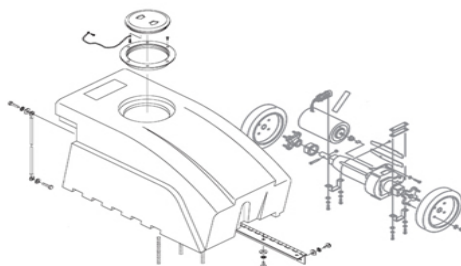
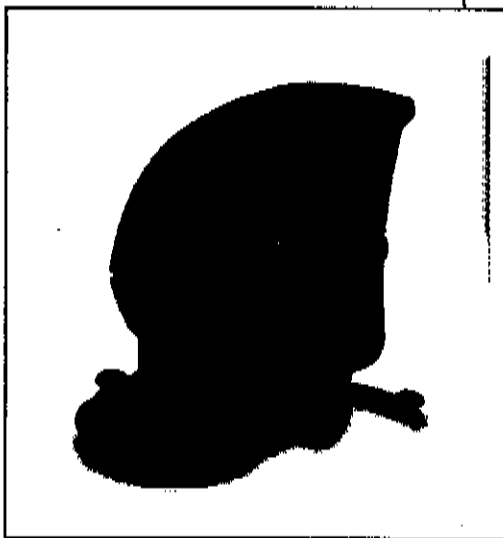


# Watchman™ 24 Operator's Manual

## Operator's Manual

Item #86009



**FLOOREQUIPMENTPARTS.COM**

Better Resources. Better Results.  
**BETCO®**

# 1. TABLE OF CONTENTS

1. TABLE OF CONTENTS .....	2
2. GENERAL INFORMATION .....	4
2.1. SCOPE OF THE MANUAL .....	4
2.2. IDENTIFICATION OF THE MACHINE .....	5
2.3. DOCUMENTATION ANNEXED TO THE MACHINE .....	5
3. TECHNICAL INFORMATION .....	6
3.1. GENERAL DESCRIPTION .....	6
3.2. LEGEND .....	6
3.3. OVERALL DIMENSIONS .....	7
3.4. TECHNICAL SPECIFICATIONS .....	8
3.5. DANGER AREAS .....	8
3.6. ACCESSORIES .....	9
4. INFORMATION ON SAFETY .....	9
4.1. SAFETY STANDARDS .....	9
5. HANDLING AND INSTALLATION .....	12
5.1. LIFTING AND CARRYING THE PACKED MACHINE .....	12
5.2. CHECKING THE MACHINE ON DELIVERY .....	12
5.3. UNPACKING .....	12
5.4. FEEDING BATTERIES .....	13
5.4.1. Batteries: preparation .....	13
5.4.2. Batteries: installation and connection .....	14
5.5. THE BATTERY-CHARGER .....	15
5.5.1. Choosing the battery-charger .....	15
5.5.2. Preparing the battery-charger .....	15
5.6. LIFTING AND HANDLING THE MACHINE .....	15
6. PRACTICAL GUIDE FOR THE USER .....	16
6.1. CONTROL DEVICES - DESCRIPTION .....	16
6.2. INSTALLING AND ADJUSTING THE SQUEEGEE .....	17
6.3. MOVING THE MACHINE .....	17
6.4. INSTALLING AND REPLACING THE BRUSHES / DRIVE DISCS .....	18
6.5. DETERGENTS - USE .....	19
6.6. SETTING UP THE MACHINE .....	19
6.7. WORK .....	20
6.8. SOME USEFUL SUGGESTIONS FOR THE OPTIMAL USE OF THE MACHINE .....	21
6.8.1. Pre-washing .....	21
6.8.2. Drying .....	21
6.9. DRAINING OFF DIRTY WATER .....	21
6.10. DRAINING OFF CLEAN WATER .....	22
7. PERIODS OF INACTIVITY .....	23
8. MAINTENANCE AND BATTERY RECHARGING .....	23
8.1. RECHARGING PROCEDURES .....	23

<b>9. INSTRUCTIONS FOR MAINTENANCE.....</b>	<b>24</b>
9.1. MAINTENANCE – GENERAL RULES .....	24
9.2. ROUTINE MAINTENANCE .....	24
9.2.1. <i>Daily cleaning</i> .....	24
9.2.2. <i>Suction air filter and floating rod: cleaning</i> .....	25
9.2.3. <i>Squeegee blades: replacement</i> .....	25
9.2.4. <i>Fuses: replacement</i> .....	26
9.3. PERIODIC MAINTENANCE .....	27
9.3.1. <i>Daily maintenance</i> .....	27
9.3.2. <i>Weekly maintenance</i> .....	27
9.3.3. <i>Six-monthly maintenance</i> .....	27
<b>10. HOW TO ORDER SPARE PARTS .....</b>	<b>27</b>
<b>11. TROUBLESHOOTING .....</b>	<b>28</b>
11.1. HOW TO OVERCOME POSSIBLE FAILURES .....	28

## 2. GENERAL INFORMATION



**Read this manual carefully before starting any operations on this machine<sup>1</sup>.**

### 2.1. Scope of the manual

This manual has been drawn up by the Manufacturer and is considered as an integral part of the machine.

It defines the purpose for which the machine has been manufactured and contains all information the operators<sup>2</sup> require.

Besides this manual, which contains the necessary information for the users, other publications have been issued, which contain the specific information for the technicians in charge of maintenance<sup>3</sup>.

The constant observance of the instructions guarantee the safety of man and machine, low running costs, quality results and a longer work life of the machine itself. The non-observance of the prescribed rules could injure men, damage the machine, spoil the washed floor and even the environment.

To find the single topics in a fast way, see the descriptive table of contents at the beginning of this manual.

The paragraphs that are not to be neglected are printed in bold letters and preceded by symbols illustrated and defined below.

### **! DANGER**

**Indicates that attention must be paid to avoid serious consequences that could cause the death of the personnel or possible damages to health.**

### **⚠ WARNING**

**Indicates that attention must be paid to avoid serious consequences that could damage the machine, spoil the environment where the machine is used or cause economic losses.**

### **i INFORMATION**

**Particularly important instructions.**

In following a policy of constant development and update of the product, the Manufacturer could implement modifications without any previous notice.

Even though the machine you own is greatly different from the one(s) illustrated in this manual, safety and information thereof are guaranteed anyway.

<sup>1</sup> The definition "machine" substitutes the commercial name to which this manual refers.

<sup>2</sup> People authorised to use the machine without carrying out maintenance operations that require precise technical knowledge.

<sup>3</sup> People having the experience, technical preparation and knowledge of the regulations and laws necessary to carry out the activity and capable to recognize and avoid possible dangers when handling, installing, using the machine and carrying out maintenance operations.

## 2.2. Identification of the machine

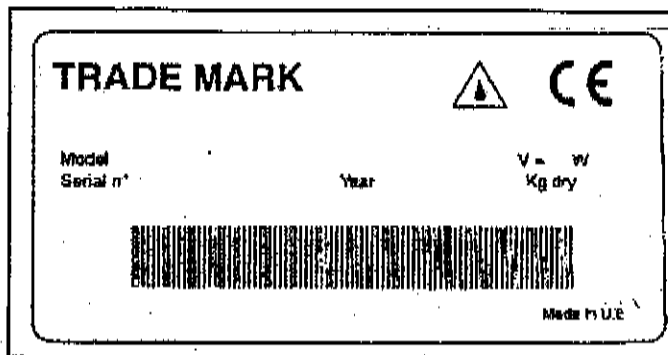


Fig. 1

The number plate (fig. 1), which is attached at the rear of the machine, shows the following information:

- model code;
- machine model;
- power supply voltage;
- total rated power;
- serial number (registration number);
- year of manufacture;
- dry weight;
- maximum full load weight;
- steepest slope that can be overcome;
- bar code with serial number;
- Manufacturer's identification.

## 2.3. Documentation annexed to the machine

- User's Manual;
- warranty certificate;
- adhesive slips for spare part orders;
- test sheet;
- CE Certificate of conformity.

### 3. TECHNICAL INFORMATION

#### 3.1 General description

The machine is a sweeping scrubber, which can be used in civil and industrial environments for sweeping, washing and drying flat, horizontal, smooth or moderately rough floors, with even surfaces and free from obstacles.

The scrubber distributes on the floor an adequately dosed solution of water and detergent, and brushes it to remove dirt. Choosing with care the right cleaning detergent and brushes (or abrasive discs) in the wide range of accessories available, the machine can adapt itself to all kinds of combinations of floors and dirt.

A liquid suction system, which is embedded in the machine, allows a perfect drying of the just-washed floor: actually thanks to a suction unit which sucks up the air from the recovery tank thus creating a vacuum, the squeegee scrapes the dirty water from the floor, collects it and sends it to the recovery tank.

The storage battery feeding and the high capacity of usable batteries allow the **maximum freedom of movement** and endurance at **any work conditions**.

Moreover, thanks to the electronically driven motor and being the machine provided with forward gear speed and freewheel, any path on the floor to clean can be easily run to and fro.

#### 3.2 Legend

The main components of the machine are the following (fig. 2):

- the detergent solution tank (fig. 2, ref. 7): used to contain and carry the mixture of clean water and detergent;
- the recovery tank (fig. 2, ref. 2): used to collect dirty water sucked up from the floor during washing;
- control panel (fig. 2, ref. 1);
- head unit (fig. 2, ref. 4): the main element is represented by the brushes (fig. 2, ref. 5), which distribute the detergent solution on the floor, removing dirt;
- squeegee unit (or floor wiper, fig. 2, ref. 6): used to wipe and dry the floor, sucking up the water spread on the floor;
- small carriage wheel (fig. 2, ref. 3): makes the machine displacements easier when the drive motor is off;
- drive unit (fig. 2, ref. 8): the main element is represented by the electronically controlled motor, which is started by a proper lever under the handgrip and makes the machine move forward.

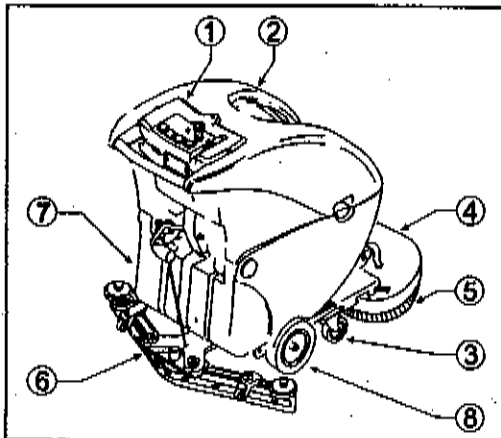
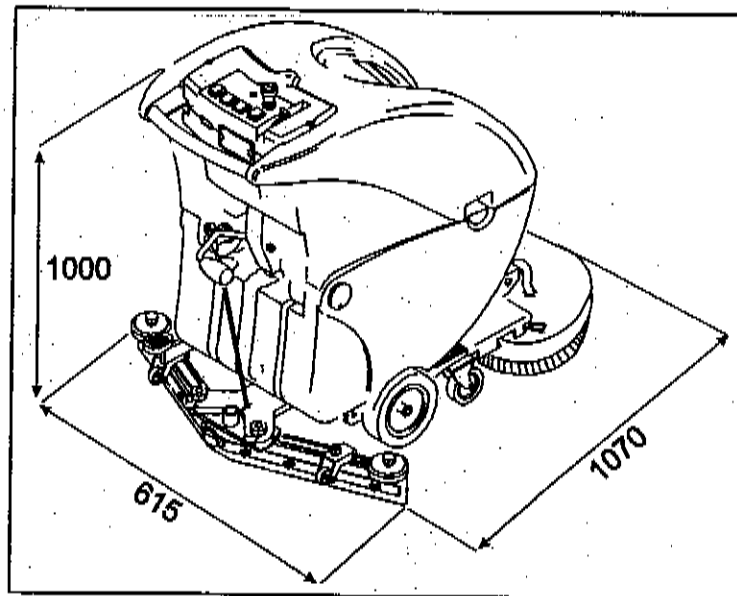


Fig. 2

### 3.3 Overall dimensions



### 3.4. Technical specifications

Cleaned track width	mm	600
Squeegee width	mm	800
Hourly performance	m <sup>2</sup> /h	2400
Number of brushes	n°	2
Brush diameter	mm	310
Max brush pressure	daN	48
Brush rotation speed	G/1°	135
Brush motor power	W	600
Drive control	/	Electronic
Drive motor rated power	W	120
Maximum speed	Km/h	4
Three-stage suction motor power	W	550
Suction motor vacuum	Pa	17000
Noise level	dB(a)	70
Solution tank	l	50
Recovery tank	l	60
Wheel diameter	mm	200
Net weight without batteries	Kg	95
Number of batteries	n°	2
Series battery voltage	V	24
Single battery capacity	Ah (5h)	100
	Ah (20h)	140
Single battery weight	Kg	36
Battery compartment size (length, width, height)	mm	380x
		360x
		300
Machine size (length, width, height)	mm	1070x
		615x
		1000
Dimensions of packing (length, width, height)	mm	1130x
		680x
		1180

**Table A** Data can be changed without notice.

### 3.5. Danger areas

**A -Tank unit:** in presence of certain detergents, danger of irritation for the eyes, skin, mucous diaphragms, respiratory apparatus and asphyxia. Danger caused by dirt recovered from the environment (germs and chemical substances). Danger of crushing between the recovery tank and solution tank, when the recovery tank is replaced on the solution tank.

**B -Control panel:** danger of shortcircuits.

**C -Bottom of washing head:** danger caused by the brush rotation.

**D -Rear wheels:** danger of crushing between wheels and chassis.

**E -Battery compartment** (located within the solution tank): danger of short circuits between the battery poles and presence of hydrogen during battery charging.

### 3.6. Accessories

- **Bristle brushes:** used for washing delicate floors and for polishing;
- **Polypropylene brushes:** used for normal floor washing;
- **Tynex brushes:** used to remove accumulated stubborn dirt on resistant floors;
- **Drive discs:** allow the use of the following discs:
  - \* yellow discs: used for washing and polishing marble and similar surfaces;
  - \* green discs: used for washing of resistant floors;
  - \* black discs: used for thorough washing of resistant floors with stubborn dirt;

## 4. INFORMATION ON SAFETY

### 4.1. Safety standards



**Read the User's manual carefully before proceeding with start-up, use, maintenance, routine maintenance or any other operations on the machine.**

### WARNING

**Stick to all the instructions contained in this Manual (especially those regarding danger and warning) and observe the safety plates attached on the machine.**

**The Manufacturer declines all responsibility for injuries to persons or damage to things deriving from the non-observance of these instructions.**

The machine must be used by trained personnel only, who have shown their skill and have been expressly authorized to use it.

Persons under eighteen cannot use the machine.

This machine must not be used for any other purpose than that for which it has been expressly manufactured. Assess the type of building in which it will be used (e.g. pharmaceutical and chemical companies, hospitals, etc.) and scrupulously respect the regulations and conditions in force.

Do not use the machine in places that are not adequately lighted, in environments with danger of explosions, on public roads, in the presence of dirt harmful to health or improper environments.

The suitable temperature for the use of the machine ranges between +4°C and +35°C; when the machine is not used, the temperature range is between +0°C e +50°C.

The humidity range for the machine under any conditions varies between 30% and 95%.

Never use or suck up inflammable or explosive liquids (e.g. petrol, fuel oil, etc.), inflammable gases, dry dust, acids and solvents (e.g. solvents for paints, acetone, etc.) even if diluted. Never suck up any burning or white-hot objects.

Do not use the machine on slopes or ramps higher than 2%; in the event of light slopes do not use it transversally, handle it with extreme care and do not reverse. When driving along ramps or heavier slopes take great care to avoid overturning or uncontrolled acceleration. Overcome ramps and/or steps exclusively with the brush head and squeegee lifted.

**Never park the machine on slopes.**

Never leave the machine in operation unattended. Leave the machine only after having

switched off the motor, made sure that it cannot move accidentally and unplugged it from the mains.

When using the machine mind the presence of people particularly children in the environment where you are working.

Do not use the machine to carry persons/things or to tow things. Do not drag the machine.

Never lay things on the machine for any reason.

Do not obstruct the air vents and heat dispersion openings.

Do not remove, modify or elude the safety devices.

Various and unpleasant experiences have shown that people wear or carry various objects capable of causing serious accidents: before starting to work, remove trinkets, watches, neckties or other such things.

Always use individual safety protections: apron or protective suit/overalls, non-slip waterproof shoes, rubber gloves, protective goggles and caps, face mask to protect the respiratory system.

Do not put the hands in between moving organs.

Do not use detergents different from those provided for, and stick to the instructions indicated on the respective safety sheets. Keep detergents in a safe place, inaccessible to children, and in case they come in contact with the eyes, wash them immediately with plenty of water or, if swallowed, call for a doctor immediately.

Make sure that the plugs for the power supply of the models with cable or of the battery-chargers are properly grounded and protected by magnetothermal switches and differentials.

Make sure that the electric characteristics of the machine (voltage, frequency, absorbed power) indicated on the identification plate (fig. 1), are compliant with those of the power distribution plant. The machine with cable is equipped with three lead wires and a three-contact ground plug for the use of a proper grounding plug. The yellow and green wire of the cable is the earth wire: never connect this wire to other wires that are not the plug ground tap.

It is fundamental to observe the battery Manufacturer's instructions and stick to the Legislator's provisions. Keep batteries always dry and clean to avoid surface leakage currents. Keep batteries safe from impurities, for instance metal dust.

Do not lay tools on batteries: danger of short circuits and explosions.

Mind the use of battery acid: stick to the relative safety instructions.

When using the machine model with cable mind that you do not crush or tear the power supply cable. Check this cable periodically to control if it is damaged; if this is so, the machine cannot be used.

In presence of particularly high magnetic fields assess the possible effects on the control electronics.

Never wash the machine with jets of water.

The recycled fluids contain detergents, disinfectants, water, organic and inorganic stuff recycled during the work stages: they must be disposed of in compliance with the laws in force.

In case of breakdown and/or bad operation of the machine, switch it off immediately (unplugging it from the mains) and do not tamper with it. Contact a technical assistance centre of the Manufacturer's.

All maintenance operations must be performed in adequately lighted environments and only after having disconnected the machine from the power supply (in models with cable by unplugging the machine from the socket, while in models with battery by detaching the battery connector).

Have any electrical work and all maintenance and repair operations (particularly those not

explicitely described in this manual) carried out a specialised and trained technical staff only.

In case of replacement of the power supply cable, plug or terminals, perform the repair by properly fixing the electric connections and the cable blocking strap that is located in the control panel, to guarantee the resistance of the cable. Then reassemble the panel with care to ensure the protection of the machine user.

Only the use of original accessories and spare parts supplied by the Manufacturer is permitted, as only these offer the certainty that the machine will operate safely and without any inconveniences. Do not use parts removed from other machines or other kits as spares.

This machine has been designed and manufactured for a service endurance of ten years starting from the date of manufacture, which can be seen on the identification plate (see fig. 1). After this time, whether the machine has been used or not, disposal must be considered according to the laws in force in the place of use:

- the machine must be disconnected from the mains, emptied of all liquids and cleaned;
- then it must be dismantled in homogeneous groups of materials (plastics according to the indications of the recycling symbol, metals, rubber, wrapping and packing). In case there are parts composed of different materials, refer to the competent bodies;
- each homogeneous group must be disposed of according to the laws governing the recycling of materials.

Alternatively, the machine can be sent to the Manufacturer for a thorough overhaul.

If the machine is not used anymore, it is recommended that batteries are removed and deposited at an authorized collecting centre.

Moreover, it is recommended that you make harmless those parts of the machine that could be dangerous especially to children, who could use the machine for their games.

## 5. HANDLING AND INSTALLATION

### 5.1. Lifting and carrying the packed machine

#### WARNING

**In all lifting operations make sure that the packed machine has been tightly anchored to the pallet, in order to avoid any overturning or accidental falls. Loading and/or unloading from the motor vehicles must be performed in an adequately lighted environment.**

The machine, which is packed on a wooden pallet by the Manufacturer, must be loaded by means of proper handling machines (refer to the EEC provision 89/392/CEE and following amendments), onto the carrier and, once it has arrived at the appointed destination, unloaded by similar means.

The squeegees are packed in cardboard boxes without a pallet.

The packed machine body must be lifted only with a fork lift truck. Handle with care to avoid bumps or overturnings.

### 5.2. Checking the machine on delivery

On delivery check with attention that the package and the machine are not damaged. In the event that the machine has suffered any damages, report so to the carrier; before accepting the goods, reserve by written the right to present a claim for the refund of the damages.

### 5.3. Unpacking

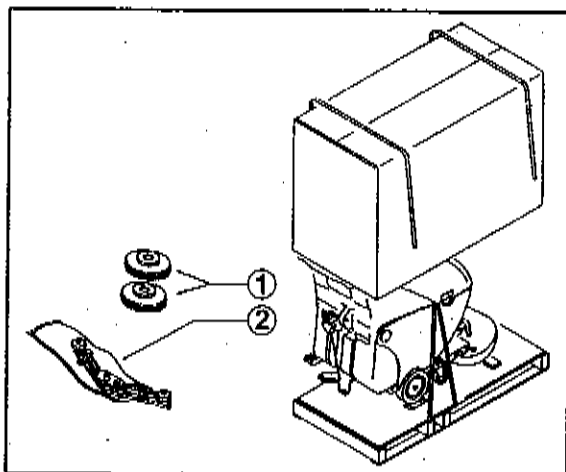
#### WARNING

**On unpacking the machine, the operator must be provided with the necessary accessories (e.g. gloves, protective goggles etc.) to limit possible hazards of accidents.**

Unpack the machine in the following way:

- cut and remove the plastic straps with scissors or nippers;
- remove the cardboard;
- remove the envelopes inside the battery compartment (within the solution tank) and check its contents:
  - envelope 1:
    - test sheet;
    - warranty coupon;
    - user's and maintenance manual;
    - list of spare parts;
    - cards with serial numbers to order spare parts;
  - envelope 2:
    - 1 battery bridge with clips;
    - 1 pair of tweezers for fuses;
    - 1 connector for the battery-charger;
- depending on the model, remove the metal brackets or cut the plastic straps, which fix the machine chassis to the pallet;
- let the machine slide down the pallet on an inclined plane, by pushing it into reverse;
- unwrap the brushes (fig. 3, ref. 1) and the squeegee (fig. 3, ref. 2) from their packing;
- clean the outside of the machine observing the safety rules;
- after unpacking the machine, you can install the batteries: see respective paragraphs.

If necessary, preserve the wrapping material as it could be used again to protect the machine in the event of a move or if the machine should be sent to a service centre for repair.



Otherwise, the material must be disposed of in compliance with the laws in force.

Fig. 3

#### 5.4. Feeding batteries

Two different batteries can be fitted on this machine:

- **Tubular leak-proof batteries:** these batteries require the periodical check of the electrolyte level. When it is necessary, top up with distilled water alone until the plates are covered; do not overfill (max. 5 mm. above the plates).
- **Gel batteries:** this kind of batteries requires no maintenance.

The technical specifications must correspond to those indicated in the paragraph concerning the machine technical data: actually, the use of heavier storage batteries can cause serious problems to the machine controllability and overheat the drive motor, whereas storage batteries with a lower capacity require recharges more frequently. They must be kept charged, dry and clean, with their connections tight.

##### 5.4.1. Batteries: preparation

### ! DANGER

**On installing or performing any kind of maintenance on the batteries wear the necessary accessories (e.g. protective gloves, goggles, overalls, etc.) to limit the hazards of accidents, keep away from possible free flames, do not short-circuit the battery poles, cause sparks or smoke.**

The batteries are normally supplied filled with acid and ready-for-use.

If batteries without acid are to be used, before mounting them on the machine, it is necessary to make them active as follows:

- after taking off the battery plugs, fill up all elements with a solution of specific sulphuric acid, until the cells are thoroughly covered (fill each element at least twice);
- let them rest for about 4-5 hours, to give time to air bubbles to come up to the surface and the plates to absorb the electrolyte;
- check that the electrolyte level is still above the plates, otherwise top up with the solution of sulphuric acid;
- reclose the plugs;
- install the storage batteries on the machine (following the procedure described below).

It is now necessary to perform a first recharging before having the machine start; to do so stick to the instructions written in the respective paragraph.

#### 5.4.2. Batteries: installation and connection

### ! DANGER

Check that all switches on the control panel are at the position "0" (off).  
Mind you connect only the clips marked with the symbol "+" to the positive poles.  
Do not check the battery charge by creating sparkles.  
Stick scrupulously to the instructions described below, as any short circuits of the batteries may cause them to explode.

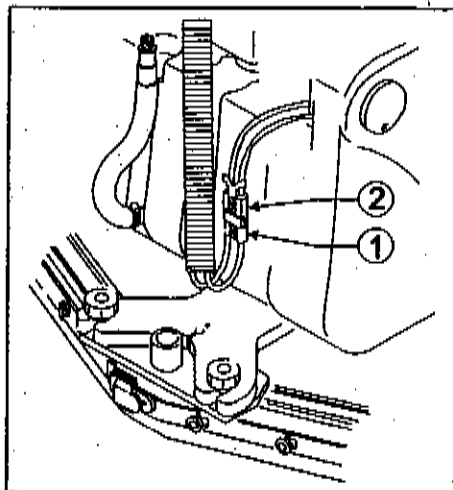


Fig. 4

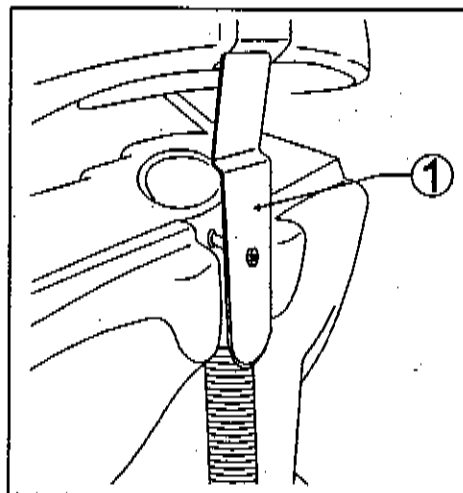


Fig. 5

- 1) Make sure that the two tanks are empty (empty them, if necessary: see respective paragraph);
- 2) disconnect the Anderson connector (fig. 4, ref. 2) of the battery wiring from the corresponding Anderson connector (fig. 4, ref. 1) of the main wiring;
- 3) unhook the recovery tank (fig. 2, ref. 2) from the solution tank (fig. 2, ref. 7) acting on the blocking hook (fig. 5, ref. 1), placed on front of the machine;
- 4) lift the recovery tank, by making it turn backwards around about 90°: in this way you have access to the battery compartment (embedded in the solution tank) from the upper side;
- 5) insert the batteries in the compartment, orienting them as shown in the drawing printed on the solution tank in the compartment.

### WARNING

Install the storage batteries on the machine using suitable means according to their weight.

Positive and negative poles have different diameters.

- 6) Referring to the arrangement of cables in the aforesaid drawing, connect the clips of the battery wiring and the bridge to the poles of the storage batteries. After orienting the cables as shown in the drawing, tighten the clips at the poles and cover them with vaseline;
- 7) insert back the tank unit in its work position and hook it to the solution tank by means of the fixing hook (fig. 5, ref. 1);
- 8) after having checked that all switches on the control panel are at the position "0" (off), connect the battery wiring connector (fig. 4, ref. 2) to the machine wiring connector (fig. 4, ref. 1);
- 9) use the machine in compliance with the instructions written below.

## **5.5. The battery-charger**

### **WARNING**

**Never let the batteries run down excessively, as they could become damaged irreparably.**

#### **5.5.1. Choosing the battery-charger**

Check that the battery-charger is compatible with the batteries to be charged:

- **tubular lead batteries:** an automatic battery-charger 24V - 20A is suggested. Anyway, refer to the Manufacturer and read the relative manual to confirm your choice;
- **gel batteries:** use a battery-charger specifically intended for this type of storage batteries.

#### **5.5.2. Preparing the battery-charger**

If you wish to use a battery-charger not supplied with the machine, it is necessary to mount on it the connector delivered with the machine (see paragraph "Unpacking" of this manual).

To install the connector proceed as follows:

- remove about 13 mm of sheath from the black and red cables of the battery-charger;
- insert the cables in the connector pins and push strongly with suitable pliers;
- insert the cables in the connector respecting the polarity (red cable +, black cable -).

## **5.6. Lifting and handling the machine**

### **WARNING**

**All stages must be performed in an adequately lighted environment adopting all necessary safety measures.**

**Always wear individual protections for the user's safety.**

The loading of the machine onto a vehicle must be done as follows:

- empty the recovery tank and the solution tank;
- remove the squeegee and the brushes (or drive discs);
- remove the batteries;
- put the machine on the pallet, by anchoring it with plastic straps or the proper metal brackets;
- lift the pallet by means of a fork lift truck and load it on the vehicle;
- anchor the machine to the vehicle with ropes connected to the pallet and to the chassis of the machine.

## 6. PRACTICAL GUIDE FOR THE USER

### 6.1. Control devices - Description

With reference to fig. 6 the machine has the following controls and leds:

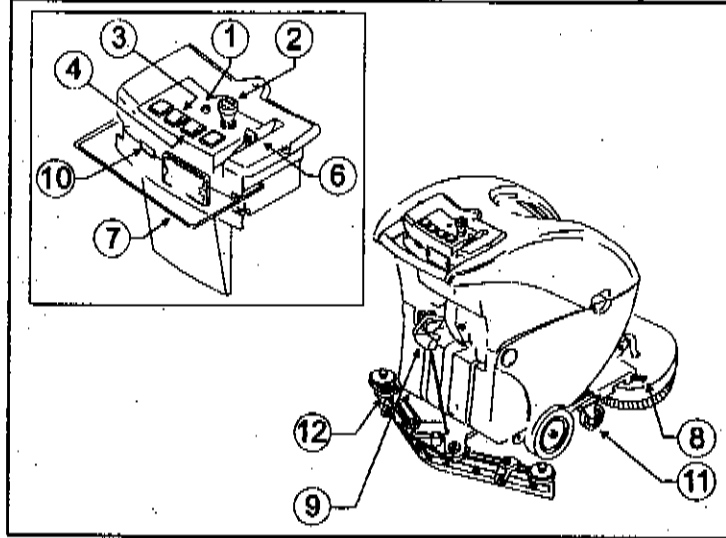


Fig. 6

- 1) **Battery charge check led** (ref. 1): It is red and it indicates that the machine is fed and the level of the battery charge. It can be:
  - a) **off**: the battery is disconnected and all switches are at the position "0" (off);
  - b) **on**: the machine is connected to the batteries and the batteries are charged;
  - c) **flashing at a steady frequency**: the machine is on, but the batteries are nearly flat and therefore must be recharged.
- 2) **Main switch - emergency button with key** (ref. 2): enables or disables the power supply to all the machine functions. It acts as a safety device. To start the machine turn the proper key clockwise. To stop the machine press the button.
- 2) **Brush switch with led** (ref. 3): enables ("1") or disables ("0") the function "Brush".
- 3) **Suction switch with led** (ref. 4): switches on ("1") or off ("0") the suction motor, which allows to dry the floor just washed. The led is on when the suction unit is fed.
- 6) **Cock control lever** (ref. 6): allows to adjust continuously the flow of solution sent to the brushes. On turning it forward, the liquid outlet flow is increased.
- 7) **Drive command lever** (ref. 7): placed under the handgrip, when it is slightly pressed upwards (the mushroom button must be active), it starts the drive motor thus making the machine move forward slowly (1<sup>st</sup> speed). When the lever is lifted completely towards the handgrip, the machine moves on fast (2<sup>nd</sup> speed).
- 8) **Head pressure lever** (ref. 8): placed on the right side of the machine, it exercises a certain pressure on the head during the work in progress (pressure that varies depending on the position of the lever itself); in this way the washing power of the brushes can be adjusted to the various conditions of work.
- 9) **Squeegee lifting lever** (ref. 9): it allows to raise (when lifted) or lower (when pushed down) the squeegee.
- 10) **Hour meter** (ref. 10 - optional): displays the hours of work of the brush.
- 11) **Carriage small wheel** (ref. 11): if lowered, it makes the handling of the machine easier when the drive motor is off.
- 12) **Head lowering pedal** (ref. 12): placed on the left side of the machine, when it is pressed, the brush-head is lowered down. To have the head return to the stand-by position, it is sufficient to press on the handgrip of the machine so as to lift its front

side.

## 6.2. Installing and adjusting the squeegee

The floor wiper, also called squeegee (fig. 2, ref. 6), is the first responsible for drying.

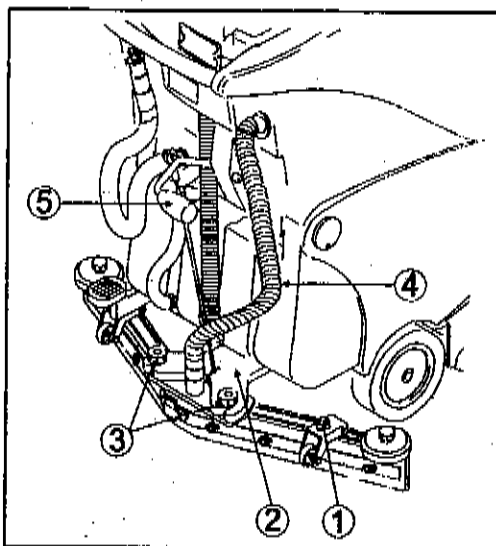


Fig. 7

To install the squeegee on the machine proceed as follows:

- 1) check that the squeegee supporting plate (fig. 7, ref. 2) is raised, otherwise lift it by acting on the proper lever (fig. 7, ref. 5);
- 2) firmly push down the sleeve of the suction tube (fig. 7, ref. 4) into the squeegee;
- 3) slacken the two knobs (fig. 7, ref. 3) placed in the centre of the squeegee;
- 4) insert the two threaded dowels in the slots of the support (fig. 7, ref. 2);
- 5) fix the squeegee by tightening the knobs (fig. 7, ref. 3).

The blades of the squeegee are used to scrub from the floor the film of water and detergent thus allowing a perfect drying. As long as time goes by the continuous scraping rounds off and splits the sharp edge in contact with the floor, thus reducing the drying efficacy and therefore requiring the replacement of the blades. Therefore, often check their state of wear and tear.

To obtain a perfect drying action it is necessary to adjust the squeegee in such a way that when it is in operation, the rear blade lip is bent about 45 degrees with respect to the floor at all points. It is possible to adjust the inclination of the blades by screwing down the nuts (fig. 7, ref. 1): by unscrewing the nuts the blade inclination is reduced, while by screwing the nuts the blade inclination is increased.

## 6.3. Moving the machine

To displace the machine do as follows:

- lift the squeegee;
- lift the head, pushing down the handgrip;
- Insert the key to release the emergency button (fig. 6, ref. 2);
- under the handgrip there is a lever (fig. 6, ref. 7): by pulling it up, the motor gets started and the machine starts moving;
- once you have reached the desired spot, lower the head by pushing down the release pedal (fig. 6, ref. 12).

## i INFORMATION

The machine is provided with two speeds of travel depending on whether the drive lever (fig. 6, ref. 7) is pressed upwards slightly (fig. 8, ref. 1) or completely (fig. 8, ref. 2).

## WARNING

Never leave the machine unattended or parked with the head lifted or with the key inserted in the emergency button.

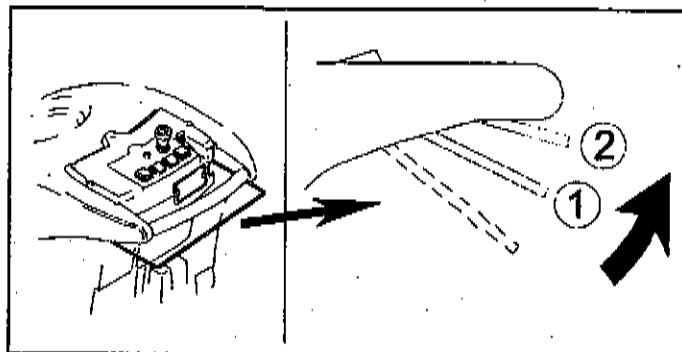


Fig. 8

### 6.4. Installing and replacing the brushes / drive discs

## WARNING

Do not work if the brushes or drive discs are not perfectly installed.

Before disassembling the brushes, stop the machine, lift the head and wait until the brushes are still. Press "0" on the brush switch (fig. 6, ref. 3); press the emergency button (fig. 6, ref. 2) and disconnect the battery connector (fig. 4, ref. 2).

#### Removing (fig. 9):

- press the top edge of the brush B down with both hands.

#### Fitting (fig. 9):

- grip the brush B at the sides with both hands;
- match the brush in-built hexagon with the brush-cover mold;
- press upwards until they are coupled;
- to use the abrasive disc, preassemble the drive disc, preassemble the drive disc and then fit it on the machine.

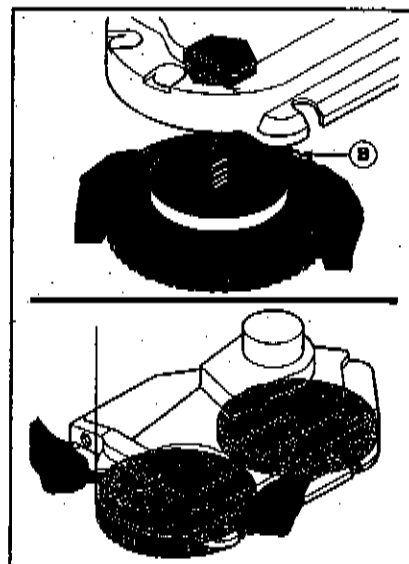


Fig. 9

## 6.5. Detergents - Use

### WARNING

**Always dilute detergents according to the supplier's instructions. Do not use sodium hypochlorite (bleaching solution) or other oxidizers, especially if in high concentrations, and do not use solvents or hydrocarbons. The temperatures for water and detergent must not exceed the maximum temperatures indicated in the technical data and must be free from sand and/or other impurities.**

The machine has been designed to be used with non-foaming and biodegradable detergents specific for sweeping scrubbers.

Contact the Manufacturer to have a complete and updated list of the available detergents and chemical products; you will receive all papers together with the Manual "Complete cleaning system".

Use only products suitable for floors and for removing dirt.

Follow the safety rules concerning the use of detergents indicated in the paragraph "Safety regulations".

## 6.6. Setting up the machine

### WARNING

**Before starting to work wear an apron, cap, non-slip waterproof shoes, a mask to protect the respiratory system, gloves and any other form of protection indicated by the supplier of the detergent or necessary in the environment you are going to work in.**

Before starting to work, perform the following operations:

- check the level of battery charge (recharge, if necessary);
- lower the head using the proper pedal (fig. 6, ref. 12);
- make sure that the recovery tank (fig. 2, ref. 2) is empty; if this is not so, empty it;
- check that the cock control lever (fig. 6, ref. 6) is at the position "off";
- fill the solution tank (fig. 2, ref. 7) through the respective hole on the front with clean water and non-foaming detergent in a suitable concentration; leave a difference in level of at least 5 cm between the liquid surface and the tank opening;
- install brushes or drive discs suitable for the floor and the job to be done;
- check that the squeegee (fig. 2, ref. 6) is fixed well and connected to the suction tube (fig. 7, ref. 4); make sure that the rear blade is not worn.

### INFORMATION

**If you use the machine for the first time, it is advisable that you train with it for a short time on a wide surface without any obstacles, to acquire the necessary familiarity.**

**Always empty the recovery tank before refilling the solution tank.**

For an effective cleaning and long life of the equipment, it is necessary to follow some simple rules:

- prepare the work area, keeping away the possible obstacles;
- begin to work starting from the farthest spot, in order to avoid trampling on the area just-cleaned;
- choose paths that are as much straight as possible;
- on wide floors divide the paths into rectangular and parallel areas.

At the end quickly mop the area, if necessary, to clean spots that are inaccessible to the scrubber.

## 6.7. Work

After setting up the machine, proceed as follows:

- connect the machine to the power supply: connect the ANDERSON connectors with each other (fig. 4, ref. 1 and ref. 2);
- insert and operate the key to release the emergency button (fig. 6, ref. 2), and make all the machine functions active: the power supply led lights up (fig. 6, ref. 1);
- move the cock lever (fig. 6, ref. 6) to the position of minimum flow of solution: the detergent solution begins to reach the brushes;
- lower the head using the proper pedal (fig. 6, ref. 12);
- lower the squeegee by means of the proper lever (fig. 6, ref. 9);
- press "1" on the brush switch (fig. 6, ref. 3) to enable the function "Brush": the brush motor is started. The turning brushes spread the solution all over the floor;
- press "1" on the suction unit switch (fig. 6, ref. 4) to start the suction motor;
- press the drive lever (fig. 6, ref. 7) placed under the handgrip: the drive motor is started and the machine starts moving forward;
- should it be necessary, reduce the brush-head pressure exercised on the floor acting on the pressure lever (fig. 6, ref. 8) (see label attached next to the lever);

## ! INFORMATION

**To facilitate rotation around 180° of the gear direction release the drive lever.**

- check periodically that the detergent solution reaches the brushes and fill with solution if it runs out;
- while working, check the quality of washing and, if necessary, adjust the flow of solution sent to the brushes (by turning the lever (fig. 6, ref. 6)).

## ! WARNING

**Whenever you fill up the solution tank, always empty the recovery tank.  
Do not leave the machine stationary with the suction motor on and the solution cock turned on.**

- if the warning led (fig. 6, ref. 1) starts flashing, it means that the storage batteries are getting flat. Therefore, it is necessary to recharge them, as there is no device blocking the total running of the machine; if you keep on working, the batteries could become damaged irreparably.

## ! WARNING

**If the drive lever (fig. 6, ref. 7) operation is intermittent for a prolonged time, it is possible that the motor becomes overheated with consequent damages to the same motor. For this reason limit the "lever shots" to the sole events when they are strictly necessary.**

**At the end of work:**

- move the cock lever (fig. 6, ref. 6) to the position "CLOSED";
- release the drive lever (fig. 6, ref. 7) placed beneath the handle: the drive motor switches off and the machine stops;
- press "0" on the brush switch (fig. 6, ref. 3) to disable the function "Brush";
- raising the lever (fig. 6, ref. 9), lift the scrubber from the floor to prevent the drying blades from warping due to the continuous pressure;
- let the suction motor run for at least 2 minutes to make sure that it is completely dry; then press "0" on the suction unit switch (fig. 6, ref. 4) to switch off the suction motor;
- press the main switch (fig. 6, ref. 2) to disable all the machine functions;
- disconnect the ANDERSON connectors (fig. 4, ref. 1 and ref. 2);
- empty and clean the recovery tank.

### 6.8. Some useful suggestions for the optimal use of the machine

If the floor presents a particularly resistant type of dirt, it is possible to make the machine wash and dry it in separate stages.

#### 6.8.1. Pre-washing

- Turn on the water cock;
- switch on the brush motor and lower the head;
- start washing with the suction motor off and the squeegee lifted.

The flow of water must be dosed in proportion to the desired advance speed: the slower the machine goes, less water comes down.

Insist on washing the dirtiest spots: In this way the detergent has the time to perform its chemical action for the detachment and suspension of dirt, and the brushes to develop an effective mechanical action.

#### 6.8.2. Drying

Lower the squeegee and with the suction unit operating pass again on the same area you have previously washed. In this way you obtain a result that is similar to a thorough washing and the following operations of ordinary maintenance will certainly take less time. To wash and dry at the same time, operate the brushes, water, squeegee and suction motor simultaneously.

### 6.9. Draining off dirty water

## ! DANGER

**Use the individual protection devices suitable for the operation to be performed.  
Perform the draining operations with the machine disconnected from the power supply.**

The drain hose of the recovery tank is located at the rear left side of the machine.  
To empty the above-mentioned tank:

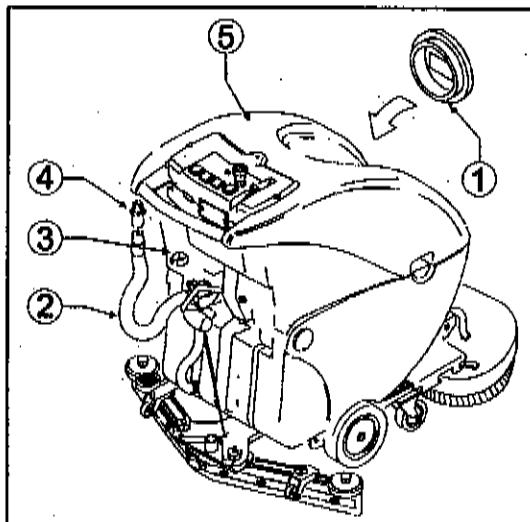


Fig. 10

- take the machine next to a drain;
- take off the tank cap (fig. 10, ref. 1) from the recovery tank (fig. 10, ref. 5);
- detach the drain hose (fig. 10, ref. 2) from its seat, holding it in correspondence with the fixing spring (fig. 10, ref. 3) and pull it horizontally;

- keeping the hose end as much high as possible, take off the drain cock (fig. 10, ref. 4) from the hose by unscrewing it;
- lower the hose end gradually, checking the intensity of the jet of water with reference to its height from the ground;
- check the amount of residual dirt in the recovery tank and wash it inside, if necessary. To facilitate the cleaning and total drain, it is better to unhook it from the solution tank and lift it;
- when the dirty water has been totally drained, lower the recovery tank (if it has been previously lifted) and hook it again to the solution tank;
- put back the cap (fig. 10, ref. 1) on the recovery tank, making sure that it is perfectly closed;
- close the drain hose (fig. 10, ref. 2) with the cock (fig. 10, ref. 4) screw-tightening it; check that it is perfectly closed and refit the hose in its housing.

## ! WARNING

**While washing the recovery tank never remove the suction filter (fig. 12, ref. 2) from its seat and never direct the jet of water towards the filter itself.**

Now it is possible to proceed with a new washing and drying action.

### 6.10 Draining off clean water

## ! DANGER

**Use the individual protection devices suitable for the operation to be performed. Perform the draining off operations with the machine disconnected from the power supply.**

To empty the tank:

- take the machine next to a drain;
- detach the drain hose (fig. 11, ref. 1) from its seat, holding it in correspondence with the fixing spring (fig. 11, ref. 2) and pull it horizontally;
- keeping the hose end as much high as possible, take off the drain cock (fig. 11, ref. 3) from the hose by unscrewing it;
- lower the hose end gradually, checking the intensity of the jet of water with reference to its height from the ground;
- when the contents have been totally drained from the solution tank, close the drain hose with the cock (fig. 11, ref. 3) screw-tightening it; check that it is perfectly closed and refit the hose in its housing.

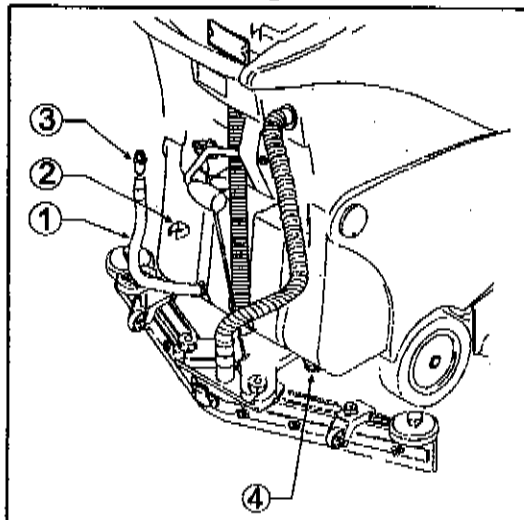


Fig. 11

## **i INFORMATION**

The water and detergent solution can also be used to wash the recovery tank.

### **7. PERIODS OF INACTIVITY**

If the machine is to remain unused for a long time, the squeegee and brushes (or drive discs) must be dismantled, washed and kept in a dry place (preferably packed in a plastic envelope or sheet), sheltered from dust. Park the machine with the head lowered.

Furthermore, make sure that the tanks are completely empty and perfectly clean.

Disconnect the machine from the power supply (disconnect the ANDERSON connector from the battery wiring).

Recharge the batteries completely before putting them in the storehouse. During long periods of inactivity recharge the batteries (once every two months at least) to preserve the storage batteries constantly at the maximum charge.

## **WARNING**

If the batteries are not recharged periodically, they may become damaged irreparably.

### **8. MAINTENANCE AND BATTERY RECHARGING**

## **! DANGER**

**Do not check the battery charge by producing sparks.**

**The batteries give off inflammable vapours: put out any fire or embers before checking and filling up the batteries.**

**Perform the operations described below in airy environments.**

To avoid permanent damages to the batteries, never let them get flat completely.

Remember that when the proper red led (fig. 6, ref. 1) flashes on the control panel, it is necessary to recharge the batteries.

#### **8.1. Recharging procedures**

##### **Lead batteries with liquid electrolyte:**

It is necessary to check the level of the electrolytic solution in order that it always covers the films of the elements, adding the necessary distilled water.

## **WARNING**

**Do NOT connect the battery-charger to the connector of the machine main wiring.**

**During recharging do not let the temperature of the electrolyte exceed 45°C.**

To recharge proceed as follows:

- detach the recovery tank (after having emptied it) from the solution tank, acting on the blocking hook (fig. 5, ref. 1) located on front of the machine;
- lift the recovery tank;
- disconnect the battery wiring connector (fig. 4, ref. 2) from the main wiring connector (fig. 4, ref. 1);
- connect the battery-charger to the battery wiring connector;
- recharge according to the instructions written in the manual to the battery-charger;

- at the end of the recharging time check the battery intensity with a densimeter: if one or more elements are flat and the remaining ones completely charged, the battery is damaged and must be replaced;
- reclose the caps;
- bring the recovery tank back to the work position and hook it to the solution tank by the blocking hook;
- reconnect the battery wiring connector to the machine connector.

**Gel batteries:**

- disconnect the battery wiring connector (fig. 4, ref. 2) from the main wiring connector (fig. 4, ref. 1);
- connect the battery-charger connector to the battery wiring connector;

## ! WARNING

**Do NOT connect the battery-charger to the machine main wiring connector.**

**Use only a battery-charger that is specific for gel storage batteries.**

- recharge following the instructions written in the manual to the battery-charger;
- at the end of the recharging time disconnect the connectors;
- reconnect the battery wiring connector to the machine connector.

## 9. INSTRUCTIONS FOR MAINTENANCE

### ! DANGER

**Before carrying out any maintenance operations disconnect the machine connector from the battery connector.**

**All maintenance operations on the electric system and those not explicitly described in this manual must only be performed by trained technical staff in compliance with the safety regulations in force and recommendations stated in the maintenance manual.**

#### 9.1. Maintenance – General rules

A regular maintenance performed according to the Manufacturer's instructions guarantees a better performance and endurance of the machine.

#### 9.2. Routine maintenance

##### 9.2.1. Daily cleaning

When cleaning the machine always observe the following instructions:

- avoid using water cleaners, which could let water go inside the electric or the motor compartments with a consequent damage or hazard of short circuits;
- do not use steam in order not to warp the plastic parts;
- do not use solvents or hydrocarbons, which could damage the hoods or the rubber parts.

### i INFORMATION

**Do not use water on the motors or electric parts.**

### 9.2.2. Suction air filter and floating rod: cleaning

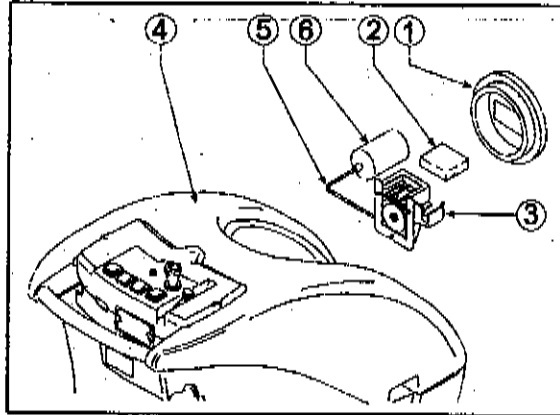


Fig. 12

- Unscrew and take off the tank cap (fig. 12, ref. 1) from the recovery tank (fig. 12, ref. 4);
- make sure that the recovery tank (fig. 12, ref. 4) is empty;
- take out the air filter (fig. 12, ref. 2) of the suction unit from the float support (fig. 12, ref. 3), which is located on the upper inner side of the recovery tank;
- clean the filter with current water or with the detergent used in the machine;
- put the filter back in the support only after having it dried well;
- make sure that the filter has been replaced in its seat correctly;
- check that the floating rod (fig. 12, ref. 5), which is also fixed to the support (fig. 12, ref. 3), moves freely and clean it, if necessary;
- screw again the cap on the recovery tank.

### 9.2.3. Squeegee blades: replacement

The blades of the squeegee are used to scrub from the floor the film of water and detergent thus allowing a perfect drying. As long as time goes by the continuous scraping rounds off and splits the sharp edge in contact with the floor, thus reducing the drying efficacy and therefore requiring the replacement of the blades. Therefore, often check their state of wear and tear.

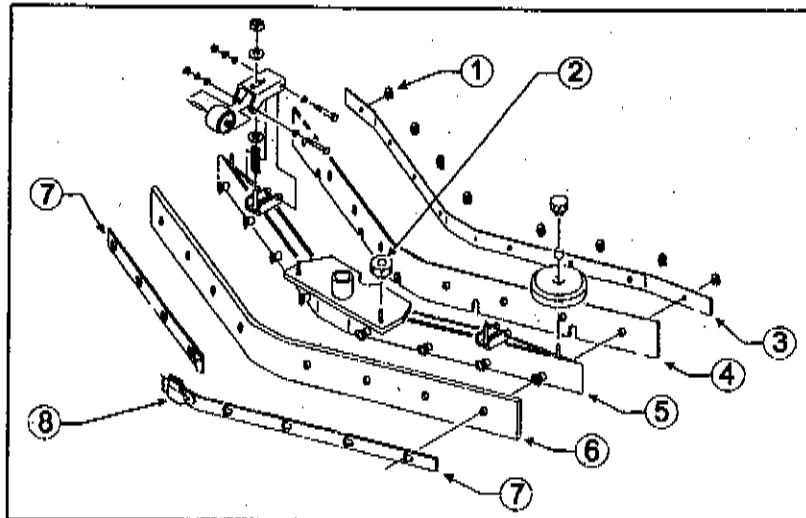


Fig. 13

### **Exchanging or replacing the blades:**

- lower the squeegee by using the proper lever (fig. 6, ref. 9);
- take off the squeegee (fig. 2, ref. 6) from its supporting plate (fig. 7, ref. 2) by unscrewing completely the two knobs (fig. 7, ref. 3);
- slide out the sleeve of the suction tube (fig. 7, ref. 4) from the squeegee.

#### **Front blade:**

- unscrew the knobs (fig. 13, ref. 1);
- remove the blade clamps (fig. 13, ref. 3);
- take out the blade (fig. 13, ref. 4);
- fit in the same blade inverting the edge in contact with the floor until all the four edges are worn, or else fit in a new blade;
- put the blade clamp (fig. 13, ref. 3) back;
- screw down all the knobs (fig. 13, ref. 1).

#### **Rear blade:**

- unhook the hook clamp (fig. 13, ref. 8);
- slide out the two blade clamps (fig. 13, ref. 7) by first pushing them outwards with respect to the squeegee unit (fig. 13, ref. 5) and then taking them out;
- remove the blade (fig. 13, ref. 6);
- fit in the same blade inverting the edge in contact with the floor until all the four edges are worn, or else fit in a new blade embedding it in the screws of the squeegee unit (fig. 13, ref. 5);
- put the two blade clamps (fig. 13, ref. 7) back, centering the largest part of the slots on the fixing screws of the squeegee unit (fig. 13, ref. 5) and then pushing the blade clamps towards the inside of the squeegee itself;
- hook the clamp (fig. 13, ref. 8) again.

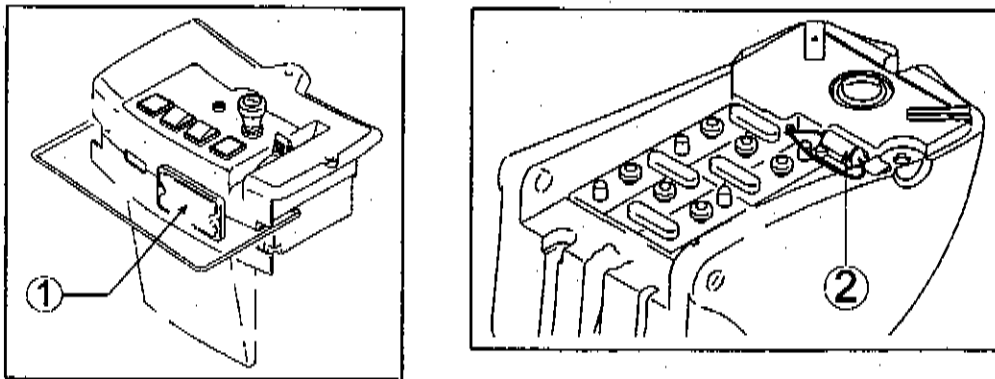
Insert the squeegee back on its support following the instructions reported in §6.2.

### **9.2.4. Fuses: replacement**

To replace the fuses in the control panel of the machine, proceed as follows:

- remove the fuse cover (fig. 14, ref. 1);
- with the tweezers supplied with the machine take out the blown fuses and replace them with new ones of the same amperage;
- reclose the fuse cover.

The 60A fuse, which protects the brush motor, is in the fuse-holder (fig. 14, ref. 2) that is fixed to the solution tank inside the battery compartment of the machine.



**Fig. 14**

To replace it:

- make sure that the recovery tank is empty, otherwise empty it;
- lift the recovery tank;
- lift the fuse cover and take out the fuse, removing the fixing screws;
- install a new fuse and reclose the fuse-holder cover;
- finally, lower the recovery tank.

**Fuse chart:** for a chart of the fuses see the Catalogue of Spare Parts.

## **WARNING**

**Never fit a fuse with a higher Amp value than the intended one.**

If a fuse keeps burning, it is necessary to identify and repair the damages present in the wiring, boards (if fitted) or motors: have the machine checked by trained technical staff.

### **9.3. Periodic maintenance**

#### **9.3.1. Daily maintenance**

Every day at the end of work perform the following operations:

- disconnected the machine from the power supply;
- empty the recovery tank and clean it, if necessary;
- clean the squeegee blades, checking that they are not excessively worn; replace them, if necessary;
- make sure that the squeegee suction hole is not clogged, freeing it from any encrusted dirt;
- recharge the batteries according to the procedure described above.

#### **9.3.2. Weekly maintenance**

- Clean the floating rod of the recovery tank and check that it works correctly;
- clean the suction air filter and check that it is not damaged (replace it, if necessary);
- clean the solution filter placed at the front opening of the solution tank (fig. 2, ref. 7) and check that it is not damaged (replace it, if necessary);
- clean the suction tube;
- clean the recovery tank and the solution tank;
- check the level of the electrolyte in the batteries and top up with distilled water, if necessary.

#### **9.3.3 Six-monthly maintenance**

Have the electric system, calibrations and tension of the brush motor belts checked by qualified staff.

## **10. HOW TO ORDER SPARE PARTS**

For a correct identification by our After-sales Service Office of the spare part(s) you need and, therefore, to help us serving you better, please fill in your orders with the following data:

- machine model;
- machine serial number on the identification plate (see fig. 1);
- chart of the list of spare parts in which the item and its reference number are found;
- code of the item to be found in the list of spare parts;
- amount ordered.

If you ask for a replacement under warranty terms, the order must be completed with a brief description of the fault.

# 11. TROUBLESHOOTING

## 11.1. How to overcome possible failures

Possible failures affecting the whole machine

FAILURES	CAUSES	REMEDIES
The machine does not work	• the battery connector is disconnected	• connect the batteries to the machine
	• the batteries are flat	• recharge the batteries
	• the emergency button is pressed or faulty	• insert the key, turn and release or replace the button
The brushes do not turn	• the emergency button is pressed or faulty	• insert the key, turn and release or replace the button
	• the brush switch is at the position "0"	• turn the brush switch to position "1"
	• the brush motor thermal protection has tripped: the motor has become overheated	• release the brush lever, turn the brush switch to position "0" (off), letting the machine cool down for at least 45'
	• the power supply connector or the motor thermal protection connector are disconnected	• connect again the power supply connector or the motor thermal protection connector
	• the thermal protection fuse (F6) and/or the 60A (F7) fuse of the brush motor have blown	• check and remove the causes that made the fuse blow, then replace it
	• the brush microswitch is not calibrated or is faulty	• have the microswitch calibrated or replaced
	• the brush motor contactor is faulty	• have the contactor replaced
	• the batteries are flat	• recharge the batteries
	• the belt is broken	• have the belt replaced
	• the motor is faulty	• have the motor replaced
The machine does not wash evenly	• the brushes or abrasive discs are worn	• replace them
	• the pressure exercised by the head on the floor is not right	• adjust the brush pressure on the floor acting on the proper lever
The brush keeps on turning also when the main switch and/or brush switch have been pressed	• the brush contactor is faulty	• have it replaced
The solution does not come out	• the cock control lever is at the position "CLOSED"	• move the lever to the position "OPEN"
	• the solution tank is empty	• fill it up
	• there is an obstruction in the tube through which the solution is pumped to the brush	• remove the clogging, cleaning the ducts
	• the tap is dirty or does not work	• clean or replace the tap, unscrewing the screw ref. 4 in fig. 11
The flow of solution keeps coming to the brush	• the tap remains open, because it is damaged or very dirty	• have the tap cleaned or replaced

<b>The suction motor does not work</b>	• the suction unit switch is at the position '0' (off)	• operate the suction unit switch
	• the suction motor is not fed or is faulty	• check that the motor power supply connector is connected to the main wiring in the right way; in the second case have the motor replaced
	• the fuse has blown (F3)	• replace the fuse F3
	• the batteries are flat	• recharge the batteries

<b>The squeegee does not clean or suck well</b>	• the edge of the rubber blades in contact with the floor is rounded off	• replace the rubber blade
	• there is an obstruction or damage in the squeegee or in the tube	• remove the obstruction and repair the damage
	• the float has intervened (recovery tank full), or is blocked by dirt or broken	• empty the recovery tank or make the necessary repairs to the float
	• there is an obstruction in the suction tube	• free the tube from the obstruction
	• the suction tube is not connected to the squeegee or is damaged	• connect or repair the tube
	• the suction unit motor is not fed or is faulty	• check that the motor power supply connector is connected to the main wiring in the right way and that the protection fuse has not blown; in the second case replace the motor

<b>The machine does not move forward</b>	• the drive motor is not fed or is faulty	• in the first case turn the emergency switch key clockwise, set the brush switch to "1" and press the drive lever; in the second case check that the brush motor is connected to the main wiring in the right way; in the third case replace the motor
	• the thermal protection of the drive motor has tripped: the motor has become overheated	• stop the machine and switch it off, letting it cool down for at least 45'
	• the microswitch is faulty or not calibrated	• replace or calibrate it
	• the batteries are flat	• recharge the batteries

The batteries do not ensure the normal work time	• the poles and charging clips of the batteries are dirty and oxydized	• clean and grease the poles and clips, recharge the batteries
	• the electrolyte level is low	• add distilled water topping up all elements according to the instructions
	• the battery-charger does not work or is unsuitable	• see instructions relative to the battery-charger
	• there are considerable differences in density between the various elements of the battery	• replace the damaged battery
	• the machine is working with a too high pressure on the brush	• reduce pressure on the brush

The storage battery gets flat too fast during use, although it has been charged in the correct way and when tested with a densimeter at the end of recharging, it turned out to be uniformly charged	• the storage battery is new and does not give 100% of its expected capacity	• it is necessary to "run-in" the storage battery by 20-30 charges and discharges to obtain maximum performance
	• the machine is used at its maximum capacity for continuous periods and the autonomy is not sufficient	• use, if possible, storage batteries with larger capacity or replace the storage batteries with others already charged
	• the electrolyte has evaporated and does not cover the plates completely	• add distilled water, topping up all elements until the plates are covered and recharge the storage battery

The storage battery gets flat too fast during use, the recharging with an electronic battery-charger is too fast and at the end the storage battery gives the right voltage (about 2,14V for each empty element), but it turns out to be not uniformly charged when tested with densimeter	• the storage battery, already filled with acid by the Manufacturer, has been stored for a too long time before being recharged and used for the first time	<p>• if the recharging with a normal storage-charger is not effective, it is necessary to carry out a double recharging consisting in:</p> <ul style="list-style-type: none"> <li>- a slow recharging of about 10 hours with a current equal to 1/10 of the rated capacity expressed in 5 hours (ex.: for a storage battery of 100Ah(5), the current should be 10A, realized by a manual battery-charger);</li> <li>- one-hour pause;</li> <li>- charging with a normal battery-charger</li> </ul>
--	---	--

<p>After recharging with an electronic battery-charger the storage-battery does not show the correct voltage (about 2,14V for each empty element) and only one or few elements turn out to be flat when tested with densimeter</p>	<ul style="list-style-type: none"> <li>the storage battery has not been connected to the battery-charger (for instance because the low voltage connector of the battery-charger has been erroneously connected to the machine connector)</li> </ul>	<ul style="list-style-type: none"> <li>connect the battery-charger to the storage battery connector</li> </ul>
	<ul style="list-style-type: none"> <li>the battery-charger and the power socket to which the storage battery is connected are not compatible</li> </ul>	<ul style="list-style-type: none"> <li>check that the power supply characteristics indicated on the battery-charger plate are compliant with those of the mains</li> </ul>
	<ul style="list-style-type: none"> <li>the battery-charger has not been installed correctly</li> </ul>	<ul style="list-style-type: none"> <li>taking into account the actual voltage available at the socket, check that the connections of the transformer primary circuit in the battery-charger are correct (at this purpose read the manual to the battery-charger)</li> </ul>
	<ul style="list-style-type: none"> <li>the battery-charger does not work</li> </ul>	<ul style="list-style-type: none"> <li>check that there is voltage at the battery-charger, that the fuses are not interrupted and that there is current at the storage battery; in addition try to charge by means of another rectifier: if the battery-charger does not work, call the after-sales service staff communicating the serial number of the battery-charger</li> </ul>

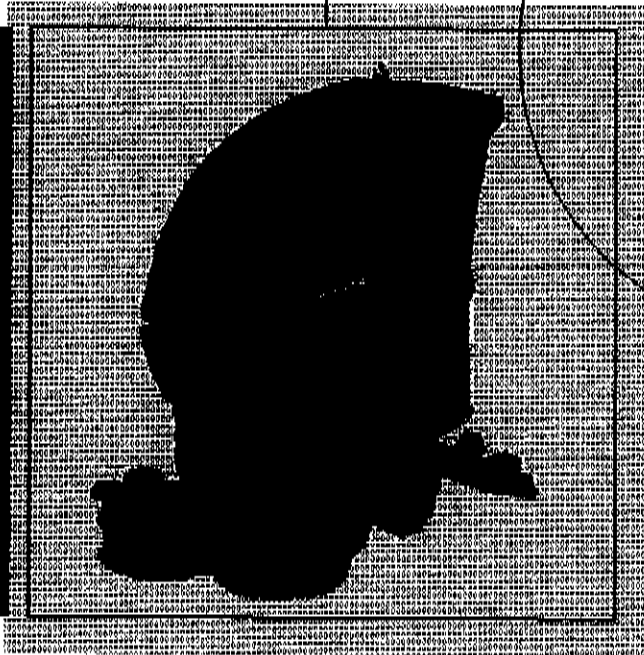
<p>After recharging with an electronic battery-charger the storage-battery does not show the correct voltage (about 2,14V for each empty element) and only one or few elements turn out to be flat when tested with densimeter</p>	<ul style="list-style-type: none"> <li>one or more elements are damaged</li> </ul>	<ul style="list-style-type: none"> <li>replace, if possible, the damaged elements. For monoblock storage batteries at 6V or 12V, replace the whole storage battery</li> </ul>
--	--	---

<p>The electrolyte that is present in the storage battery has a cloudy colour</p>	<ul style="list-style-type: none"> <li>the storage battery has completed the charge/discharge cycles indicated by the Manufacturer</li> </ul>	<ul style="list-style-type: none"> <li>replace the storage battery</li> </ul>
	<ul style="list-style-type: none"> <li>the storage battery has been recharged with a too high current</li> </ul>	<ul style="list-style-type: none"> <li>replace the storage battery</li> </ul>
	<ul style="list-style-type: none"> <li>the storage battery has been charged beyond the limit suggested by the Manufacturer</li> </ul>	<ul style="list-style-type: none"> <li>replace the storage battery</li> </ul>

# WS24 Watchman® 24" Auto Scrubber

## Parts Schematic

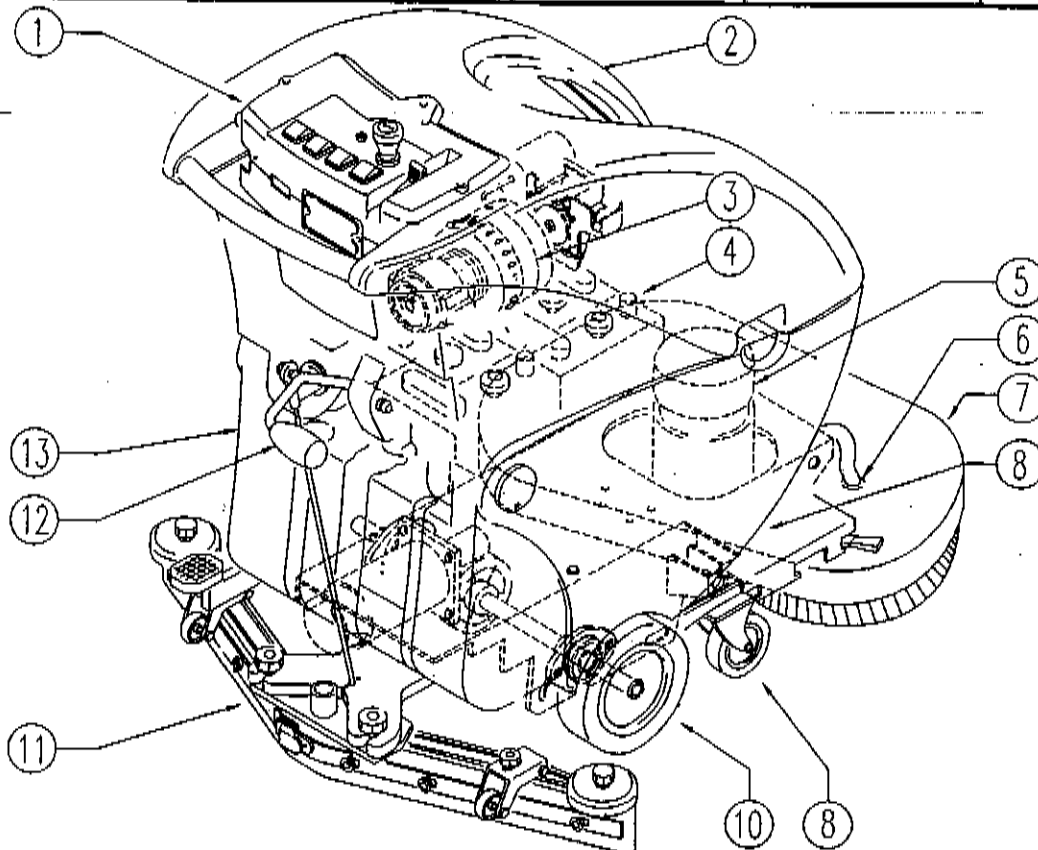
Item #86009



CODE:

PF02270BC-4 ab SN from 01J899

DESCRIPTION:

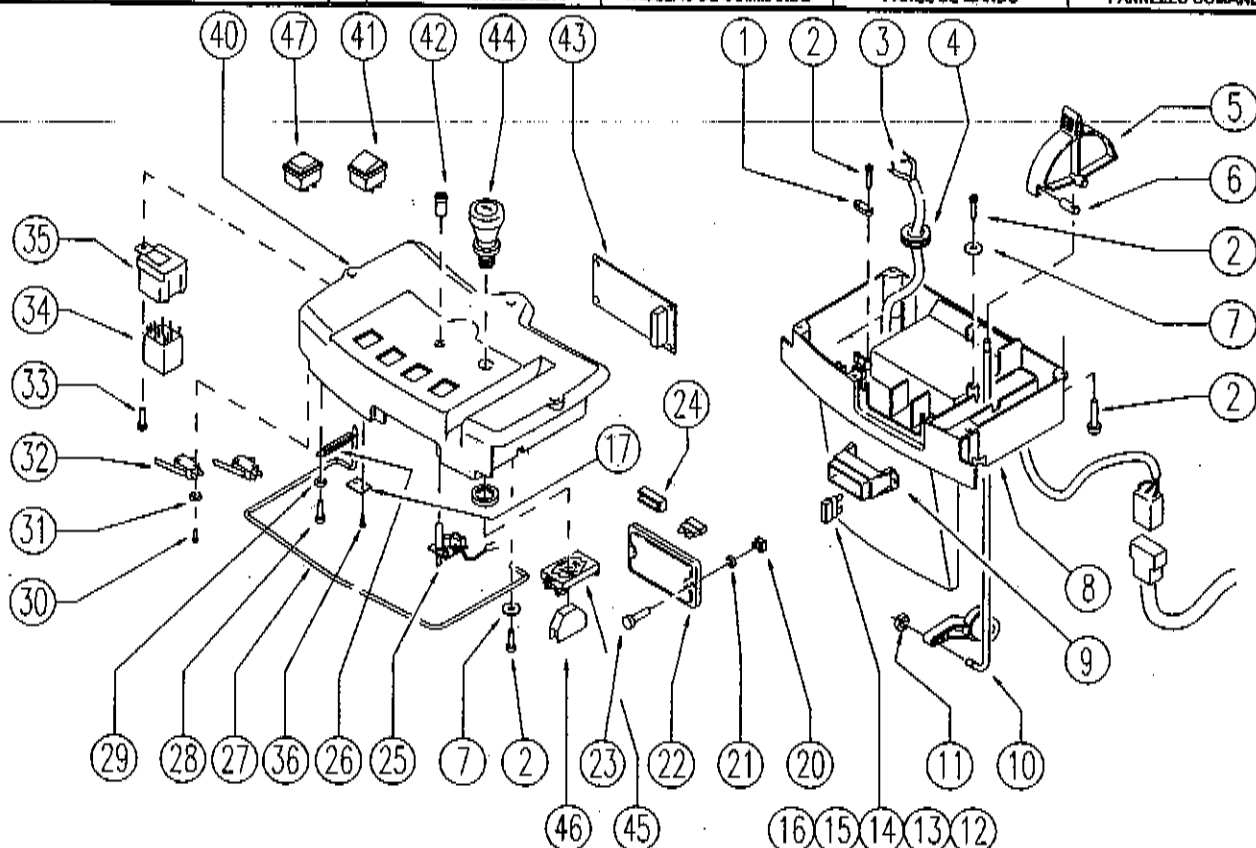


REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	PL1340	CONTROL PANEL		INSTRUMENTENBRETT	TABLÉAU DE COMMANDE	PANEL DE MANDO	PANNELLO COMANDI
2	PL1012	TANK		TANK	RESERVOIR	TANQUE	SERBATOIO SUPERIORE
3	PL1001	SUCTION UNIT		SAUGGRUPPE	GROUPE ASPIRATION	GRUPO DE ASPIRACION	ASPIRAZIONE
4	PL1347	ELECTRIC UNIT		ELEKTRISCHE GRUPPE	GROUPE ELECTRIQUE	GRUPO ELECTRICO	PARTI ELETTRICHE
5	PL1455	HEAD: MOTOR		KOPF: MOTOR	TETE: MOTEUR	CABEZA: MOTOR	TESTATA: MOTORE
6	PL1337	HEAD: AXLE PULLEY		KOPF: RIEMENSCHNABENACHSE	TETE: ESSIEU POULIE	CABEZA: EJE POLEA	TESTATA: ASSE SPAZZOLA
7	PL1458	HEAD: FLAP		KOPF: FLAP	TETE: FLAP	CABEZA: FLAP	TESTATA: FLAP
8	PL1341	FRAME - TRANSPORT SYSTEM		RAHMEN	CADRE	CHASSIS	TELAIO
9	PL1343	DRIVE UNIT		ANTRIEBS GRUPPE	GROUPE TRACTION	GRUPO DE TRACCION	GRUPPO TRAZIONE
10	PL1010	SQUEEGEE		SQUEEGEE	SQUEEGEE	SQUEEGEE	SQUEEGEE
11	PL1467	SQUEEGEE SUPPORT		SAUGFLURHALTERUNG	SUPPORT SUCEUR	SOPORTE ESCURRIEBUELOS	SUPPORTO SQUEEGEE
12	PL1346	TANK		TANK	RESERVOIR	TANQUE	SERBATOIO INFERIORE
13	PL1457	BRUSHES		BURSTE	BROSSE	CEPILLO	SPAZZOLA
14	PL1339C	EXTERNAL PARTS		EXTERNE TEILE	EXTERNES PARTIES	EXTERNAS PARTES	PARTI ESTERNE
15	PL1468C	PACKING		VERPACKUNG	EMBALLAGE	EMBALAJE	IMBALLAGGIO
16	WD27183	ELEC. WIRING DIAGRAM		SCHALTPLAN	SCHEMA ELECTRIQUE	ESQUEMA ELECTRICO	SCHEMA ELETTRICO
17	WD27183-1	ELEC. SCHEMATIC DIAGRAM		SCHALTPLAN	SCHEMA ELECTRIQUE	ESQUEMA ELECTRICO	SCHEMA ELET. FUNZIONALE

CODE:

p11340 ab SN from 02AQ00

DESCRIPTION:	CONTROL PANEL	INSTRUMENTENBRETT	TABEAU DE COMMANDE	PANEL DE MANDO	PANNELLO COMANDI
--------------	---------------	-------------------	--------------------	----------------	------------------

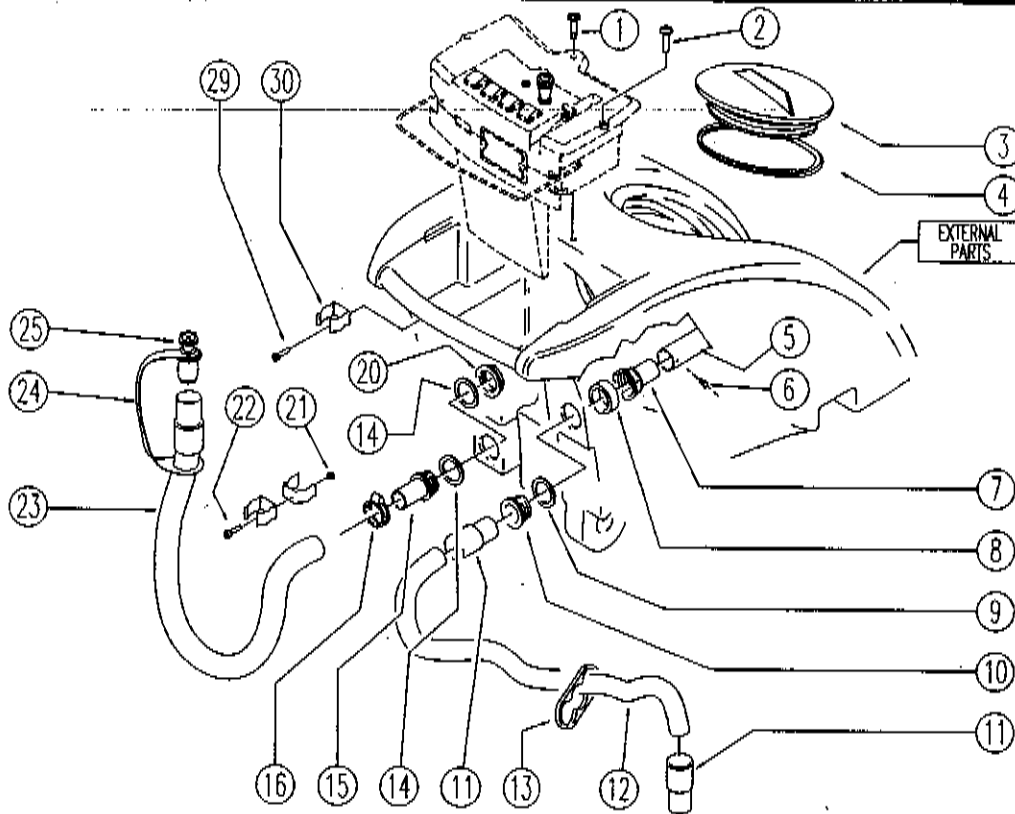


REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
	GR21715-4	PREESEMBLED CTRL PANEL	1	INSTRUMENTENBRETT GRÜPPE	GRUPE TABLEAU DE COMMANDE	CONJUNTO PANEL DE MANDO	PANN. COM. PREESEMBLATO
1	SL08608	CABLE CLAMPING STAPLE	1	ÜBERBRÜCKUNG FÜR KABELHALTER	BARRETTE FIXE-CABLE	PUENTE DE BLOQUEO PARA CABLE	PONTICELLO BLOCCACAVO
2	SL04187	SCREW	8	SCHRAUBE	VIS	TORNILLO	VITE
3	SL23733	WIRING	1	VERKABELUNG	CABLAGE	CABLEO	CABLAGGIO
4	SL23686	FAIRLEAD	1	KABELDURCHFÜHRUNG	PAISSE-CABLE	GUIACABOS	PASSACAVO
5	SL17400-1	LEVER	1	HEBEL	LEVIER	PALANCA	LEVA
6	SL09606	ARTICULATION	1	GELENK	JOINT	ARTICULACION	SNODO
7	SL06036	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDOLA	RONDELLA
8	SL17489-1	CONTROL PANEL	1	INSTRUMENTENBRETT	TABEAU DE COMMANDE	PANEL DE MANDO	PANNELLO COMANDI
9	SL23664	FUSE CARRIER	1	SICHERUNGSSOCKEL	PORTE-FUSIBLES	PORTAFUSIBLES	PORTAFUSIBILI
10	SL06605	ROD	1	STANGE	TIGE	VARILLA	ASTA
11	SL06041	NUT	1	MUTTER	ECROU	TUERCA	DADO
12	SL23144	FUSE	2	SICHERUNG	FUSE	FUSIBLE	FUSIBILE LAMPADA (5A)
13	SL23148	FUSE	2	SICHERUNG	FUSE	FUSIBLE	FUSIBLE GENERALE (30A)
14	SL23148	FUSE	2	SICHERUNG	FUSE	FUSIBLE	FUSIBLE MOTORE M2 (30 A)
15	SL23144	FUSE	2	SICHERUNG	FUSE	FUSIBLE	FUSIBLE PER KM1 (5A)
16	SL23148	FUSE	1	SICHERUNG	FUSE	FUSIBLE	FUSIBLE PER M3 (30A)
17	SL06666	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
20	SL05077	NUT	2	MUTTER	ECROU	TUERCA	DADO
21	SL03118	GASKET	2	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
22	SL17148-1	LID	1	DECKEL	COUVERCLE	TAPA	COPERCHIO
23	SL04377	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
24	SL23209	FUSE TWEELZERS	1	ZANGE FÜR SICHERUNGEN	PINCELETTE POUR FUSIBLES	PINZAS PARA FUSIBLES	PINZETTA FUSIBILI
25	SL23031	BOARD / CARD	1	KARTE	FICHE	TARJETA	SCHEDA
26	SL13118	SPRING	1	FEDER	RESSORT	RESSORTE	MOLLA
27	SL06796	LEVER	1	HEBEL	LEVIER	PALANCA	LEVA
28	SL04216	SCREW	3	SCHRAUBE	VIS	TORNILLO	VITE
29	SL06019	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDOLA	RONDELLA
30	SL04214	SCREW	6	SCHRAUBE	VIS	TORNILLO	VITE
31	SL06009	WASHER	4	UNTERLEGSCHIBE	RONDELLE	ARANDOLA	RONDELLA
32	SL23109	MICROSWITCH	2	MIKROSCHALTER	MICRO-INTERRUPTEUR	MICROINTERRUPTOR	MICROINTERRUTTORE
33	SL04226	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
34	SL23719	RELAYS	1	RELAIS	RELAIS	RELAIS	RELAIS
36	SL23722	RELAYS SUPPORT	1	RELAIS HALTERUNG	SUPPORT RELAIS	SOPORTE RELAIS	SUPPORTO RELAIS
38	SL04327	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
40	SL17489-1	CONTROL PANEL	1	INSTRUMENTENBRETT	TABEAU DE COMMANDE	CUADRO DE MANDO	PANNELLO COMANDI
41	SL23183	SWITCH	2	SCHALTER	INTERRUPTEUR	INTERRUPTOR	INTERRUTTORE
42	SL23031-1	REFLEX REFLECTOR	1	RÜCKSTRAHLER	PASTILLE REFLECHISSANTE	CATAFARO	GEJMA
43	SL23731-2	GEARCASE / BOARD	1	ZENTRALE / KARTE	FICHE DE CONTROLE	CENTRALITA / TARJETA	CENTRALINA / SCHEDA
44	SL23664	EMERGENCY SWITCH	1	DRUCKKNOPF	BOULON	PULSADOR	PULSANTE EMERGENZA
45	SL23666	CONTACT CARRIER	1	KONTAKT-HALTER	PORTE-CONTACTS	PORTA CONTACTOS	PORTA CONTATTI
46	SL23668	CONNECTION	2	KONTAKT	CONTACT	CONEXION	CONTATTO
47	SL23670	SWITCH COVER	2	SCHALTERABDECKUNG	COUVRE-INTERRUPTEUR	CUBREINTERRUPTOR	COPRI INTERRUTTORE

CODE:

pl1012 ah SN from 01K187

DESCRIPTION:	TANK	TANK	RESERVOIR	TANQUE	SERBATOIO SUPERIORE
--------------	------	------	-----------	--------	---------------------



REF.	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL14182	CLIP	1	GEZAHNTE KLIPPE	CLIP DENTEE	CLIP DENTELLATA	KLIP DENTELLATA
2	SL04377	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
3	SL17468	COVER	1	DECKEL	COUVERCLE	TAPA	COPERCHIO
4	SL03487	GASKET	1	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
5	SL07420	HOSE	1	SCHLAUCH	TUYAU	TUBO FLEXIBLE	TUBO
6	SL04325	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
7	SL18348	CONNECTOR	1	ANSCHLUSS	RACCORD	CONECTOR	RACCORDO
8	SL07546	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	OSTANZIALE
9	SL03418	GASKET	1	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
10	SL18366	SUCTION OPENING	1	ÖFFNUNG	SUCEUR	ORIFICO / ABERTURA	BUCCHETTONE
11	SL14003	SLEEVE	2	MUFFE	MANCHON	MANIGLITO	MANICOTTO
12	SL18021	HOSE	1	SCHLAUCH	TUYAU	TUBO FLEXIBLE	TUBO
13	SL03437	PLAQUE	1	PLÄTTCHEN	PLATINE	PLACA	PIASTRINA
14	SL03441	GASKET	2	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
15	SL18350	CONNECTOR	1	ANSCHLUSS	RACCORD	CONECTOR	RACCORDO
16	SL14083	CLAMP	1	SCHNELLE	BANDE	ABRAZADERA	FASCETTA
20	SL05075	NUT	1	MUTMUTTER	FRETTE	ANILLO	CHIERA
21	SL05044	NUT	2	MUTMUTTER	FRETTE	ANILLO	CHIERA
22	SL04032	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
23	SL18113-5	HOSE	1	SCHLAUCH	TUYAU	TUBO FLEXIBLE	TUBO
24	SL03677	CLAMP	1	SCHNELLE	BANDE	ABRAZADERA	FASCETTA
25	SL18395	KNOB	1	KNALF	VOLANT A MAIN	BOTÓN ESFERICO	POMOLO
28	SL04371	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
30	SL13118	DUCT LOCK	3	SCHLAUCHHALTER	FIXE-TUYAU	BLOQUEO TUBO	FERMO TUBO

CODE:

pl1001 as SN from 01B600

DESCRIPTION:

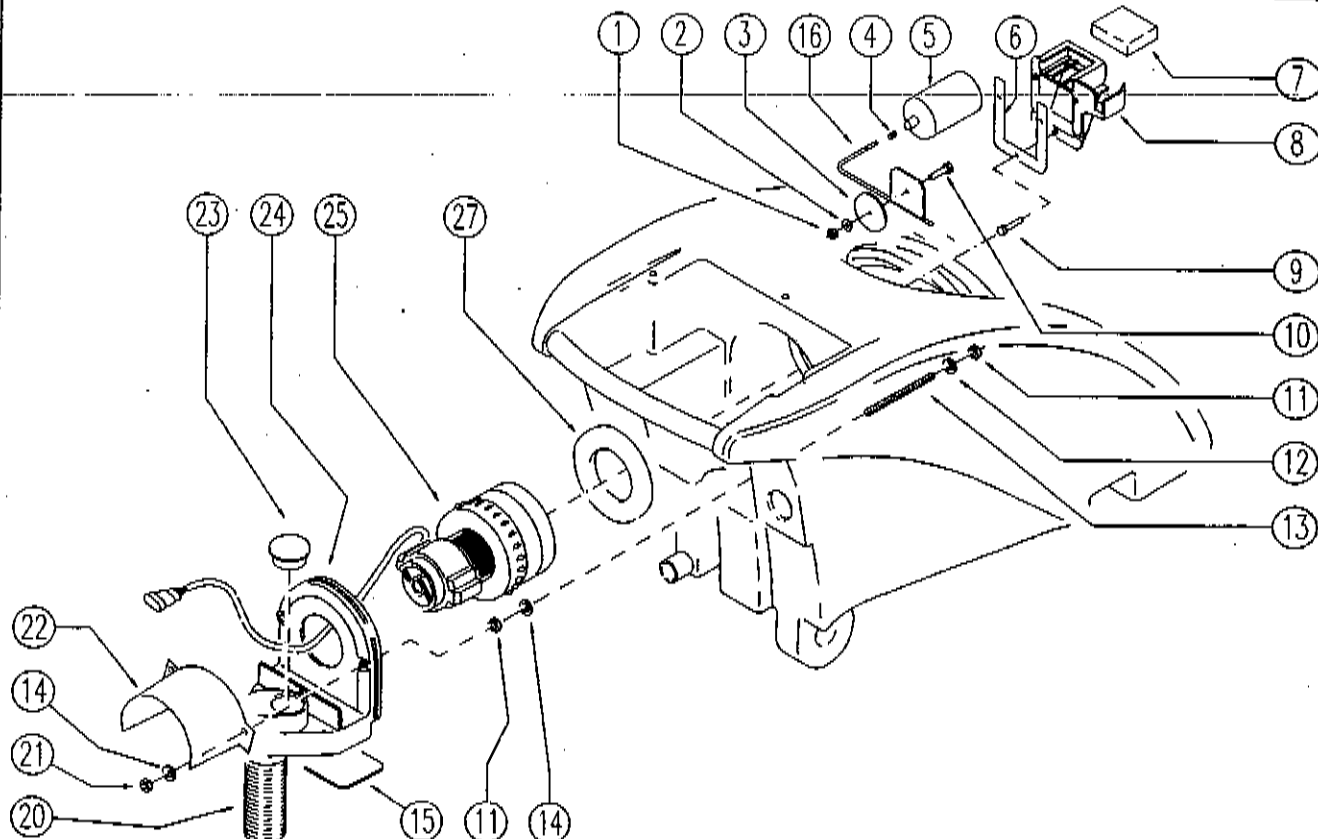
SUCTION UNIT

SAUGGRUPPE

GROUPE ASPIRATION

GRUPO DE ASPIRACIÓN

ASPIRAZIONE



REF.	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL05067	NUT	1	MUTTER	ECROU	TUERCA	DADO
2	SL06036	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
3	SL03346	GASKET	1	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
4	SL04366	INSERT	1	EINSATZ	SEGMENT	ENCAJE	INSERTO
5	SL18393	FLOAT	1	SCHWIMMER	FLUTTEUR	FLOTADOR	GALLEGGIANTE
6	SL03429	GASKET	1	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
7	SL03345	FILTER	1	FILTER	FILTRE	FILTRO	FILTRO
8	SL17462-1	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
9	SL04096	SCREW	3	SCHRAUBE	VIS	TORNILLO	VITE
10	SL04910	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
11	SL05017	NUT	4	MUTTER	ECROU	TUERCA	DADO
12	SL06071	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
13	SL04276	SCREW	2	SCHRAUBE	VIS	TORNILLO	BARRA FILETTATA
14	SL06022	WASHER	4	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
15	SL17554	BULKHEAD	1	TRENNWAND	CLOISON	MAMPARO	PARETE CUFFIA
16	SL09827	ROD	1	STANGE	TIGE	VARILLA	ASTINA
20	SL18246	PIPE	1	ROHR	TUBE	TUBO	TUBO
21	SL05041	NUT	2	MUTTER	ECROU	TUERCA	DADO
22	SL03514	SUCTION CONVEYOR	1	SAUGFORDERER	CONVOYEUR ASPIRATION	TRANSPORTADOR SUCCION	CONVOGIATORE
23	SL14240	CAP	1	STOPFEN, VERSCHLUSS	BOUCHON	TAPON	TAPPO
24	SL03267	CAP / SHELL	1	SCHUTZGEHAUSE	PROTECTEUR	GORRO / PROTECCION	CUFFIA
25	SL02303-J	EXHAUSTER / ASPIRATOR	1	SAUGER	ASPIRATEUR / SUCEUSE	ASPIRADOR	ASPIRATORE
27	SL03033	GASKET	1	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE

CODE:

p1347 ac SN from 02C000

DESCRIPTION:

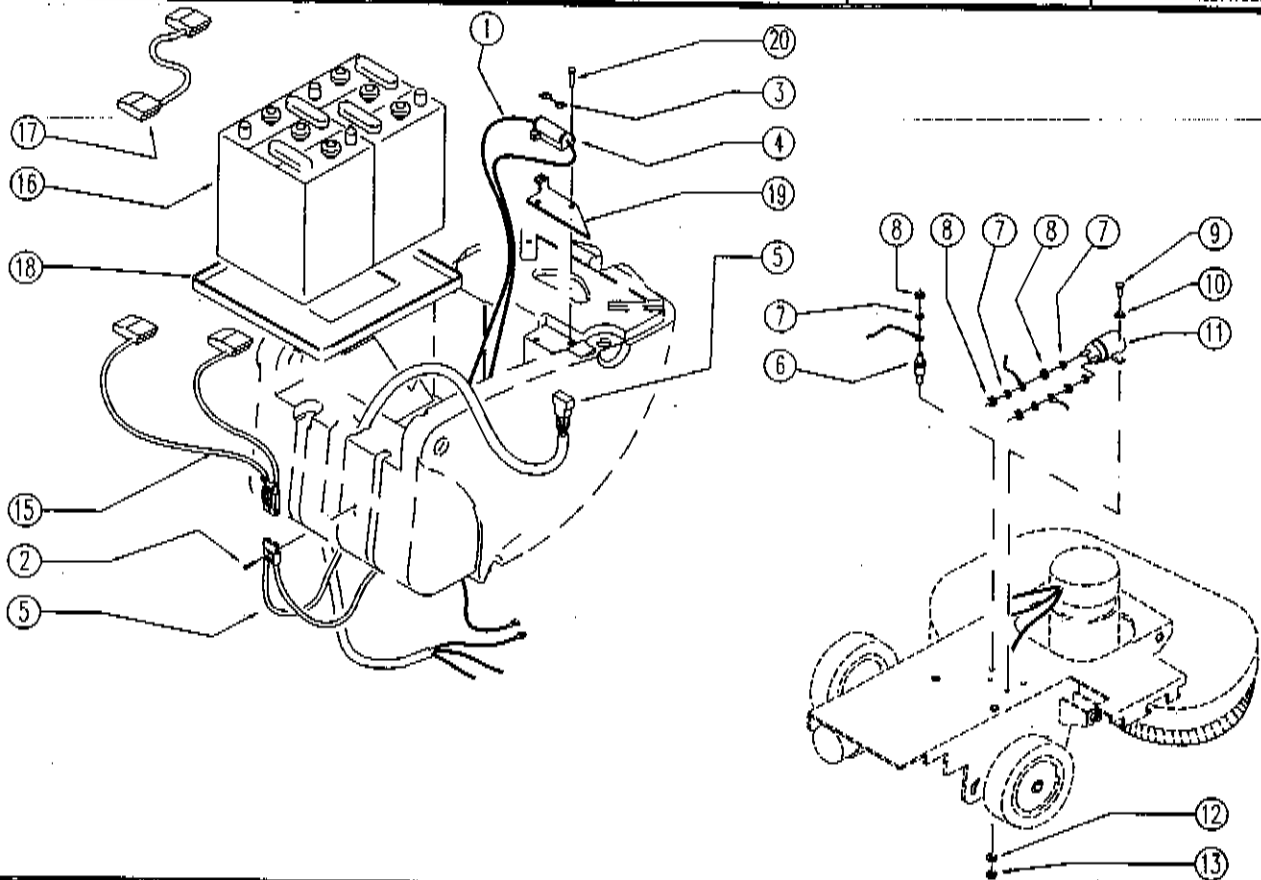
ELECTRIC UNIT

ELEKTRISCHE GRUPPE

GROUPE ELECTRIQUE

GRUPO ELÉCTRICO

PARTI ELETTRICHE



REF CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1 SL23630	WIRING	1	VERKABELUNG	CABLAGGIO	CABLO	CABLAGGIO
2 SL04018	SCREW	2	SCHRAUBE	VIS	TORNELLO	VITE
3 SL23636	FUSE	1	SICHERUNG	FUSIBLE	FUSIBILE	FUSIBILE
4 SL23697	FUSE CARRIER	1	SICHERUNGSSOCKEL	PORTE-FUSIBLES	PORTAFUSIBILES	PORTA FUSIBILI
5 SL23629	WIRING	1	VERKABELUNG	CABLAGGIO	CABLO	CABLAGGIO
6 SL23103	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
7 SL06002	WASHER	5	UNTERLEGSCHEIBE	RONDELLE	ARANDOLA	RONDELLA
8 SL05004	NUT	5	MUTTER	ECROU	TUERCA	DADO
9 SL04108	SCREW	2	SCHRAUBE	VIS	TORNELLO	VITE
10 SL06030	WASHER	2	UNTERLEGSCHEIBE	RONDELLE	ARANDOLA	RONDELLA
11 SL23001	REMOTE CONTROL SWITCH	1	FERNSCHALTER	TELE-INTERRUPTEUR	TELEINTERRUPTOR	TELEBRUTTORE
12 SL06067	WASHER	1	UNTERLEGSCHEIBE	RONDELLE	ARANDOLA	RONDELLA
13 SL05039	NUT	1	MUTTER	ECROU	TUERCA	DADO
14 SL23628	WIRING	1	VERKABELUNG	CABLAGGIO	CABLO	CABLAGGIO
15 SL03122	BATTERY	2	BATTERIE	BATTERIE	BATERIA	BATERIA
16 SL23630	BRIDGE / JUMPER	1	BRÜCKE	PONT	PUNTE	PONTE
17 GR17182-1	PLATE	1	TAFEL	PLAT	PLATO	PIATTO
18 SL23606	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
20 SL04318	SCREW	2	SCHRAUBE	VIS	TORNELLO	VITE

CODE:

pl1455 ab SN from 01C000

DESCRIPTION:

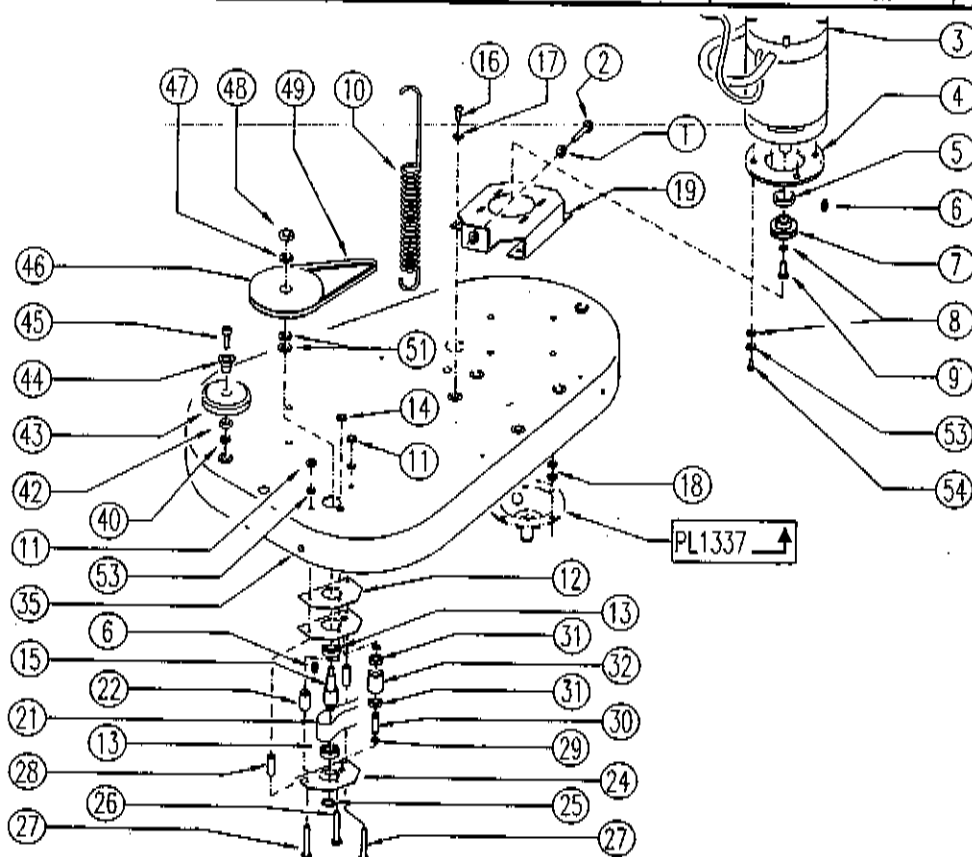
HEAD: MOTOR

KOPF: MOTOR

TETE: MOTEUR

CABEZA: MOTOR

TESTATA: MOTORE



REF.	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL06004	NUT	1	MUTTER	ECROU	TUERCA	DADO
2	SL04164	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
3	SL06045	MOTOR	1	MOTOR	MOTEUR	MOTOR	MOTORE
4	SL07536	FLANGE	1	FLANSCH	BRIDE	BRIDA	FLANGIA
5	SL11010	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
6	SL11010	TANG / TONGUE	2	LAPPEN	ENTRETOISE	LENGUETA	LINGUETTA
7	SL10048	PULLEY	1	RIEMENSCHLEIBE	POULIE	PULEGIA	PULEGGIA
8	SL06039	WASHER	5	UNTERLEGSCHLEIBE	RONDILLE	ARANDELA	RONDELLA
9	SL04136	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
10	SL13002	SPRING	1	FEDER	RESSORT	REBORTE	MOZZA
11	SL06045	NUT	1	MUTTER	ECROU	TUERCA	DADO
12	SL06041	GASKET	1	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
13	SL12029	BEARING	2	LAGER	PALIER / ROULEMENT	COINNETE	CUBCINETTO
14	SL05017	NUT	1	MUTTER	ECROU	TUERCA	DADO
15	SL07190	SHAFT	1	WELLE	ARBRE	ARBORE	ALBERO
16	SL04039	SCREW	4	SCHRAUBE	VIS	TORNILLO	VITE
17	SL06039	WASHER	4	UNTERLEGSCHLEIBE	RONDILLE	ARANDELA	RONDELLA
18	SL06022	WASHER	8	UNTERLEGSCHLEIBE	RONDILLE	ARANDELA	RONDELLA
19	SL39127	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
20	SL10042	BELT	1	RIEMEN	COURROIE	CORREA	CINGHIA
21	SL07545	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
22	SL38063	PLATE	2	PLATTE	PLAQUE	PLACA	PIASTRA
23	SL11190	RING	1	RING	ANNEAU / BAGUE	ANILLO	ANELLO
24	SL04061	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
25	SL04058	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
26	SL07143	SPACER	2	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
27	SL11095	RING	2	RING	ANNEAU / BAGUE	ANILLO	ANELLO
28	SL11041	PIN / PLUG	1	STECKER	GOUILLON / PIGNE	CLAVIA	SPINA
29	SL12003	BEARING	2	LAGER	PALIER / ROULEMENT	COINNETE	CUBCINETTO
30	SL10042	PULLEY	1	RIEMENSCHLEIBE	POULIE	PULEGIA	PULEGGIA
31	SL39121	HEAD	1	KOPF	TETE	CABEZA	TESTATA
32	SL05048	SCREW	3	SCHRAUBE	VIS	TORNILLO	VITE
33	SL06039	WASHER	3	UNTERLEGSCHLEIBE	RONDILLE	ARANDELA	RONDELLA
34	SL09040	WHEEL / SMALL WHEEL	3	RAD / RADCHEN	ROUE	RUEDA / RUEDECILLA	RUOTA
35	SL07390	BUSHING / BUSH	3	BUCHSE	DOUILLE	GASCUILLO / PORRO	BOCCOLA
36	SL04167	SCREW	3	SCHRAUBE	VIS	TORNILLO	VITE
37	SL10077	PULLEY	1	RIEMENSCHLEIBE	POULIE	PULEGIA	PULEGGIA
38	SL06017	WASHER	1	UNTERLEGSCHLEIBE	RONDILLE	ARANDELA	RONDELLA
39	SL05039	NUT	1	MUTTER	ECROU	TUERCA	DADO
40	SL16010	BELT	1	RIEMEN	COURROIE	CORREA	CINGHIA
41	SL06058	WASHER	2	UNTERLEGSCHLEIBE	RONDILLE	ARANDELA	RONDELLA
42	SL06022	WASHER	8	UNTERLEGSCHLEIBE	RONDILLE	ARANDELA	RONDELLA
43	SL04002	SCREW	4	SCHRAUBE	VIS	TORNILLO	VITE

CODE:

p11337 ac SN from 01K199

DESCRIPTION:

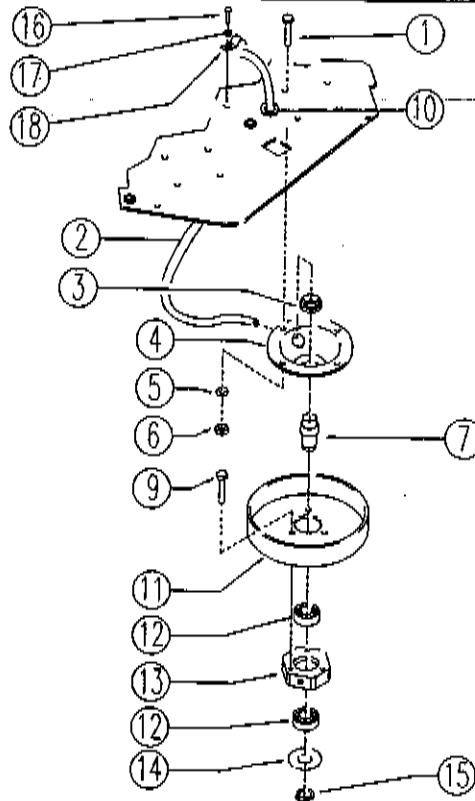
HEAD: AXLE PULLEY

KOPF: RIEMENSCHNITTENACHS

TETE: ESSIEU POULIE

CABEZA: EJE POLEA

TEST: ASSE PULEGGIA



REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL04105	SCREW	8	SCHRAUBE	VB	TORNILLO	VITE
2	SL19328	HOSE	2	SCHLAUCH	TUYAU	TUBO FLESSIBILE	TUBO
3	SL05049	NUT	2	MUTMUTTER	FRETTE	ANELLO	GHERA
4	SL09820	FLANGE	2	FLANSCH	BRIDE	BRIDA	FLANGIA
5	SL09003	WASHER	8	UNTERLEGESCHEIBE	RONDELLE	ARANDELA	ROSETTA
6	SL05030	NUT	8	MUTTER	ECROU	TUERCA	DADO
7	SL07535	PIN	2	ZAPFEN	PIVOT	PERNO / PIVOTE	PERNO
8	SL04119	SCREW	8	SCHRAUBE	VB	TORNILLO	VITE
10	SL23684	FAIRLEAD	2	KABELDURCHFÜHRUNG	PASSE-CABLE	GUÍDABOS	PASSACAVO
11	SL10047	PULLEY	2	RIEMENSCHNITTEN	POULIE	POLEA	PULEGGIA
12	SL12026	BEARING	4	LAGER	PAJER / ROULEMENT	COJINETE	CUSCINETTO
13	SL14175	HEXAGON	2	SECHSKANT	HEXAGONE	HEXAGONO	ESAGONO
14	SL03247	GUARD	2	SCHUTZ	PROTECTION	PROTECCIÓN	PROTEZIONE
15	SL11096	SEEGER	2	SEEGER	SUCIEUR	SEEGER	SEEGER
16	SL04070	SCREW	2	SCHRAUBE	VB	TORNILLO	VITE
17	SL09031	WASHER	2	UNTERLEGESCHEIBE	RONDELLE	ARANDELA	ROSETTA
18	SL23381	CLAMP	2	SCHNELLE	BANDE	ABRAZADERA	FASCETTA

CODE:

p11456 ab SN from 01133

DESCRIPTION:

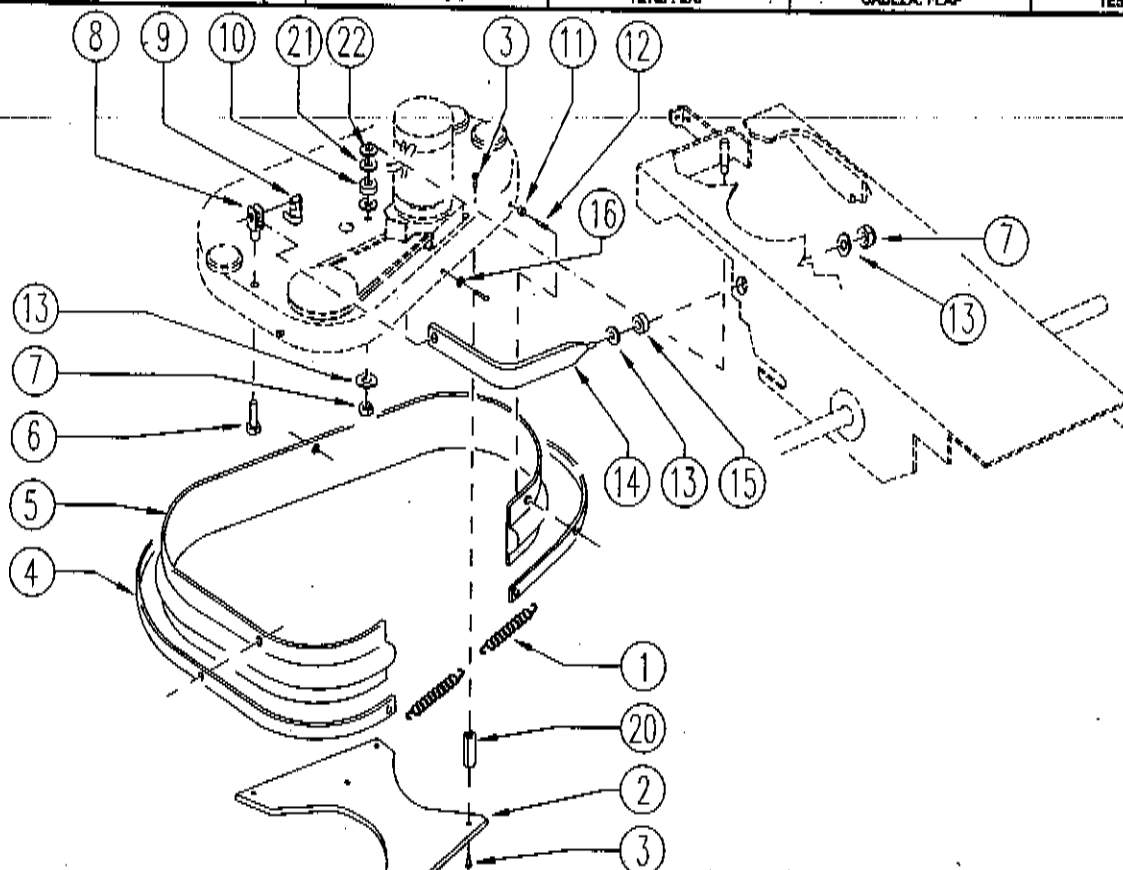
HEAD: FLAP

KOPF: FLAP

TETE: FLAP

CABEZA: FLAP

TESTATA: FLAP



REF.	CODÉ	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL1300M	SPRING	3	FEDER	RESSORT	RESORTE	MOLLA
2	SL03002	GUARD	1	SCHUTZ	PROTECTION	PROTECCION	PROTEZIONE
3	SL04006	SCREW	10	SCHRAUBE	VIS	TORNILLO	VITE
4	SL03039	FLAP PRESS	1	FLAPNIEDERHALTER	PRESSE-FLAP	APRIETAFLAP	PREMI FLAP
5	SL03039	FLAP	1	FLAP	FLAP	FLAP	FLAP
6	SL04134	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
7	SL05039	NUT	2	MUTTER	ECROU	TUERCA	DADO
8	SL22008	FORM	1	GABEL	FOURCHE	HORQUILLA	FORCELLA
9	SL22010	BRACKET / CLASP	1	KLIPS	CLIP	ABRAZADERA	CLIP
10	SL05018	NUT	1	MUTTER	ECROU	TUERCA	DADO
11	SL14055	SPACER	5	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
12	SL06092	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
13	SL06101	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
14	SL03009	RUBBER SHIM	1	ZWISCHENLEGSCHIBE AUS GUMMI	CALE EN CAOUTCHOUC	ROSTRA DE GOMA	COMANDO
15	SL07375	SCREW	3	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
16	SL04367	SCREW	4	SCHRAUBE	VIS	TORNILLO	VITE
17	SL06041	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
18	SL30137	LEVER	1	HEBEL	LEVIER	PALANCA	LEVA
19	SL07120	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE

CODE:

pl1341 ad SN from 01K198

DESCRIPTION:

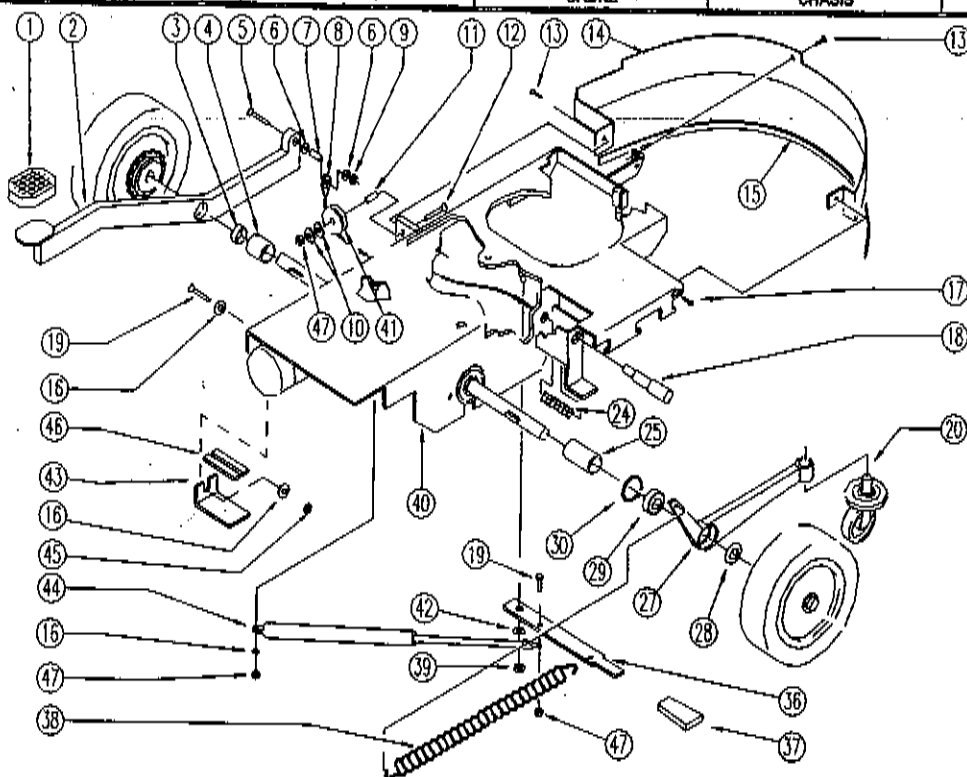
FRAME

RAHMEN

CADRE

CHASIS

TELAIO



REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL20008	RUBBER SHIM	1	ZWISCHENLEGSCHIBE AUS GUMMI	CALE EN CAOUTCHOUC	RIOSTRA DE GOMA	GOMMA
2	SL39048	PEDAL	1	PEDAL	PEDALE	PEDALE	PEDALE
3	SL12071	BEARING	1	LAGER	PALIER/ROULEMENT	COINNETE	CUSCINETTO
4	SL07519	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
5	SL04036	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
6	SL08034	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
7	SL07581	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
8	SL14346	CABLE	1	DRAHT	PETIT CABLE	CABLECITO	CAVO
9	SL05067	NUT	1	MUTTER	ECROU	TUERCA	DADO
10	SL06084	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
11	SL07164	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
12	SL04008	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
13	SL04079	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
14	SL36087	BULKHEAD	1	TRENNWAND	CLORSON	MAMPARO	PARATIA
15	SL03542	OUTLINE	1	PROFIL	PROFIL	PERFIL/CONTORNO	PROFILO
16	SL06222	WASHER	3	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
17	SL04066	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
18	SL07516	PIN	1	ZAPFEN	PIVOT	PERNO/PIVOTE	PERNO
19	SL04135	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
20	SL08067	WHEEL	1	RAD/RADCEHN	ROUE	RUEDA/RUEDECOLLA	RUOTA/RUOTINO
24	SL13128	SPRING	1	FEDER	RESSORT	RESSORTE	MOLLA
25	SL07520	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
27	SL38046	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
28	SL08058	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
29	SL12030	BEARING	1	LAGER	PALIER/ROULEMENT	COINNETE	CUSCINETTO
30	SL11033	SEEGER	1	SEEGER	SUCUR	SEGER	SEGER
36	SL39048	LEVER	1	HEBEL	LEVIER	PALANCA	LEVA
37	SL20054	HANDGRIP	1	KNOPF	POIGNEE	EMPUNADURA/BOTON	MANOPOLA
38	SL13130	SPRING	1	FEDER	RESSORT	RESSORTE	MOLLA
39	SL05038	NUT	1	MUTTER	ECROU	TUERCA	DADO
40	SL38050	FRAME	1	RAHMEN	CADRE	CHASIS	TELAIO
41	SL07094	PULLEY	1	RIEMENSCHIBE	POULE	POLEA	PULEGGIA
42	SL08041	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
43	SL08418	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
44	SL13119	SPRING	1	FEDER	RESSORT	RESSORTE	MOLLA
45	SL05041	NUT	1	MUTTER	ECROU	TUERCA	DADO
46	SL03571	SOFT GASKET	2	WEICHE DICHTUNG	JOINT SOUPLE	JUNTA BLANDA	MOUSSE
47	SL06058	NUT	3	MUTTER	ECROU	TUERCA	DADO

CODE:

pl1343 aa SN from 00G056

DESCRIPTION:

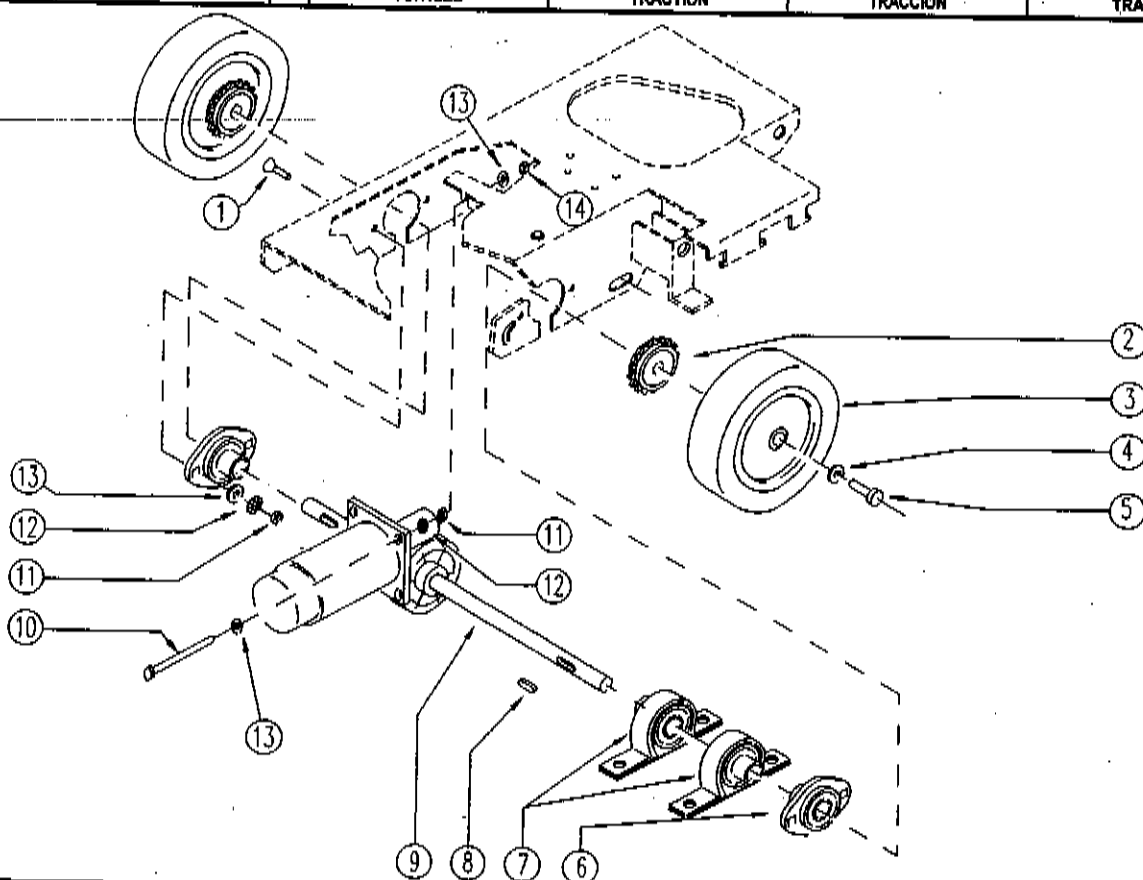
DRIVE

ANTRIEB

TRACTION

TRACCIÓN

TRAZIONE



REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL04336	SCREW	4	SCHRAUBE	VIS	TORNILLO	VITE
2	GR12011	BEARING	2	LAGER	PAUVER/ROULEMENT	COUINETE	CUSCINETTO
3	SL08033	WHEEL	2	RÄDCHEN	ROUE	RUEDA/RUEDECELLA	RUOTA
4	SL08032	WASHER	2	UNTERLEGSCHEIBE	RONDELLE	ARANDELA	RONDELLA
5	SL04077	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
6	SL12022	FLANGE	2	FLANSCH	BRIDE	BRIDA	FLANGIA
7	SL12070	SUPPORT	2	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
8	SL11034	TANG/TONGUE	2	LAPPEN	LANGUETTE	LINGUETA	LINGUETTA
9	SL02202	MOTOR-SHAFT	1	WELLE	ARBRE	ARBOL	MOTORE CON ALBERO
10	SL04134	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
11	SL05017	NUT	5	MUTTER	ECROU	TUERCA	DADO
12	SL08033	WASHER	8	UNTERLEGSCHEIBE	RONDELLE	ARANDELA	RONDELLA
13	SL08032	WASHER	7	UNTERLEGSCHEIBE	RONDELLE	ARANDELA	RONDELLA
14	SL05041	NUT	1	MUTTER	ECROU	TUERCA	DADO

CODE:

pi1010 ae SN from 01J899

DESCRIPTION:

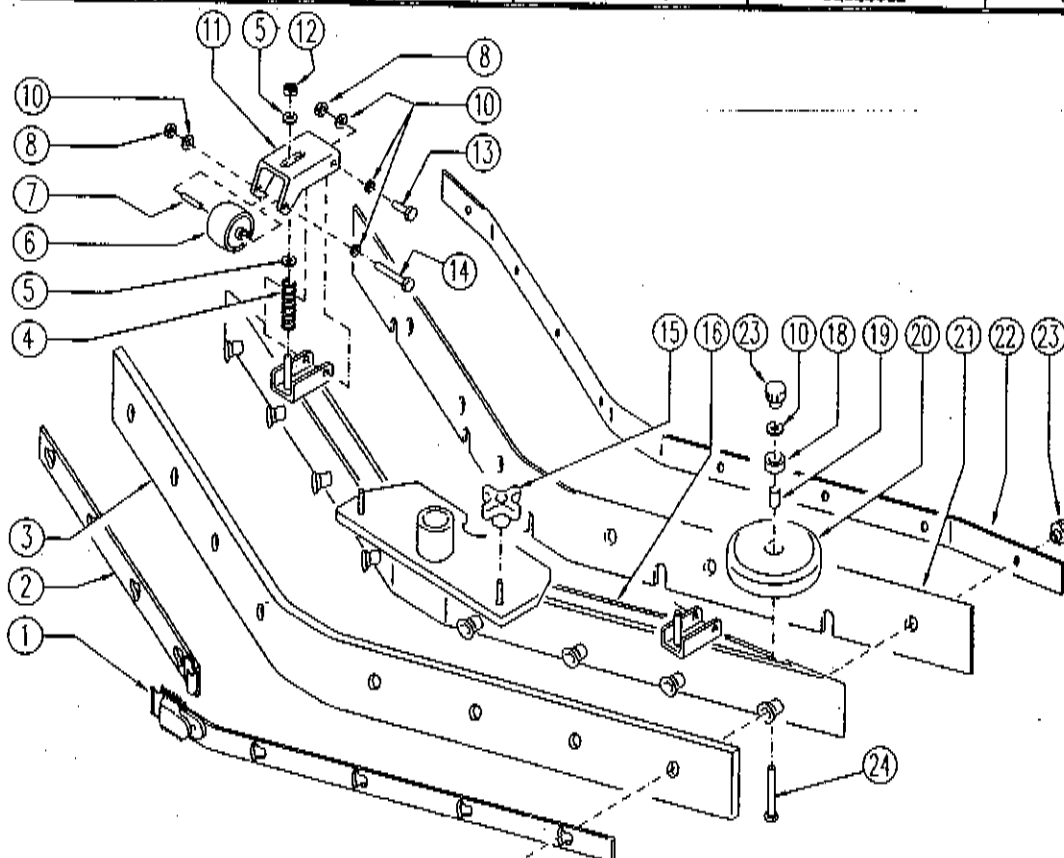
SQUEEGEE

SQUEEGEE

SQUEEGEE

SQUEEGEE

SQUEEGEE



REF.	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
GR39027		SQUEEGEE UNIT		SAUGFLUGGRUPPE	GROUPE SUCEUR	GRUPO ESCURRESUELOS	GRUPPO SQUEEGEE
1	SL39029	BLADE HOLDER	1	LIPPENHALTER	FIXE-LAME	DISPOSITIVO DE BLOQUEO HOJA	BLOCCA LAMA
2	SL39030	BLADE HOLDER	1	LIPPENHALTER	FIXE-LAME	DISPOSITIVO DE BLOQUEO HOJA	BLOCCA LAMA
3	SL03518	BLADE	1	GUMMILIPPE	LAME	HOJA	LAMA POSTERIORE
4	SL13103	SPRING	2	FEDER	RESSORT	RESSORTE	MOLLA
5	SL09041	WASHER	4	SCHEIBE	RONDELLE	ARANDOLA	RONDELLA
6	SL09058	WHEEL	2	RADCHEN	ROUE	RUEDA	RUOTINO REGOLAZIONE
7	SL07626	SPACER	2	DISTANZSTÜCK	ENTRETÔISE	ESPESOR	DISTANZIALE
8	SL05058	NUT	8	MUTTER	ECROU	TUERCA	DADO
10	SL06022	WASHER	14	SCHEIBE	RONDELLE	ARANDOLA	RONDELLA
11	SL39033	SUPPORT	2	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO RUOTINO REG.
12	SL05039	NUT	2	MUTTER	ECROU	TUERCA	DADO
13	SL04135	SCREW	4	SCHRAUBE	VIS	TORNILLO	VITE
14	SL04061	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
15	SL20081	HANDLE	2	KNAUF	POIGNEE	PERILLA	POMOLO
16	SL39136	BODY	1	KÖRPER	CORPS	CUERPO	CORPO SQUEEGEE
18	SL17608	BUSHING/BLUSH	1	BUCHSE	DOUILLE	CASQUILLO/FORRO	BOCCOLA
19	SL07065	SPACER	2	DISTANZSTÜCK	ENTRETÔISE	ESPESOR	DISTANZIALE
20	SL08040	WHEEL	2	RADCHEN	ROUE	RUEDA	RUOTINO ANTERIORE
21	SL03517	BLADE	1	GUMMILIPPE	LAME	HOJA	LAMA ANTERIORE
22	SL39028	BLADE HOLDER	1	LIPPENHALTER	FIXE-LAME	DISPOSITIVO DE BLOQUEO HOJA	BLOCCA LAMA
23	SL20058	HANDLE	10	KNAUF	POIGNEE	PERILLA	POMOLO
24	SL04058	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE

CODE:

pi1467 aa SN from 01J899

DESCRIPTION:

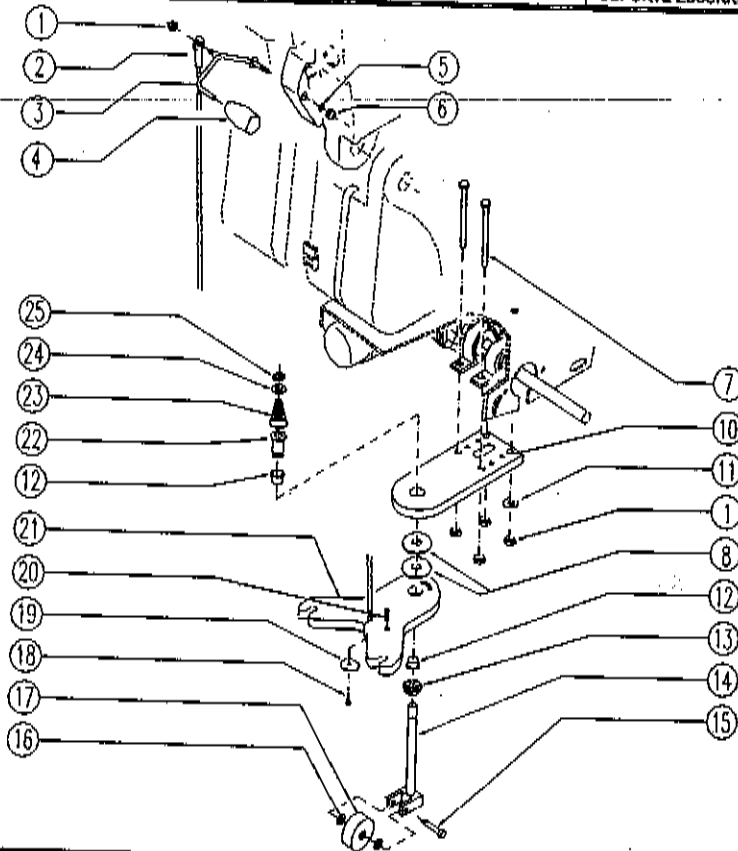
SQUEEGEE SUPPORT

SAUGFÜßHALTERUNG

SUPPORT SUCEUR

SOPORTE ESCURRESUELOS

SUPP. SQUEEGEE



REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL05030	NUT	6	MUTTER	ECROU	TUERCA	DADO
2	SL14361	CABLE	1	KABEL	CABLE	CABLE	CAVO SOLLEVAMENTO
3	SL39036	LEVER	1	HEBEL	LEVIER	PALANCA	LEVA SOLLEVAMENTO
4	SL20007	HANDGRIP	1	HANDGRIF	MANCHE	EMPUJADORA	IMPUGNATURA
5	SL06060	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
6	SL05032	NUT	1	MUTTER	ECROU	TUERCA	DADO
7	SL04004	SCREW	4	SCHRAUBE	VIS	TORNILLO	VITE
8	SL06106	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
10	SL39032	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
11	SL06003	WASHER	4	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
12	SL12035	BEARING	2	LAGER	PALIER/ROULEMENT	COARINETE	CUSCINETTO
13	SL02068	NUT	1	NUT/MUTTER	FRLETTE	ANILLO	GHIERA
14	SL39170	SUPPORT	1	HALTERUNG	SUPPORT	SOPORTE	SUPPORTO
15	SL04374	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
16	SL06025	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
17	SL06043-1	WHEEL / SMALL WHEEL	1	RAD / RADCHEN	ROUE	RUEDA / RUEDECILLA	RUOTINO
18	SL04319	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
19	SL06064	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
20	SL11126	GRAN	1	STIFT	VIS SANS TETE	GRANQ	GRANO
21	SL39031	PLATE	1	PLATTE	PLAQUE	PLACA	PIASTRA
22	SL07506	PIN	1	ZAPFEN	PIVOT	PERNO / PIVOTE	PERNO
23	SL13126	SPRING	1	FEDER	RESSORT	RESORTE	MOILA
24	SL06112	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
25	SL11096	RING	1	RING	ANNEAU / BAGUE	ANILLO	ANELLO

CODE:

p11346 af SN from 02C341

DESCRIPTION:

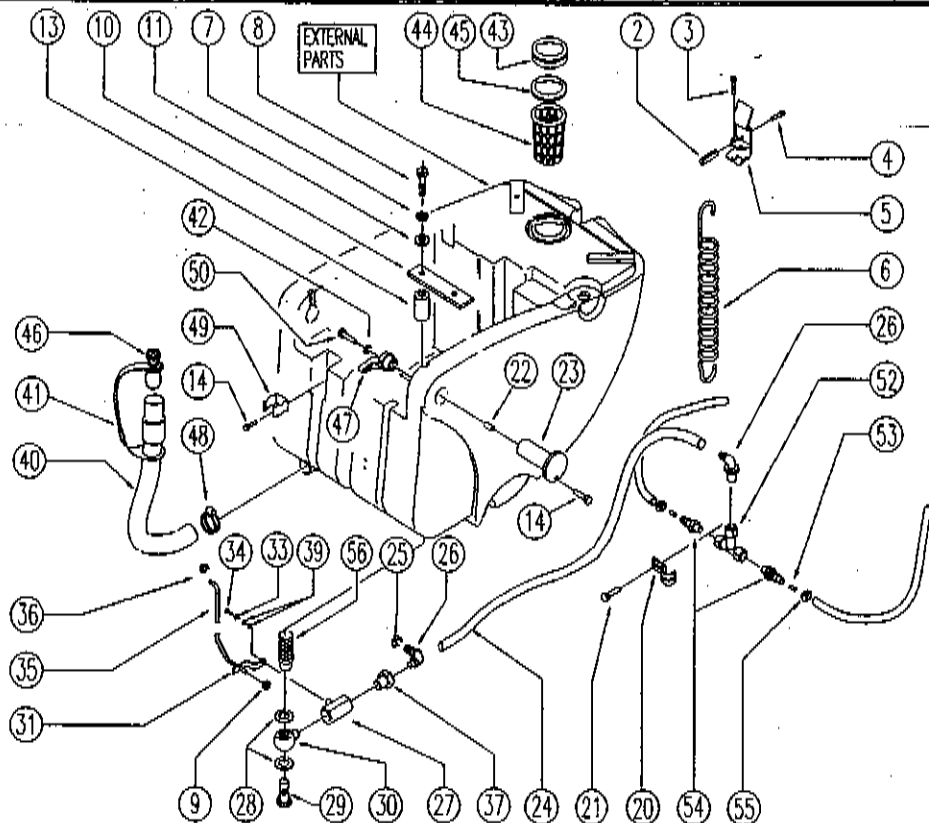
TANK

TANK

RESERVOIR

TANQUE

SERBATOIO INFERIORE



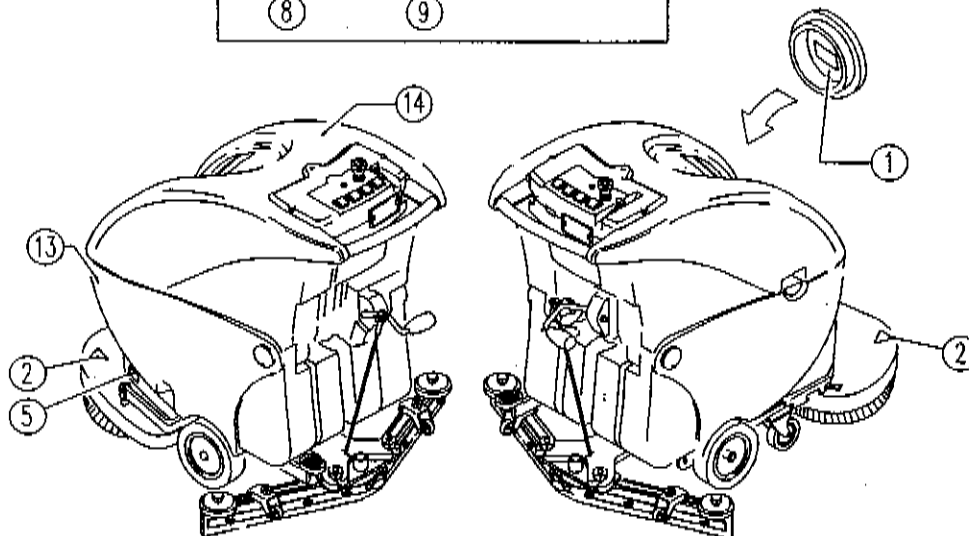
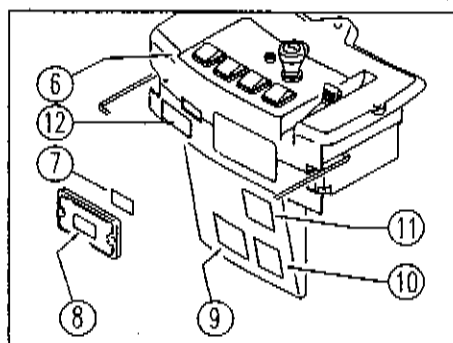
REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
2	SL07426	SPACER	1	DISTANZSTÜCK	ENTRETOISE	DISTANCIADOR	DISTANZIALE
3	SL04222	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
4	SL04278	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
5	SL08829-4	HOOK	1	HAKEN	CROCHET	ENGANCHE	GANCHO
6	SL13102	SPRING	1	FEDER	RESSORT	REBORTE	MOLLA
7	SL08802	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
8	SL04143	SCREW	2	SCHRAUBE	VIS	TORNILLO	RONDELLA
9	SL09041	NUT	3	MÜTTER	ECROU	TUERCA	DADO
10	SL30006	BRACKET	1	BÜGEL	ETRIER	ESTRIBO	BTAFFA
11	SL08803	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
12	SL07512	SPACER	2	DISTANZSTÜCK	ENTRETOISE	SEPARADOR	DISTANZIALE
13	SL04371	SCREW	4	SCHRAUBE	VIS	TORNILLO	VITE
14	SL29381	CLAMP	1	SCHELLE	BANDE	ABRAZADERA	FASCETTA
15	SL04082	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
16	SL04171	INSERT	2	EinSATZ	SEGMENT	ENCAJE	INSERTO
17	SL17493-1	PIN	2	ZAPFEN	PIVOT	PERNO	PERNO
18	SL18312	HOSE	1	SCHLAUCH	TUYAU	TUBO FLEXIBLE	TUBO D.114 L.700
19	SL14007	CLAMP	1	SCHELLE	BANDE	ABRAZADERA	FASCETTA
20	SL18341	UNION/CONNECTOR	2	ANSCHLUSS	RACCORD	UNION/CONNECTOR	RESCA
21	SL18407	TAP	1	HAHN	ROBINET	GRIFO	RUBINETTO
22	SL09336	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
23	SL18287-1	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
24	SL18258	ARTICULATION	1	GELENK	JOINT	ARTICULACION	SNODO
25	SL39171	LEVER	1	HEBEL	LEVIER	PALANCA	LEVA
26	SL08801	WASHER	1	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
27	SL04341	SCREW	1	SCHRAUBE	VIS	TORNILLO	VITE
28	SL30001	ROD	1	STANGE	TIGE	VARILLA	ASTA
29	SL11113	SEGER	1	SEGER	SEGER	SEGER	SEGER
30	SL18109	REDUCTION	1	UNTERSETZUNG	REDUCTION	REDUCCION	REDUZIONE
31	SL06041	WASHER	2	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
32	SL19113-1	HOSE	1	SCHLAUCH	TUYAU	TUBO FLEXIBLE	TUBO D.110 L.
33	SL09577	CLAMP	1	SCHELLE	BANDE	ABRAZADERA	FASCETTA
34	SL08045	WASHER	3	UNTERLEGSCHIBE	RONDELLE	ARANDELA	RONDELLA
35	SL03565	GASKET	1	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
36	SL03565	FILTER	1	FILTER	FILTRE	FILTRO	FILTRO
37	SL03575	GASKET	1	DICHTUNG	JOINT	EMPAQUETADURA	GUARNIZIONE
38	SL18395	KNOB	1	KNAUF	BOUTON A MAIN	BOTON EFERSICO	POMOLO
39	SL17481-1	LEVER	1	HEBEL	LEVIER	PALANCA	LEVA
40	SL14063	CLAMP	1	SCHELLE	BANDE	ABRAZADERA	FASCETTA
41	SL13116	DUCT LOCK	1	SCHLAUCHHALTER	FIXE-TUYAU	BLOQUEO TUBO	PERNO TUBO
42	SL04133	SCREW	2	SCHRAUBE	VIS	TORNILLO	VITE
43	SL18193	UNION/CONNECTOR	1	ANSCHLUSS	RACCORD	UNION/CONNECTOR	RACCORDO A T
44	SL04170	INSERT	2	EinSATZ	SEGMENT	ENCAJE	INSERTO
45	SL18150	UNION/CONNECTOR	2	ANSCHLUSS	RACCORD	UNION/CONNECTOR	RESCA
46	SL14109	CLAMP	2	SCHELLE	BANDE	ABRAZADERA	FASCETTA
47	SL18405	FILTER	1	FILTER	FILTRE	FILTRO	FILTRO

pl1457 aa SN from 01B600

REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	AL02450	POLYPROPYLENE BRUSH		NYLON BURSTEN	BROSSES NYLON	CEPILLOS NYLON	SPAZZOLA NYLON
2	AL02451	POLYESTER BRUSH		FOLIERBURSTERN	BROSSES BORGHIO	CEPILLOS FIBRA	SPAZZOLA BASSINA
3	AL02452	TYNEX BRUSHES		TYNEX BURSTERN	BROSSES TYNEX	CEPILLOS TYNEX	SPAZZOLA TYNEX
4	AL02453	PAD DRIVER		TREIBTELLERS	PLATEAUX PORTE DISQUE	PLATOS DE ARRASTRE	DISCO TRASCINATORE
5	AL03310	STRIPPING PAD (BLACK)		SCHLEIFSCHEBEN (SCHWARZ)	DISQUES ABRASIFS (NOIR)	DISCO ABRASIVOS (PAD)	DISCO ABRASIVO (NERO)
6	AL03311	STRIPPING PAD (GREEN)		SCHLEIFSCHEBEN (GRÜN)	DISQUES ABRASIFS (VERT)	DISCO ABRASIVOS (VERDE)	DISCO ABRASIVO (VERDE)
7	AL03317	STRIPPING PAD (YELLOW)		SCHLEIFSCHEBEN (GELB)	DISQUES ABRASIFS (JAUNE)	DISCO ABRASIVOS (AMARILLO)	DISCO ABRASIVO (GIALLO)

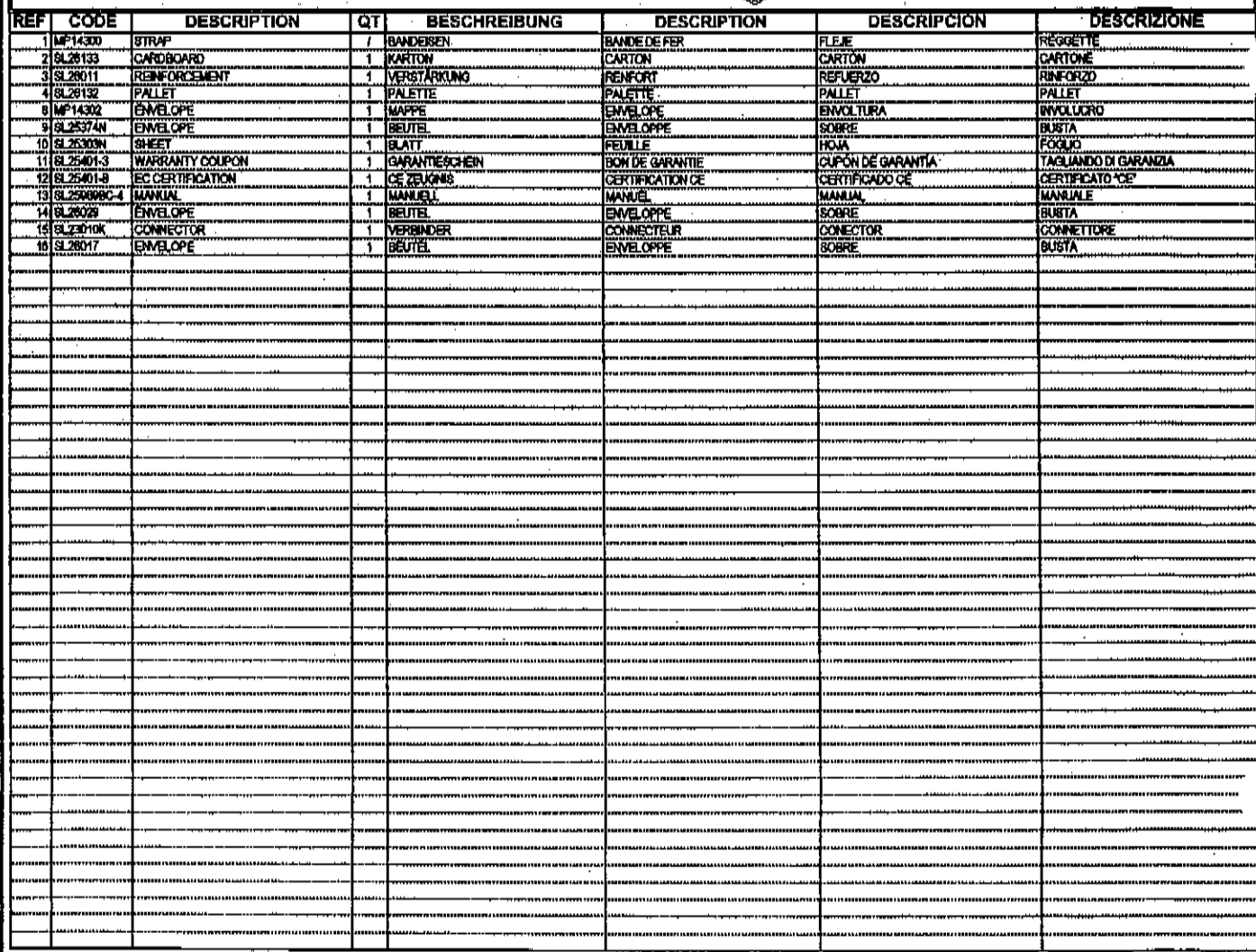
pl1339BC ab SN from 01B600

### ADESIVI-PARTI ESTERNE



REF.	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
1	SL25058	LABEL	1	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
2	SL26384	LABEL	2	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
5	SL25368	LABEL	1	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
6	SL25800	LABEL	1	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
7	SL25828	LABEL	1	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
8	SL25187	LABEL	1	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
9	SL25002	LABEL	1	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
10	SL28177	LABEL	1	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
11	SL25053	LABEL	1	ETIKETT	ETIQUETTE	ETIQUETA	ETICHETTA
12	SL25401-3	PART NUMBER	1	KENNUMMER	ETIQUETTE	ETIQUETA	ETICHETTA
13	SL17584GR	TANK	1	TANK	MATROULE	MATRICOLA	MATRICOLO
14	SL17588BC	TANK	1	TANK	RESERVOIR	TANQUE	SERBATOIO SOLLUZIONE
					RESERVOIR	TANQUE	SERBATOIO RECUPERO

pl1458BC aa SN from 01B600



CODE:

wd27193 ac SN from 02A000

DESCRIPTION: ELEC. WIRING DIAGRAM

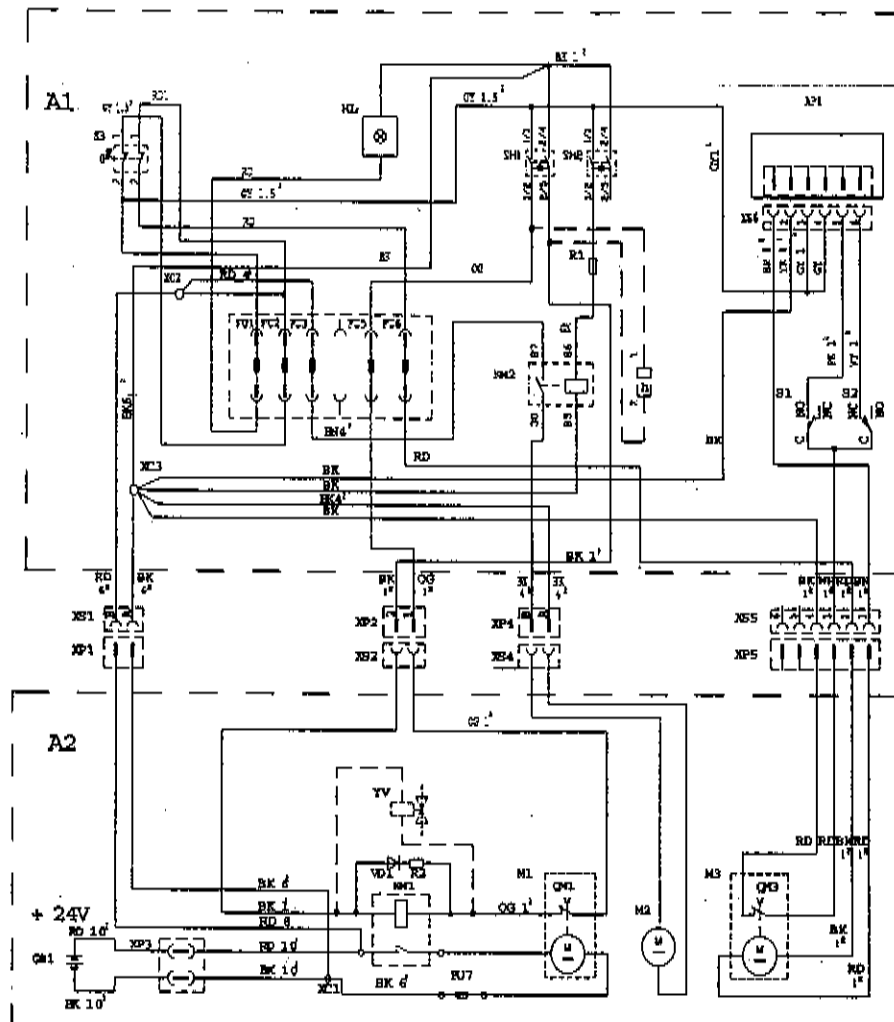
SCHALTPLAN

SCHEMA ELECTRIQUE

ESQUEMA ELECTRICO

SCHEMA ELETTRICO

BK	BLACK	BL	BLUE
BN	BROWN	VT	VIOLET
RD	RED	GR	GRAY
OG	ORANGE	WH	WHITE
YE	YELLOW	PK	PINK
GN	GREEN	TQ	TURQUOISE



REF	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
AP1	SL23731-2	GEARCASE / BOARD		ZENTRALE / KARTE	FICHE DE CONTROLE	CENTRALITA / TARIETA	CENTRALINA TRAZIONE
FU1	SL23144	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 5A
FU2	SL23148	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 30A
FU3	SL23148	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 30A
FU5	SL23144	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 5A
FU6	SL23148	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 30A
FU7	SL23696	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 60A
GB1		BATERIA		BATTERIE	BATTERY	BATTERIE	BATTERIA
HL	SL23031	INDICADOR		ANZEIGER	INDICATOR	INDICATEUR	INDICATORE
KM1	SL23001	TELEINTERRUPTOR		FERNSCHALTER	REMOTE CONTROL SWITCH	TELE-INTERRUPTEUR	TELERUTTORE
KM2	SL23719	RELAY		RELAIS	RELAIS	RELE / RELAIS	RELE / RELAIS
M1	SL02099	MOTOR		MOTOR	MOTOR	MOTEUR	MOTORE SPAZZOLE
M2	SL02303-J	MOTOR		MOTOR	MOTOR	MOTEUR	MOTORE ASPIRAZIONE
M3	SL02202	MOTOR		MOTOR	MOTOR	MOTEUR	MOTORE TRAZIONE
QM1		THERMAL PROTECTION		THERMOSCHUTZ	PROTECTION THERMIQUE	PROTECCION TERMICA	PROTEZIONE TERMICA
QM3		THERMAL PROTECTION		THERMOSCHUTZ	PROTECTION THERMIQUE	PROTECCION TERMICA	PROTEZIONE TERMICA
R1	SL23734	RESISTANCE		WIDERSTAND	RESISTANCE	RESISTENCIA	RESISTENZA
R2	SL23889	RESISTANCE		WIDERSTAND	RESISTANCE	RESISTENCIA	RESISTENZA
S1	SL23109	MICROSWITCH		MIKROSCHALTER	MICRO-INTERRUPTEUR	MICROINTERRUPTOR	MICROINTERRUTTORE
S2	SL23109	MICROSWITCH		MIKROSCHALTER	MICRO-INTERRUPTEUR	MICROINTERRUPTOR	MICROINTERRUTTORE
SB		PUSH-BUTTON		DRUCKKNOPF	POUSOIR	PULSADOR	PULSANTE EMERGENZA
SH1	SL23163	INTERRUPTOR		SCHALTER	SWITCH	INTERRUPTEUR	INTERRUTTORE
SH2	SL23183	INTERRUPTOR		SCHALTER	SWITCH	INTERRUPTEUR	INTERRUTTORE
VD1	SL23470	DIODE		DIODE	DIODE	DIODO	DIODO
XC1	SL23103	ISOLATOR		ISOLIERER	ISOLATEUR	AISLADOR	SUPPORTO ISOLATO
XC2	SL23414	CLAMP		KLEMME	BORNE	BORNE / SUJETADOR	MORSETTO
XC3	SL23414	CLAMP		KLEMME	BORNE	BORNE / SUJETADOR	MORSETTO
XP1	SL23562	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE M.2P CPL
XP2	SL23590	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE M.2P CPL
XP3	SL23010K	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE
YP4	SL23562	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE M.2P CPL
	23558	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE M.6P CPL
	23564	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE F.2P CPL
	23561	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE F.2P CPL
XS4	SL23584	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE F.2P CPL
XS5	SL23559	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE F.5P CPL
XS6	SL23902	CONNECTOR		VERBINDER	CONNECTEUR	CONNECTEUR	CONNETTORE F.6P
H	SL23984J	HOOR METER (OPTIONAL)		STUNDENZÄHLER (ZUBEHÖR)	COMPTE-HEURES (OPTION)	CUENTAHORAS (OPCIONAL)	CONTAORE (ACCESSORIO)
YV	SL18404	ELECTROVALVE (OPTIONAL)		ELEKTROVENTIL (ZUBEHÖR)	SOLPAPE ELECTRIQUE (OPTION)	ELECTROVALVULA (OPCIONAL)	ELETTROVALVOLA (ACCESSORIO)
A1		CONTROL PANEL		INSTRUMENTENBRETT	TABLEAU DE COMMANDE	CUADRO DE MANDO	PANNELLO COMANDO

CODE:

wd27193-1 ac SN from 02A000

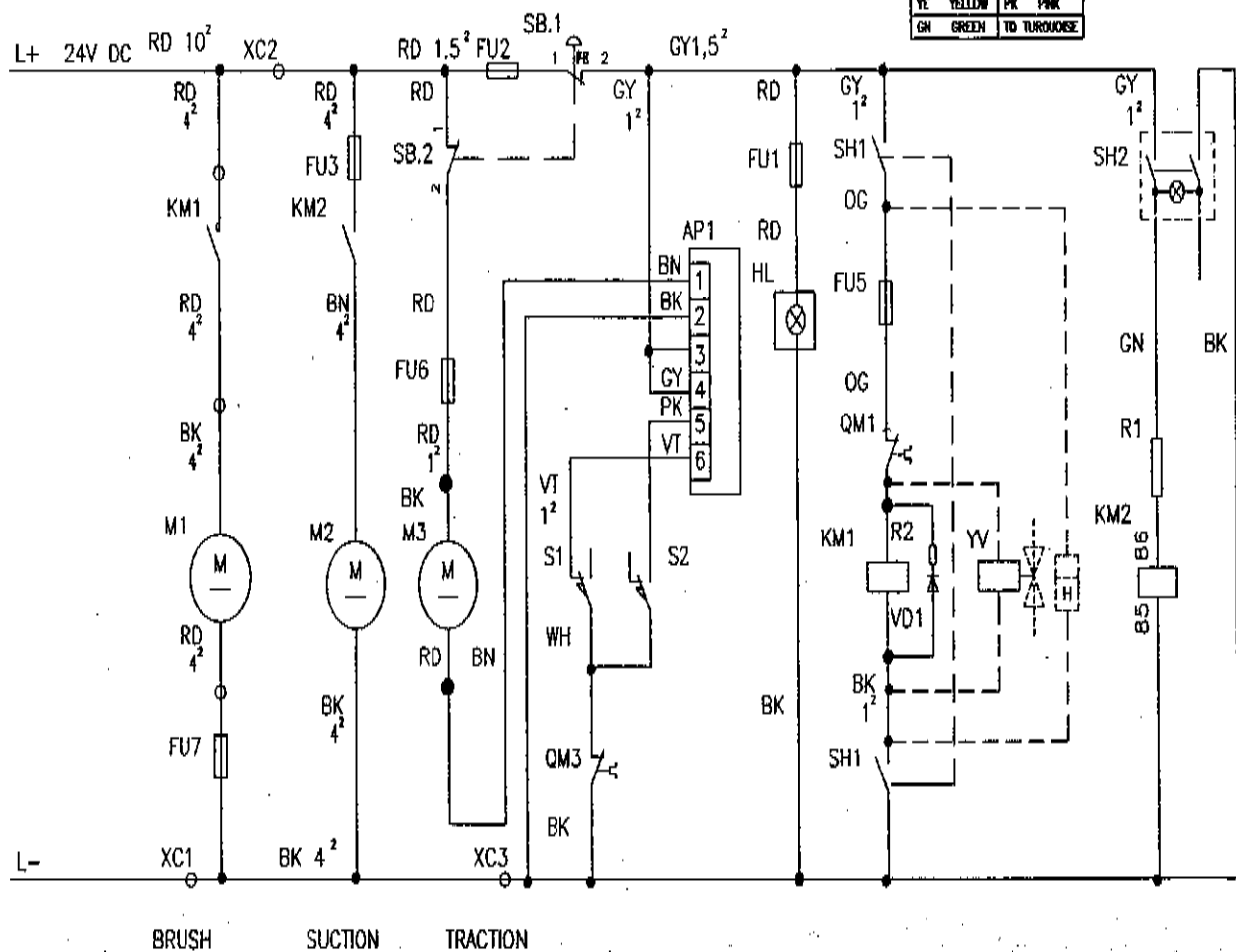
DESCRIPTION: ELEC. SCHEMATIC DIAGRAM

SCHALTPLAN

SCHEMA ELECTRIQUE

ESQUEMA ELECTRICO

SCHEMA ELETTR. FUNZIONALE



REF.	CODE	DESCRIPTION	QT	BESCHREIBUNG	DESCRIPTION	DESCRIPCION	DESCRIZIONE
AP1	SL23731-2	GEARCASE / BOARD		ZENTRALE / KARTE	FICHE DE CONTROLE	CENTRALITA / TARJETA	CENTRALINA TRAZIONE
FU1	SL23144	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 5A
FU2	SL23148	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE E 30A
FU3	SL23148	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 30A
FU5	SL23144	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 5A
FU6	SL23148	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE PER 30A
FU7	SL23098	FUSIBLE		SICHERUNG	FUSE	FUSIBLE	FUSIBILE 60A
GB1		BATERIA		BATTERIE	BATTERY	BATTERIE	BATTERIA
HL	SL23031	INDICADOR		ANZEIGER	INDICATOR	INDICATEUR	INDICATORE
KM1	SL23001	TELEINTERRUPTOR		FERNSCHALTER	REMOTE CONTROL SWITCH	TELE-INTERRUPTEUR	TELERUTTORE
KM2	SL23719	RELAY		RELAIS	RELAIS	RELE	RELE
M1	SL02086	MOTOR		MOTOR	MOTOR	MOTEUR	MOTORE SPAZZOLE
M2	SL02303-J	MOTOR		MOTOR	MOTOR	MOTEUR	MOTORE ASPIRAZIONE
M3	SL02202	MOTOR		MOTOR	MOTOR	MOTEUR	MOTORE TRAZIONE
QM1		THERMAL PROTECTION		THERMOSCHUTZ	PROTECTION THERMIQUE	PROTECCION TERMICA	PROTEZIONE TERMICA
QM3		THERMAL PROTECTION		THERMOSCHUTZ	PROTECTION THERMIQUE	PROTECCION TERMICA	PROTEZIONE TERMICA
R1	SL23734	RESISTANCE		WIDERSTAND	RESISTANCE	RESISTENCIA	RESISTENZA
R2	SL23099	RESISTANCE		WIDERSTAND	RESISTANCE	RESISTENCIA	RESISTENZA
S1	SL23109	MICROSWITCH		MIKROSCHALTER	MICRO-INTERRUPTEUR	MICROINTERRUPTOR	MICROINTERRUTTORE
S2	SL23109	MICROSWITCH		MIKROSCHALTER	MICRO-INTERRUPTEUR	MICROINTERRUPTOR	MICROINTERRUTTORE
SB		PUSH-BUTTON		DRUCKKNOPF, TASTE	BOULON-POUSSOIR	PULSADOR	PULSANTE EMERGENZA
SH1	SL23183	INTERRUPTOR		SCHALTER	SWITCH	INTERRUPTEUR	INTERRUTTORE
SH2	SL23183	INTERRUPTOR		SCHALTER	SWITCH	INTERRUPTEUR	INTERRUTTORE
VD1	SL23470	DIODE		DIODE	DIODE	DIODO	DIODO
XC1	SL23103	INSULATOR		ISOLIERER	ISOLATEUR	ASLADOR	SUPPORTO ISOLATO
XC2	SL23414	CLAMP		KLEMME	BORNE / SUIJETADOR	BORNE / SUIJETADOR	MORSETTO
XC3	SL23414	CLAMP		KLEMME	BORNE	BORNE / SUIJETADOR	MORSETTO
H	SL23084	HOUR METER (OPTIONAL)		STUNDENZÄHLER (ZUBEHÖR)	COMPTES-HEURES (OPTION)	CUENTA-HORAS (OPCIONAL)	CONTORE (ACCESSORIO)
YV	SL18404	ELECTROVALVE (OPTIONAL)		ELEKTROVENTIL (ZUBEHÖR)	SOUPAPE ELECTRIQUE (OPTION)	ELECTROVALVULA (OPCIONAL)	ELETTROVALVOLA (ACCESSORIO)
A1		CONTROL PANEL		INSTRUMENTENBRETT	TABEAU DE COMMANDE	CUADRO DE MANDO	PANNELLO COMANDO
A2		BODY WIRING DIAGRAM		SCHALTPLAN KÖRPER	SCHEMA ELECTRIQUE CORPS	ESQUEMA ELECTRICO CUERPO	CORPO MACCHINA