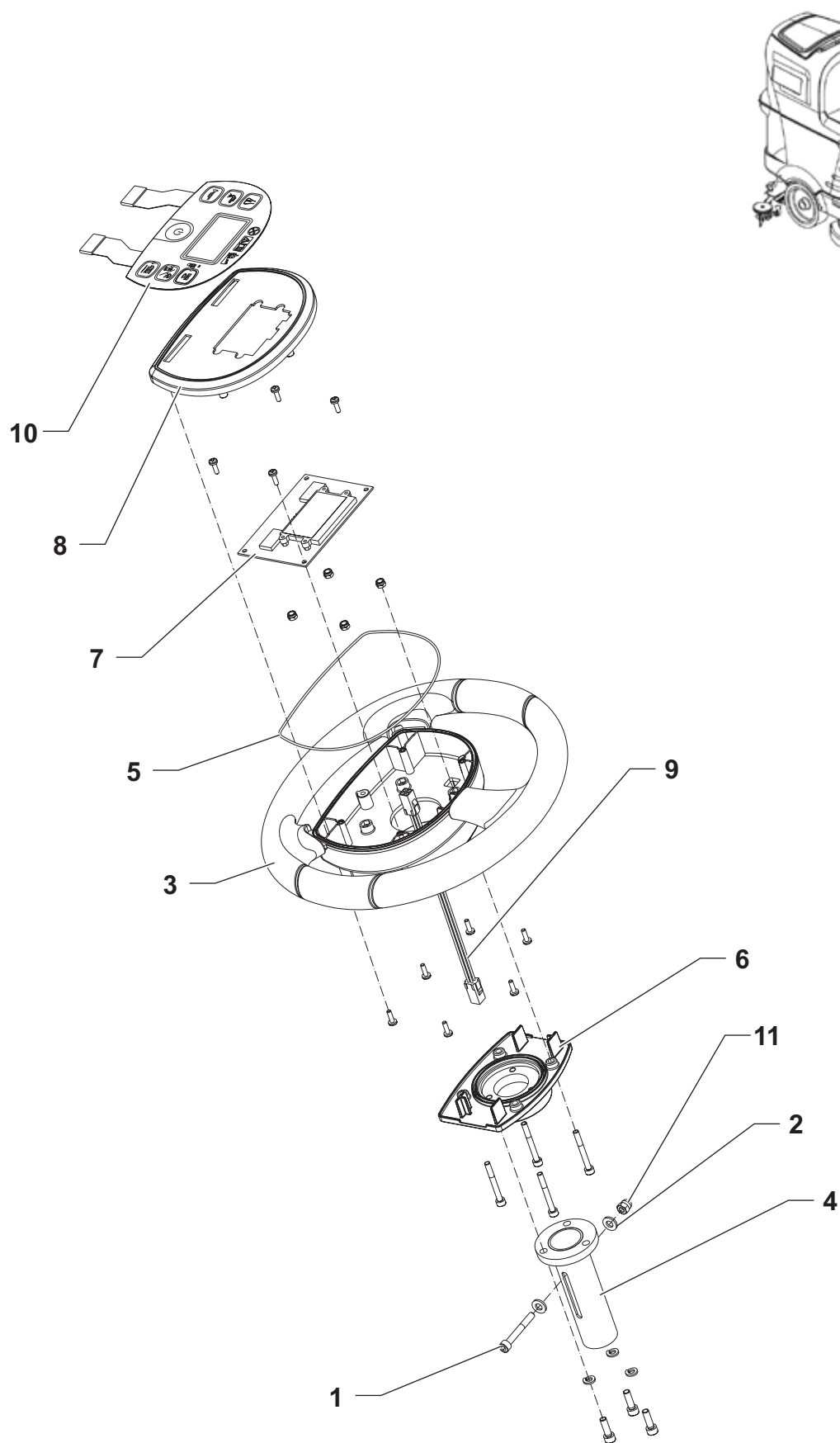
STEERING COLUMN SYSTEM



STEERING COLUMN SYSTEM

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K1	1		1	SCREW M5X50 UNI5931 5X50
K1	2		1	NUT SELF L. M5 UNI7474
	3	9100001155	1	NUT RING M40X1.5 KMA8 10 PCS SET
K1	4		2	SPACER D.5X8X11.5
	5	9100001184	1	RING D 17 UNI7435 10 PCS SET
K1	6		2	WASHER 5X15X1.5 UNI6593
	7	1466146000	1	KEY 5X5X25 UNI6604A PKD
	8	1466319000	1	JOINT UNIVERSAL D.17 PKD
	9	9100001189	1	SCREW GRUB M5X10 UNI5929 10 PCS SET
	10	9100001085	2	BEARING FLANGE IGLIDUR GFM-4044-14 PKD
	11	9100001087	1	RING D.40 UNI7436 PKD
	12	9099425000	1	TUBE STEERING KIT
	13	9100001093	1	BEARING NEEDLE ROLLER NK 17/20 PKD
	14	9100001107	1	SHAFT STEERING UPPER PKD
	15	9100001109	1	SUPPORT STEERING COLUMN PKD
	16	9100001110	1	SHAFT STEERING LOWER PKD
	17	9100001125	1	PINION Z25 PKD
[K1]	9100001170		1	HARDWARE STEERING TUBE KIT

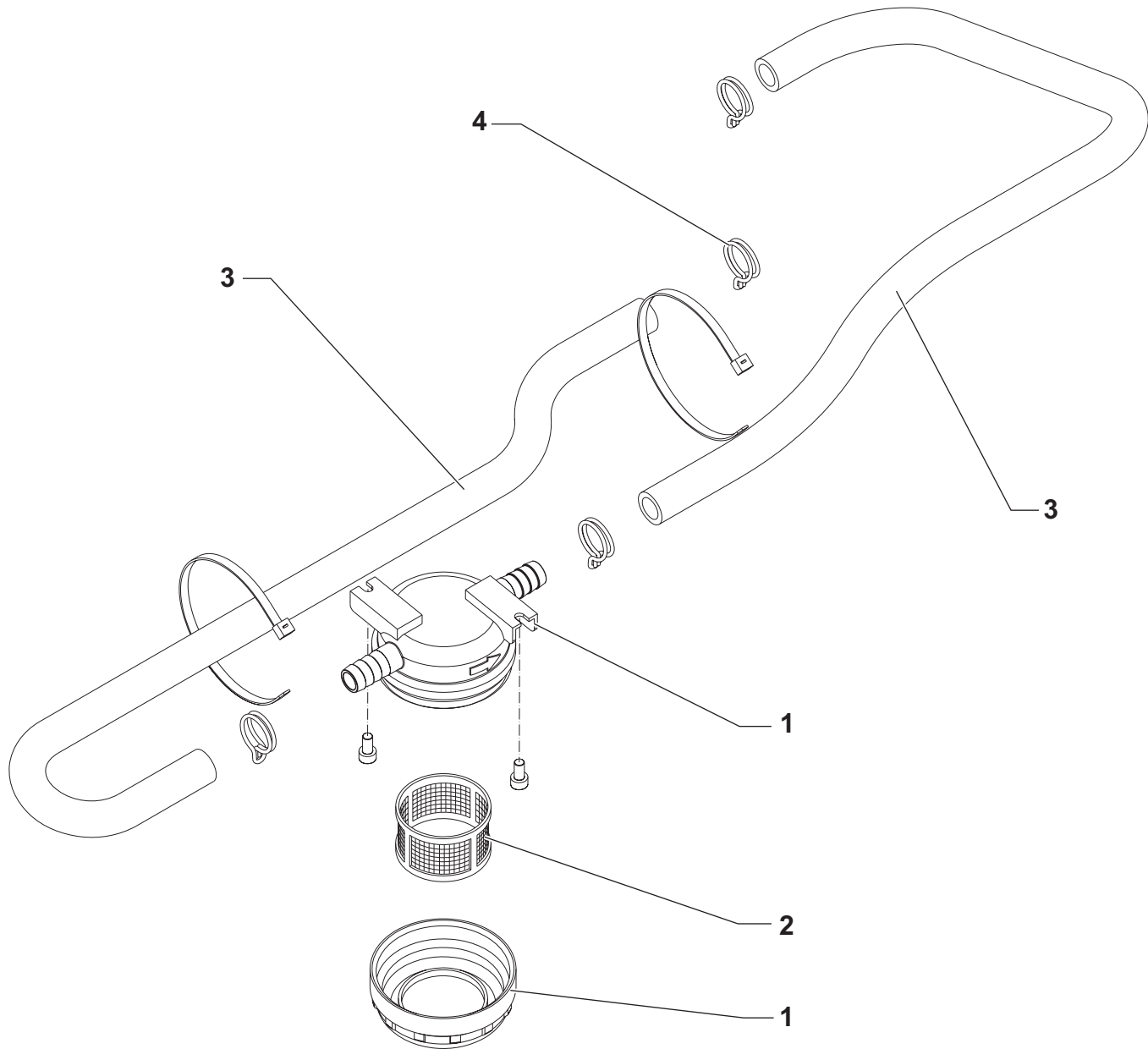
STEERING WHEEL



STEERING WHEEL

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K1	1		1	SCREW M6X20 UNI5931
K1	2		2	WASHER M6 UNI6592
	3	9100001082	1	WHEEL STEERING D.320X281 PKD
	4	9100001086	1	TUBE ADJUST.STEERING WHEEL PKD
	5	9100001088	1	GASKET ROUND D.2MM PKD
	6	9100001089	1	COVER LOWER PKD
	7	9100001104	1	CARD ELECTRONIC DISPLAY PKD
	8	9100001114	1	COVER STEERING WHEEL PKD
	9	9100001115	1	CABLE DISPLAY CARD EXTENSION PKD
	10	9100001124	1	DASHBOARD CONTROL PANEL PKD
K1	11		1	NUT HEX M6 UNI5721
	[K1]	9100001171	1	HARDWARE STEERING WHEEL KIT

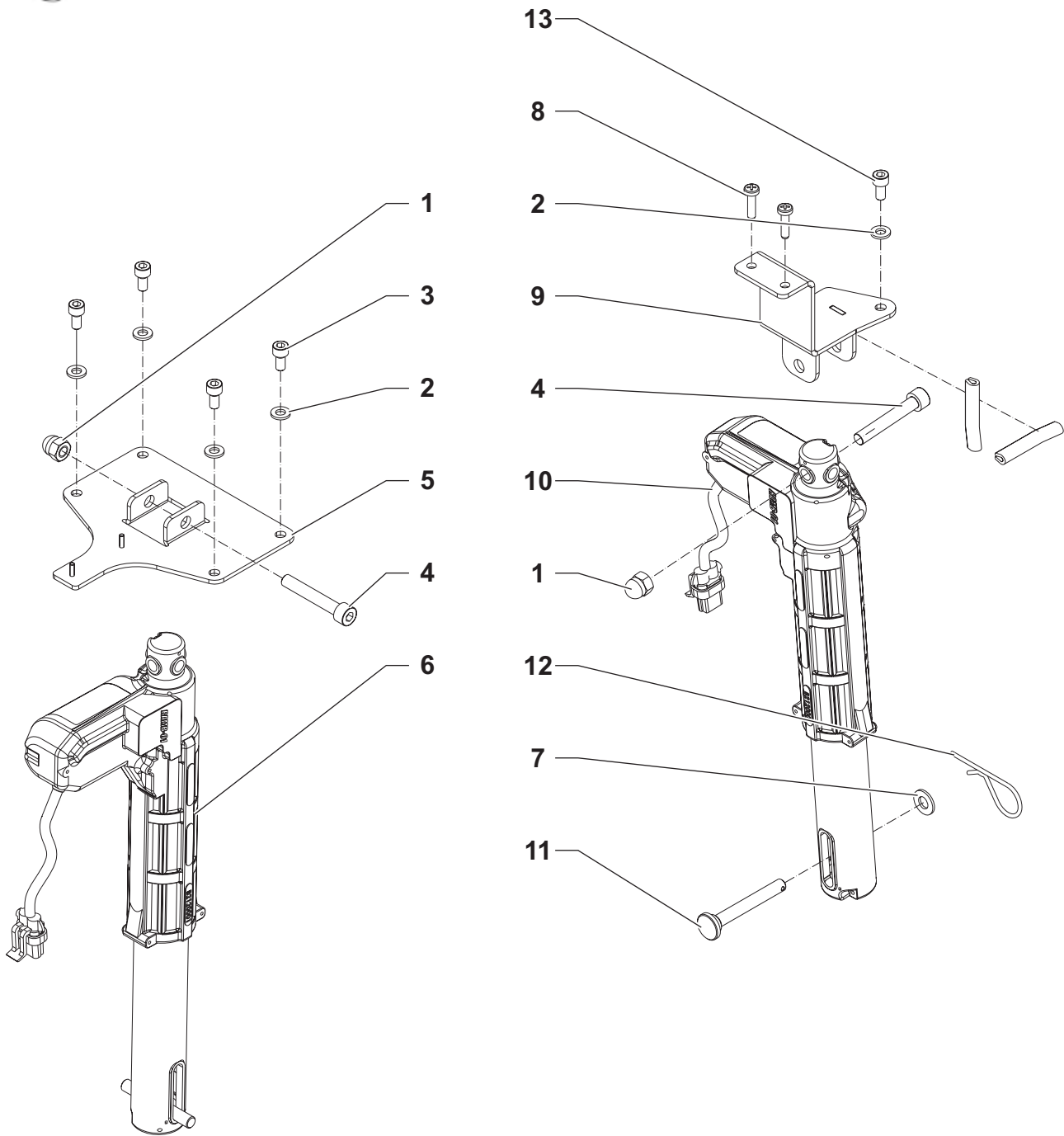
SOLUTION SYSTEM



SOLUTION SYSTEM

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1	9100000860	1	FILTER WATER PKD
	2	9100000861	1	NET WATER FILTER REINFORCED PKD
	3	9100001174	1	HOSES SOLUTION KIT
	4	9100001159	1	CLAMP DOUBLE W. SPRING D.18 10 PCS SET

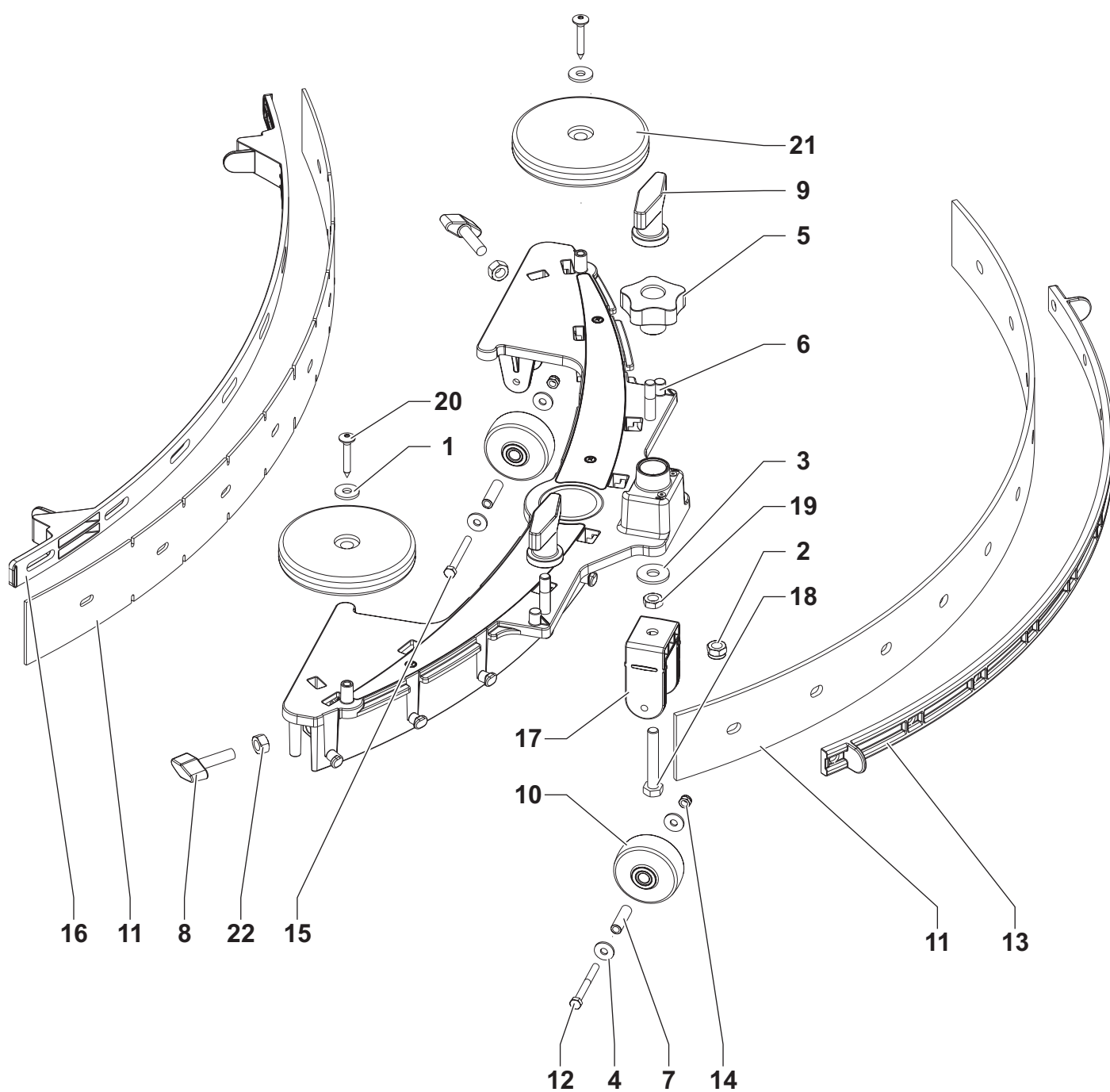
ACTUATORS



ACTUATORS

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K2	1		2	NUT.M8
K1	2		5	WASHER M6 UNI6592
K1	3		5	SCREW M6X12 UNI5931 SS
K2	4		2	SCREW M8X50 UNI5931 THREADED TOTALLY
	5	9100001126	1	SUPPORT DECK ACTUATOR PKD
	6	9100001131	1	ACTUATOR 24V DC STROKE 98MM PKD
K2	7		1	WASHER M8 UNI6592
K1	8		2	SCREW CYL HD 5X20 SELF L. PLASTOFAST
	9	9100001103	1	SUPPORT SQUEEGEE ACTUATOR PKD
	10	9100001133	1	ACTUATOR 24V DC STROKE 77.5MM PKD
K2	11		1	PIN SQUEEGEE ACTUATOR
K2	12		1	PIN SPLIT 2X50 UNI8833
K1	13		1	SCREW M6X12 UNI5931
	[K1]	9100001172	1	HARDWARE ACTUATOR SUPPORT KIT
	[K2]	9100001173	1	HARDWARE ACTUATOR KIT

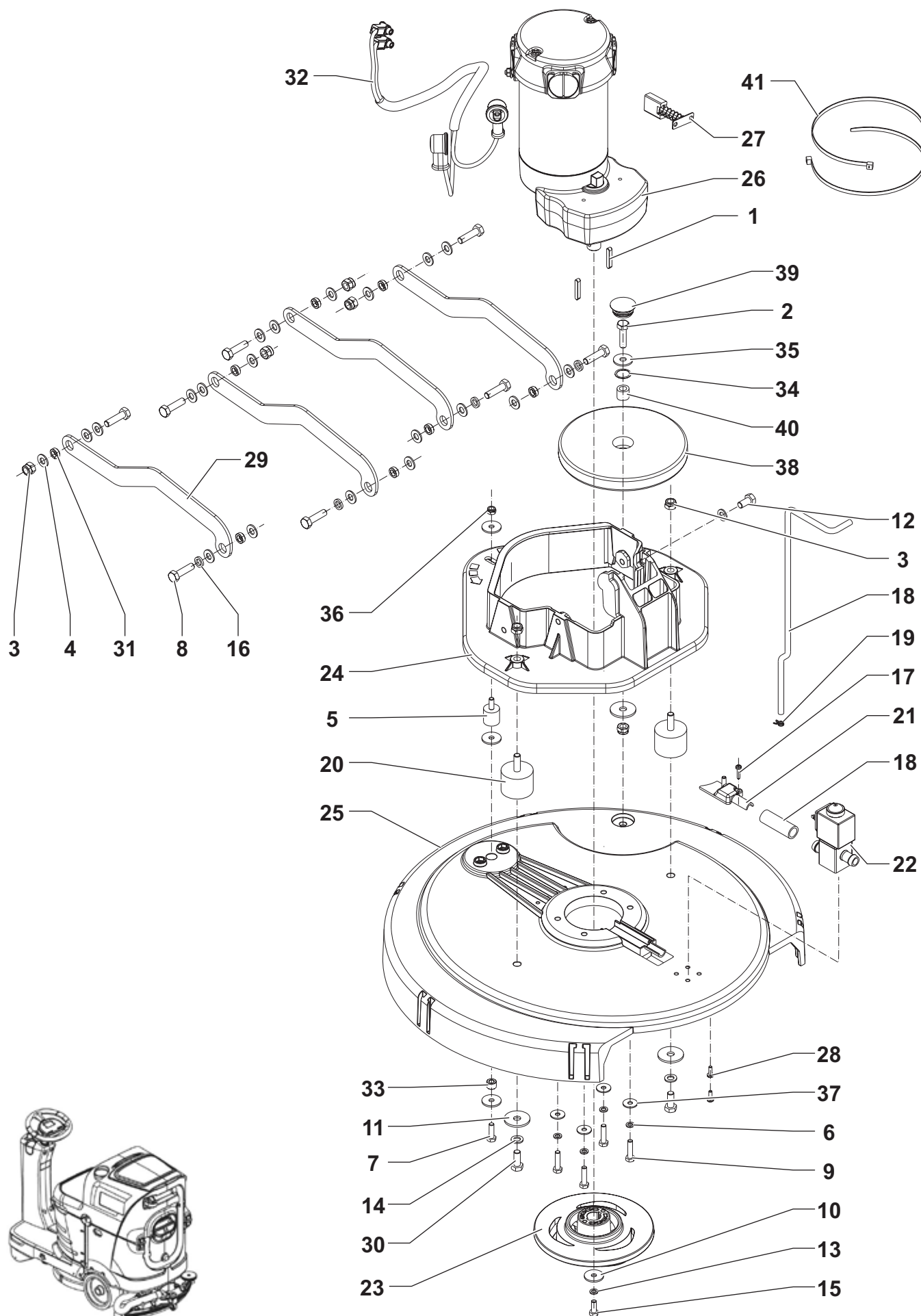
SQUEEGEE SYSTEM



SQUEEGEE SYSTEM

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K1	1		2	WASHER 6X18X1.5 UNI6593 SS
K1	2		1	NUT SELFLOCKING LOW M8 UNI7474 SS
K1	3		1	WASHER 8X24 UNI6592 SS
K1	4		6	WASHER 5X15X1.2 UNI6593 SS
	5	9100000862	1	KNOB LOBES M8 FEMALE PKD
	6	9100000747	1	SQUEEGEE 730MM/29 PRE-ASSEMBLED PKD
K1	7		3	SPACER 5.1X8X28.5 PLASTIC
	8	9100000791	2	KNOB M8X30 THD STUD SS PKD
	9	9097637000	1	SQUEEGEE FIXING KIT
	10	9100000559	3	WHEEL D.51 GREY PKD
	11*	9100000810	1	BLADE SQUEEGEE 740MM 29 GUM KIT
	11*	9100000490	1	BLADE SQUEEGEE 730MM 29 PU KIT
	11*	9100000060	1	BLADE SQUEEGEE 730MM 29 RED GUM KIT
K1	12		1	SCREW M5X50 UNI5737 SS
	13	9100000864	1	STRAP ELASTIC F REAR SQUEEGEE BL. PKD
K1	14		3	NUT SELFLOCKING LOW M5 UNI7474 SS
K1	15		2	SCREW M5X45 UNI5737 SS
	16	9100000865	1	STRAP FRONT SQUEEGEE BLADE PKD
	17	9100000866	1	SUPPORT SQUEEGEE WHEEL PKD
K1	18		1	SCREW M8X50 HEX HD F/THD SS ISO4017
K1	19		1	NUT HEX M8 ISO4035 SS
K1	20		2	SCREW 5X35 SELF THD TAPPING AW20 BLACK
	21	9100000867	1	GUIDE WHEEL 2 PCS SET
K1	22		2	NUT HEX M8 UNI5588 SS
	[K1]	9100000748	1	HARDWARE SQUEEGEE KIT

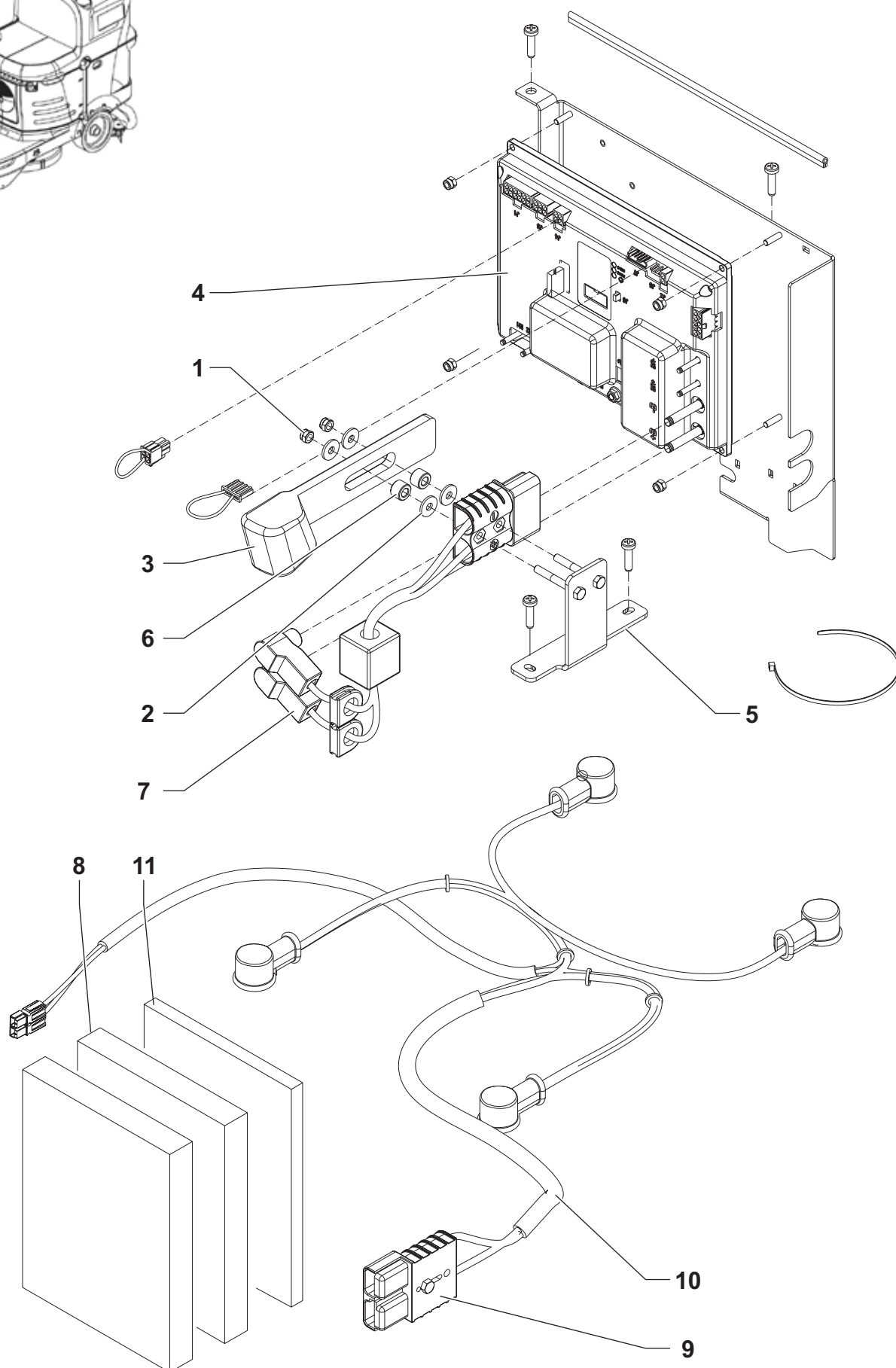
BRUSH DECK



BRUSH DECK

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1	9100000875	1	KEY 5X5X30 DIN6885 2 PCS SET
K1	2		1	SCREW M8X30 UNI5739
K2-3	3		7	NUT SELFLOCKING LOW M8 UNI7474 SS
K2	4		20	WASHER M8 UNI6592 SS
	5	9100001191	1	VIBRATION-DAMPING M6 60SH PKD
K3	6		5	WASHER M6 UNI8842A SS
	7	9100001186	1	SCREW M6X20 UNI5739 SS 10 PCS SET
K2	8		8	SCREW M8X25 UNI5739 SS
K3	9		4	SCREW M6X25 UNI5739 SS
K3	10		4	WASHER 6.6X24X2 UNI6593 SS
K3	11		3	WASHER 8.5X32X2 SS
K3	12		1	SCREW M8X16 UNI5739 SS
K3	13		1	WASHER NORD LOCK M6 DIN25201
K3	14		3	WASHER M8 UNI8842A SS
K3	15		1	SCREW M6X16 UNI5739 SS
K2	16		4	WASHER NORD LOCK M8
K3	17		1	SCREW 3.5X16 SELF THD PAN PHIL F PLASTIC
	18	9100000797	1	HOSES BRUSH DECK KIT
K3	19		1	CLAMP 6.6X 7
	20	9100000868	1	VIBRATION DAMPING M8 60SH 2 PCS SET
	21	9100000869	1	COVER SOLUTION HOSE SUPPORT PKD
	22	9100000870	1	SOLENOID VALVE 24V PKD
	23	9100000871	1	HUB BRUSH PKD
	24	9100000872	1	PLATE BRUSH DECK HOLDER PKD
	25	9100000873	1	DECK BRUSH PKD
	26	9100000874	1	REDUCTION GEARMOTOR 450W 24V PKD
	27	9098376000	1	CARBON BRUSHES KIT 4 PCS
K3	28		2	SCREW PAN HD SELF 4x12 SS
	29	9100001163	1	ARM BRUSH DECK LIFTING 4 PCS SET
K3	30		2	SCREW M8X20 UNI5739 SS
K2	31		8	BUSHING D.8.1X13X4.3
	32	9100001132	1	HARNESS BRUSH MOTOR PKD
K3	33		1	SPACER D.6X12X8.5
K1	34		1	WASHER 15
K1	35		1	WASHER 8X24X2 FLAT ISO7093
K3	36		1	NUT SELF L. M6 UNI7474 SS
K3	37		4	WASHER 6X18X1.5 UNI6593 SS
K1	38		1	ROLLER BUMPER D.160 BLACK
K1	39		1	CAP. BLACK
K1	40		1	SPACER 9X15X13
K3	41		2	TIE CABLE 4.8X500 BLACK
[K1]	909 6887 000		1	ROLLER BUMPER KIT
[K2]	9100001175		1	HARDWARE BRUSH DECK LIFTING ARMS KIT
[K3]	9100001176		1	HARDWARE BRUSH DECK KIT

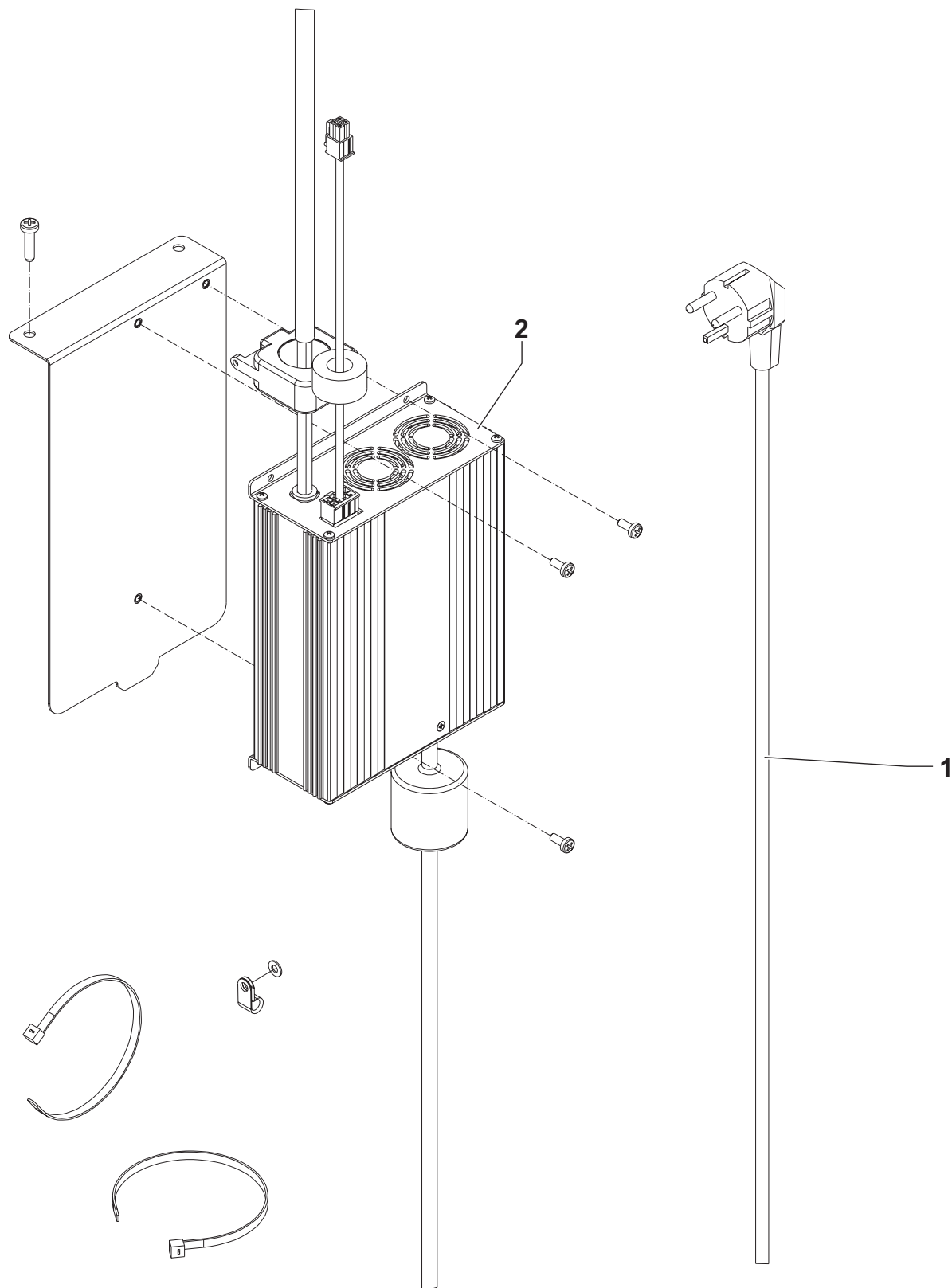
ELECTRICAL SYSTEM



ELECTRICAL SYSTEM

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K2	1		2	NUT SELF L. M5 UNI7474
K2	2		4	WASHER 5X15X1.5 UNI6593
K2	3		1	LEVER BATTERY CONNECTOR
	4	9100001122	1	CONTROLLER MAIN MACHINE PKD
K2	5		1	SUPPORT F BATTERY CONNECTOR
K2	6		2	SPACER D.6X12X8.5
	7	9100001141	1	HARNESS F ELECT. COMPONENTS BOX PKD
K1	8		2	PANEL INSULATING
	9	9100000884	1	CONNECTOR RED 120A 2 PCS SET
	10	9100001015	1	HARNESS BATTERY US PKD
K1	11		1	ISOLANT PANEL
	[K1]	9100001177	1	PANELS INSULATING KIT
	[K2]	9100001179	1	LEVER EMERGENCY KIT

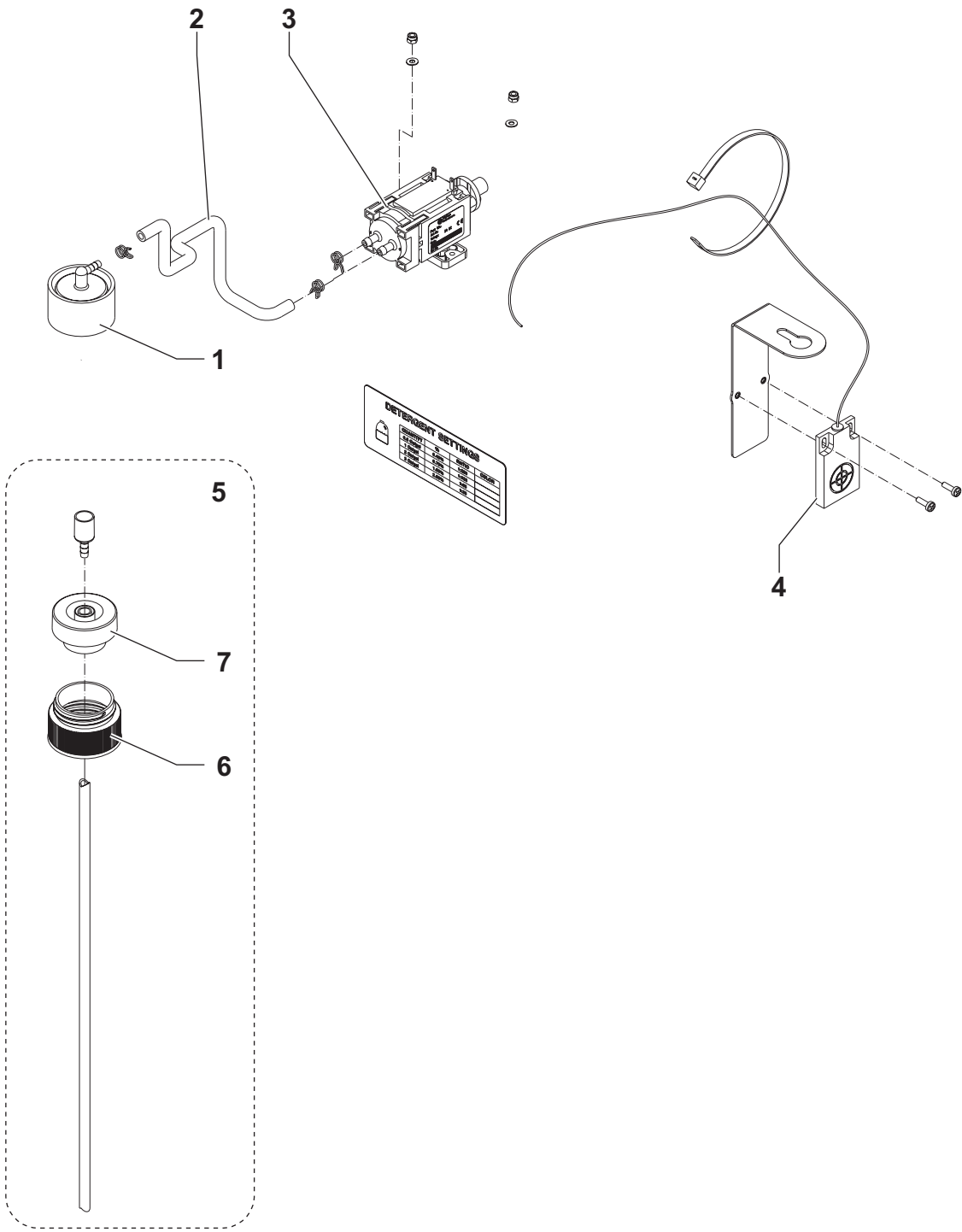
BATTERY CHARGER



BATTERY CHARGER

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K1	1	9100000890	1	CABLE EXTENSION US PLUG L.2000MM PKD
K1	2	9100001145	1	CHARGER BATT. O/B 24V 13A 100-230V PKD

CHEMICAL MIXING SYSTEM

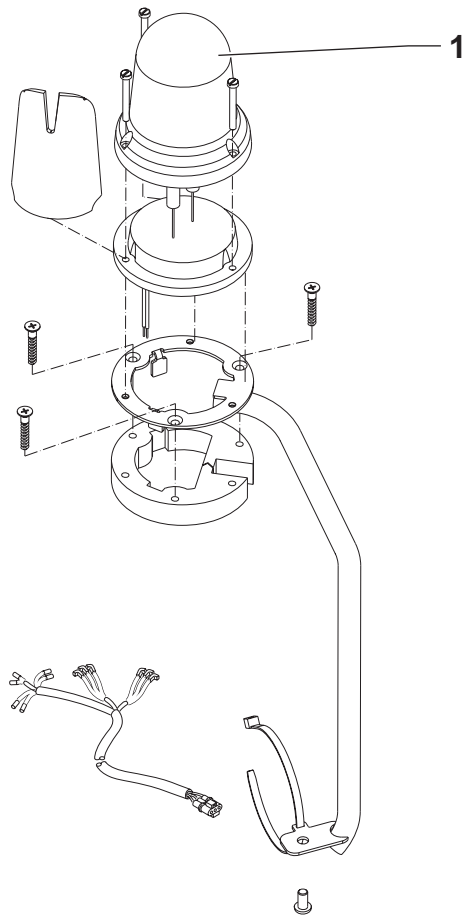


CHEMICAL MIXING SYSTEM

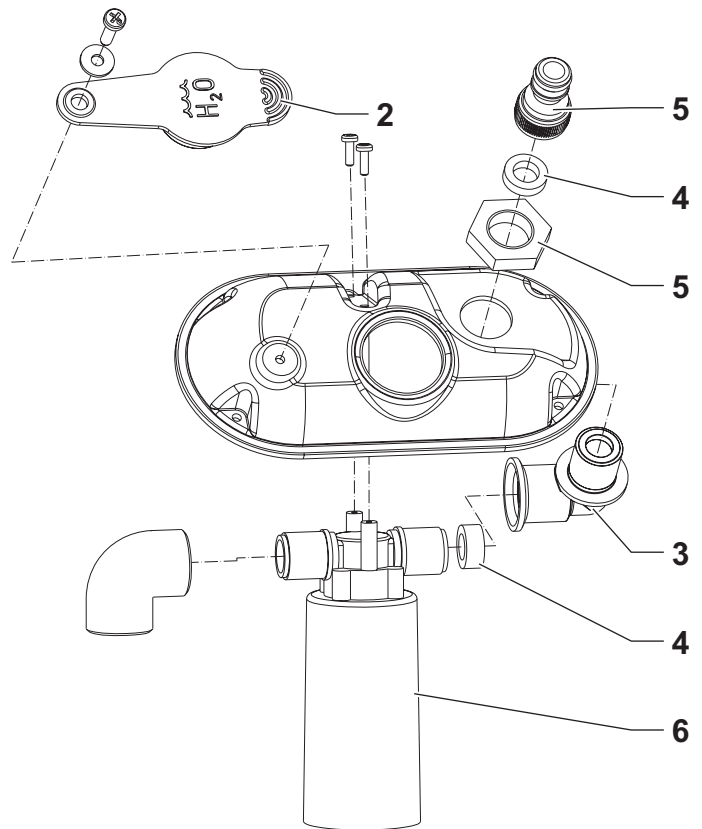
KIT	ITEM	REF. NO.	QTY	DESCRIPTION
K1	1	56315523	1	CAP DRY BREAK 1/8 BARB
K1	2	9100000891	1	HOSE SILICONE D.4X7 L.300MM PKD
K1	3	9100000892	1	PUMP CHEMICAL MIX PKD
K1	4	9100001149	1	SENSOR WATER LEVEL PKD
K1	5	9098025000	1	ADAPTER CHEMICAL KIT
K1	6	9097023000	1	ADAPTER CHEMICAL TANK
K1	7	9097022000	1	SENSOR CHEMICAL MIX LEVEL
	K1*	9100000953	1	NILFISK-ALTO CHEMICAL MIX SYSTEM KIT
		9100001070	1	INSTRUCTIONS INSTALL. KIT 9100000953

ACCESSORIES

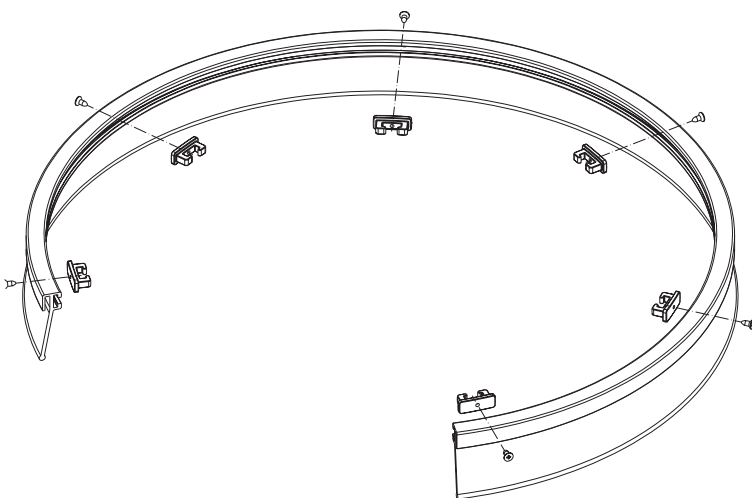
K1



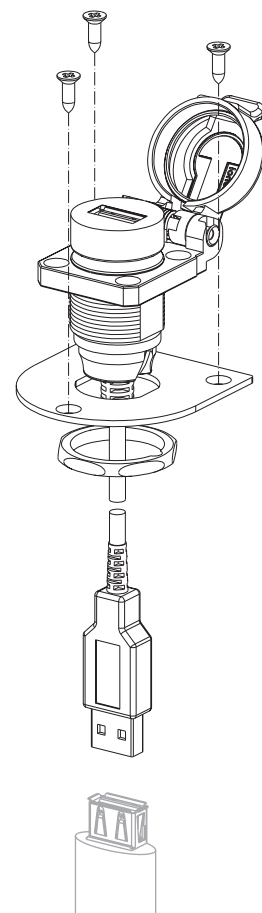
K2



K3



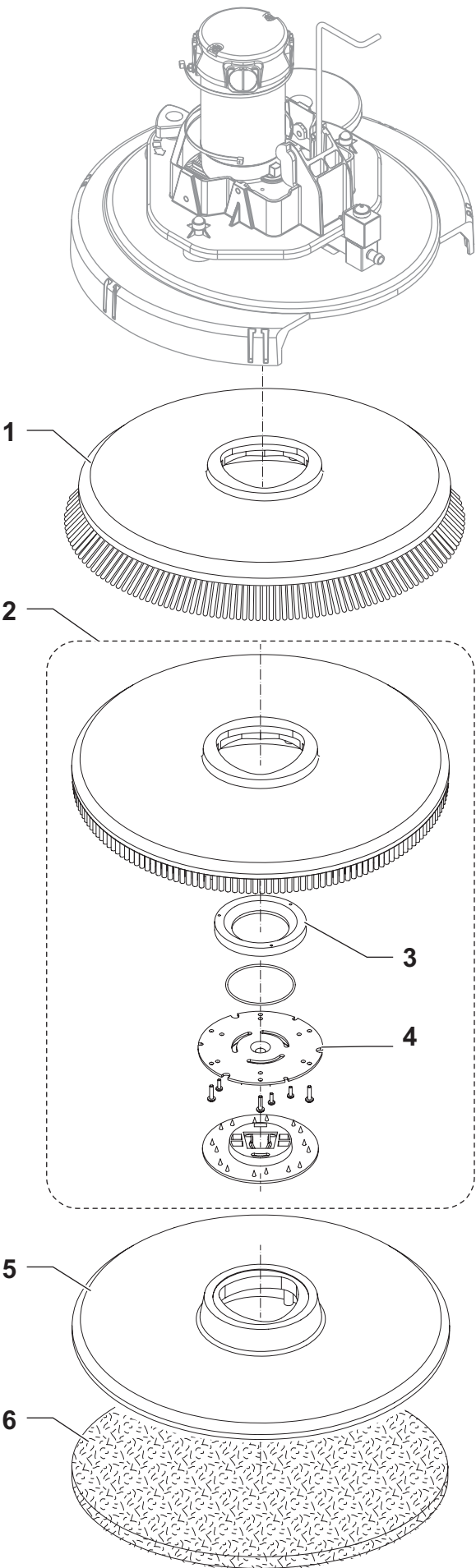
K4



ACCESSORIES

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1	33023155	1	BEACON FLASHING PKD
K1*	9100000663	1	1	BEACON FLASHING KIT
		9100000982	1	INSTRUCTIONS INSTALL. KIT 9100000663
	2	9100000808	1	RUBBER SOLUTION CAP PKD
	3	9100000894	1	ELBOW CURVED M/F PKD
	4	9100000622	2	GASKET RUBBER D.11.5x19x5 BLACK PKD
	5	9099675000	1	FITTING QUICK KIT
	6	9100000897	1	VALVE WATER STOP PKD
K2*	9100000707	1	1	AUTOMATIC WATER FILLING KIT
		9100000984	1	INSTRUCTIONS INSTALL. KIT 9100000707
K3*	9099826000	1	1	SPLASH GUARD 510MM 20 KIT
K4*	9100000784	1	1	USB PORT KIT
		9100000983	1	INSTRUCTIONS INSTALL. KIT 9100000784

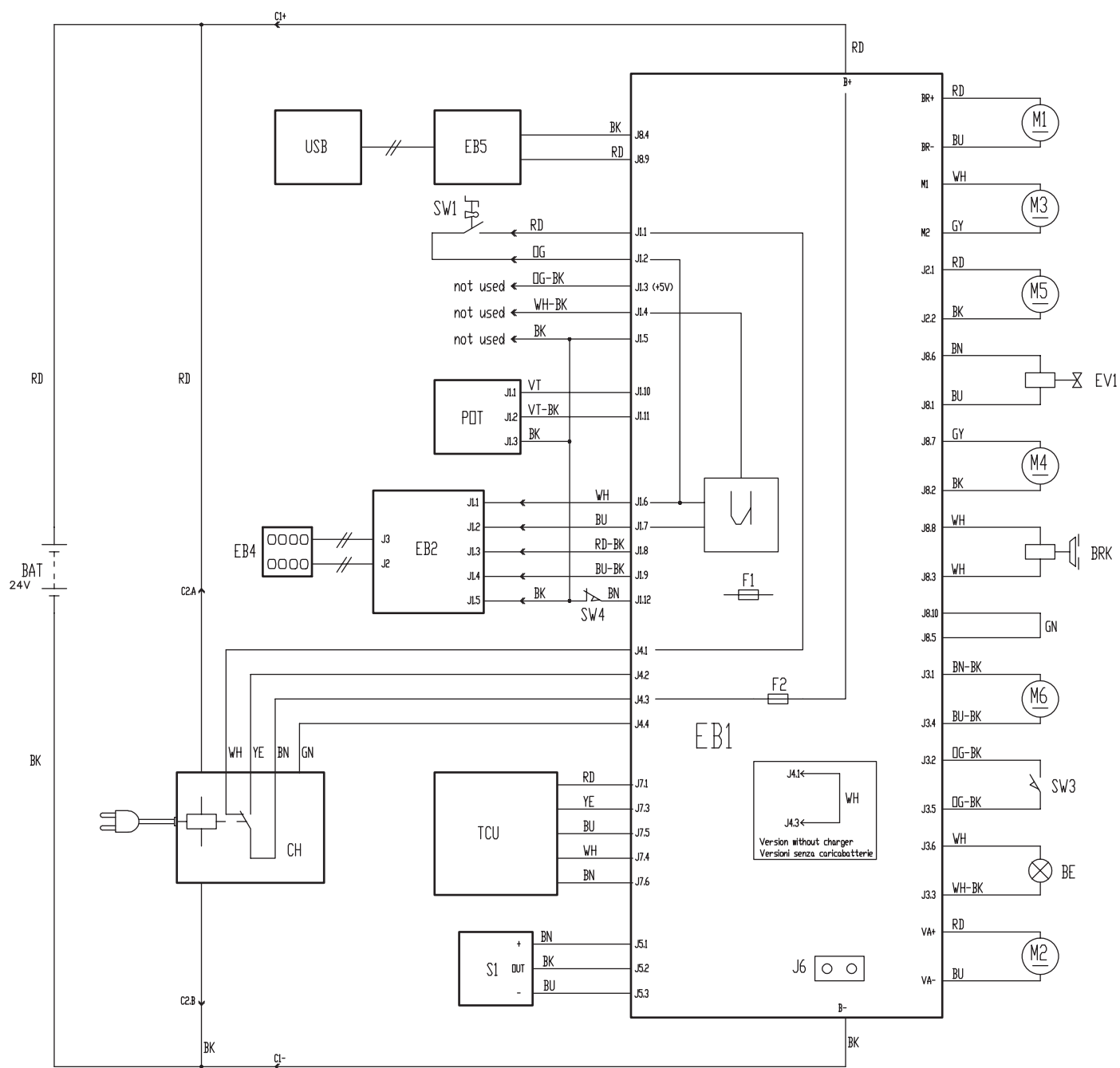
ACCESSORIES



ACCESSORIES

KIT	ITEM	REF. NO.	QTY	DESCRIPTION
	1*	L08837025	1	BRUSH DISC 530MM 21 PROLENE
	1*	L08837026	1	BRUSH DISC 530MM 21 PROLITE
	1*	L08837027	1	BRUSH DISC 530MM 21 UNION MIX
	1*	L08837028	1	BRUSH DISC 530MM 21 MIDLITE GRIT 180
	1*	L08837029	1	BRUSH DISC 530MM 21 MID GRIT 240
	1*	L08837065	1	BRUSH DISC 530MM 21 MAGNA GRIT 46
	1*	L08837066	1	BRUSH DISC 530MM 21 DYNA GRIT 80
	1*	L08837067	1	BRUSH DISC 530MM 21 AGLITE GRIT 500
	2*	L08837018	1	PAD HOLDER 530MM
	3	L08603966	1	RING NYLON
	4	56505195	1	PAD RETAINER
	5*	9099671000	1	PAD HOLDER FLAT 20 508MM
	6*	10001955	1	PAD 20 508MM ECO BLACK 5PCS
	6*	10001956	1	PAD 20 508MM ECO BLUE 5PCS
	6*	10001957	1	PAD 20 508MM ECO BROWN 5PCS
	6*	10001958	1	PAD 20 508MM ECO GREEN 5PCS
	6*	10001959	1	PAD 20 508MM ECO RED 5PCS
	6*	10001960	1	PAD 20 508MM ECO WHITE 5PCS
	6*	10002348	1	PAD 20 508MM ECO BRILLIANCE RED 2PCS
	6*	10002349	1	PAD 20 508MM ECO BRILLIANCE BLUE 2PCS
	6*	10002350	1	PAD 20 508MM ECO BRILL. YELLOW 2PCS
	6*	10002351	1	PAD 20 508MM ECO BRILLIANCE GREEN 2PCS

WIRING DIAGRAM



WIRING DIAGRAM

KEY	REF. NO.	DESCRIPTION
BAT	-	24 V BATTERIES
BE	9100000663	BEACON FLASHING KIT
BRK	9100001199	ELECTROMAGNETIC BRAKE PKD
C1	-	BATTERY CONNECTOR
C2	-	CHARGER BATT. CONNECTOR
CH	9100001145	CHARGER BATT. O/B 24V 13A 100-230V PKD
EB1	9100001122	CONTROLLER MAIN MACHINE PKD
EB2	9100001104	CARD ELECTRONIC DISPLAY PKD
EB4	9100001123	DASHBOARD CONTROL PANEL PKD
EB5	-	5V POWER UNIT (OPTIONAL)
EV1	9100000870	SOLENOID VALVE 24V PKD
F1	9100000877	FUSE MIDIFUSE 100A PKD
F2	9100000878	FUSE BLADE 3A PKD
M1	9100000874	REDUCTION GEARMOTOR 450W 24V PKD
M2	9100001144	MOTOR VACUUM 24V 310W PKD
M3	9100001200	MOTOR ELECTRIC 400W 24V PKD
M4	9100000892	PUMP CHEMICAL MIX PKD
M5	9100001131	ACTUATOR 24V DC STROKE 98MM 16MM/S PKD
M6	9100001133	ACTUATOR 24V DC STROKE 77.5MM 16MM/S PKD
POT	9100001140	THROTTLE ELECTRONIC PKD
S1	9100001149	SENSOR WATER LEVEL PKD
SW1	9100001193	SWITCH KEY WITH CAP PKD
SW3	9100001130	CUSHION SEAT W. MICROSWITCH PKD
SW4	9100001183	MICROSWITCH KIT
TC	-	TRACKCLEAN™ (OPTIONAL)
USB	9100000784	USB PORT KIT

KEY	COLOUR	COLORE
BK	BLACK	NERO
BU	LIGHT BLUE	AZZURRO
BN	BROWN	MARRONE
GN	GREEN	VERDE
GY	GREY	GRIGIO
OG	ORANGE	ARANCIONE

KEY	COLOUR	COLORE
PK	PINK	ROSA
RD	RED	ROSSO
VT	VIOLET	VIOLA
WH	WHITE	BIANCO
YE	YELLOW	GIALLO

RECOMMENDED PARTS

REF. NO.	QTY	DESCRIPTION
NORMAL WEAR		
9100001153	1	GASKET RUBBER L.1200MM PKD
9100000810	1	BLADE SQUEEGEE 740MM 29 GUM KIT
9100000490	1	BLADE SQUEEGEE 730MM 29 PU KIT
9100000060	1	BLADE SQUEEGEE 730MM 29 RED GUM KIT
L08837025	1	BRUSH DISC 530MM 21 PROLENE
ORDINARY MAINTENANCE		
9100000803	1	VALVE ELBOW PKD
9100000574	1	FITTING STRAIGHT G1/2 D.20 KIT
1465355000	1	CAP SOLUTION TANK KIT
9100001192	1	FILTER SOLUTION TANK PKD
9100001128	1	HOSE FRESH WATER LEVEL PKD
9100001139	2	GASKET RUBBER D.21X33X2.5 BLACK PKD
9100000817	1	BALL FLOATING PKD
9097587000	1	CAGE FLOAT
9100000928	1	GASKET FLOAT SUPPORT PKD
9100001106	1	HOSE SUCTION BLACK PKD
9100001113	1	HOSE DRAIN BLACK PKD
9100001144	1	MOTOR VACUUM 24V 310W PKD
9100001193	1	SWITCH KEY WITH CAP PKD
1464432000	1	CARBON BRUSHES KIT 4 PCS
9100001098	1	WHEEL D.200X76 GREY-BLACK PKD
9100000860	1	FILTER WATER PKD
9100000861	1	NET WATER FILTER REINFORCED PKD
9100000862	1	KNOB LOBES M8 FEMALE PKD
9100000791	2	KNOB M8X30 THD STUD SS PKD
9100000559	3	WHEEL D.51 GREY PKD
9100000864	1	STRAP ELASTIC F REAR SQUEEGEE BLADE PKD
9100000865	1	STRAP FRONT SQUEEGEE BLADE PKD
9100000867	1	GUIDE WHEEL 2 PCS SET
9100000748	1	HARDWARE SQUEEGEE KIT
9100000870	1	SOLENOID VALVE 24V PKD
9100000871	1	HUB BRUSH PKD
9098376000	1	CARBON BRUSHES KIT 4 PCS
L08812204	1	ROLLER BUMPER D.160 BLACK
9100000891	1	HOSE SILICONE D.4X7 L.300MM PKD
9100000892	1	PUMP CHEMICAL MIX PKD
EXTRA ORDINARY MAINTENANCE		
9100001130	1	CUSHION SEAT W. MICROSWITCH PKD
9100001091	1	TRAY DEBRIS PKD
9100001092	1	COVER TRAY DEBRIS PKD
9100001180	1	THROTTLE KIT
9100001168	1	SPRING ZERO SETTING SQUEEGEE KIT
9100001162	1	WHEEL D.254X80 GREY-BLACK 2 PCS SET
9100001200	1	MOTOR ELECTRIC DRIVE PKD
909 5941 000	1	SUPPORT BALL BEARING
909 5942 000	1	BEARING TAPER ROLLER 32004X
9100001160	1	SCREW 10X16 M8 ISO7379 12.9 10 PCS SET
9100001101	1	PIN WHEEL PKD
9100001189	1	SCREW GRUB M5X10 UNI5929 10 PCS SET
9100001093	1	BEARING NEEDLE ROLLER NK 17/20 PKD
9100001104	1	CARD ELECTRONIC DISPLAY PKD
9100001124	1	DASHBOARD CONTROL PANEL PKD
9100001174	1	HOSES SOLUTION KIT
9100001131	1	ACTUATOR 24V DC STROKE 98MM 16MM/S PKD
9100001133	1	ACTUATOR 24V DC STROKE 77.5MM 16MM/S PKD
9100001173	1	HARDWARE ACTUATOR KIT
9100000874	1	REDUCTION GEARMOTOR 450W 24V PKD
909 6887 000	1	ROLLER BUMPER KIT
9100001122	1	CONTROLLER MAIN MACHINE PKD
9100000884	1	CONNECTOR RED 120A 2 PCS SET

RECOMMENDED PARTS - ACCESSORIES/ OPTIONAL

REF. NO.	QTY	DESCRIPTION
9100001179	1	LEVER EMERGENCY KIT
9100001145	1	CHARGER BATT. O/B 24V 13A 100-230V PKD
9100001081	1	CHEMICAL TANK PKD
56104189	1	INSERT-DRY BRAKE
56315517	1	CAP
56315523	1	CAP DRY BREAK 1/8 BARB
9100001149	1	SENSOR WATER LEVEL PKD
56315523	1	CAP DRY BREAK 1/8 BARB
9100000891	1	HOSE SILICONE D.4X7 L.300MM PKD
9098025000	1	ADAPTER CHEMICAL KIT
ACCESSORIES/OPTIONAL		
9100001192	1	FILTER SOLUTION TANK PKD
9100000952	1	FILLING HOSE
909 5065 000	1	FILTER ANTIFOAMING
9100000843	1	OPERATOR KEY
9100000848	1	SUPERUSER KEY
9100000810	1	BLADE SQUEEGEE 740MM 29 GUM KIT
9100000490	1	BLADE SQUEEGEE 730MM 29 PU KIT
9100000060	1	BLADE SQUEEGEE 730MM 29 RED GUM KIT
9100000953	1	NILFISK-ALTO CHEMICAL MIX SYSTEM KIT
9098025000	1	ADAPTER CHEMICAL KIT
9100000663	1	BEACON FLASHING KIT
9100000707	1	AUTOMATIC WATER FILLING KIT
9099826000	1	SPLASH GUARD 510MM 20 KIT
9100000784	1	USB PORT KIT
L08837025	1	BRUSH DISC 530MM 21 PROLENE
L08837026	1	BRUSH DISC 530MM 21 PROLITE
L08837027	1	BRUSH DISC 530MM 21 UNION MIX
L08837028	1	BRUSH DISC 530MM 21 MIDLITE GRIT 180
L08837029	1	BRUSH DISC 530MM 21 MID GRIT 240
L08837065	1	BRUSH DISC 530MM 21 MAGNA GRIT 46
L08837066	1	BRUSH DISC 530MM 21 DYNA GRIT 80
L08837067	1	BRUSH DISC 530MM 21 AGLITE GRIT 500
L08837018	1	PAD HOLDER 530MM
9099671000	1	PAD HOLDER FLAT 20 508MM
10001955	1	PAD 20 508MM ECO BLACK 5PCS
10001956	1	PAD 20 508MM ECO BLUE 5PCS
10001957	1	PAD 20 508MM ECO BROWN 5PCS
10001958	1	PAD 20 508MM ECO GREEN 5PCS
10001959	1	PAD 20 508MM ECO RED 5PCS
10001960	1	PAD 20 508MM ECO WHITE 5PCS
10002348	1	PAD 20 508MM ECO BRILLIANCE RED 2PCS
10002349	1	PAD 20 508MM ECO BRILLIANCE BLUE 2PCS
10002350	1	PAD 20 508MM ECO BRILL. YELLOW 2PCS
10002351	1	PAD 20 508MM ECO BRILLIANCE GREEN 2PCS

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