

# BPS28 28" Battery Powered Sweeper

## Parts Schematic

Item #89001



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# INDEX

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## BPS-28

.....	General information and key	.....	Page 1
1.1	Safety Warning	.....	Page 1
1.2	Machine Registration Sheet	.....	Page 2
1.3	Serial number and CE marking	.....	Page 2
1.4	Technical features and specifications	.....	Page 2
1.5	Foreword	.....	Page 3
1.6	Machine Application	.....	Page 3
1.7	Unpacking the machine	.....	Page 3
2.1	Preparing the machine for operation	.....	Page 3
2.2	Preparing the battery for operation	.....	Page 4
3.1	Controls	.....	Page 4
4.1	Starting	.....	Page 4
4.2	Correct operation	.....	Page 5
4.3	Cleaning the waste bins	.....	Page 5
5.1	Routine maintenance	.....	Page 6
5.2	Battery maintenance	.....	Page 6
5.2.1	Battery recharge	.....	Page 6
5.3	Filter maintenance	.....	Page 7
5.4	Replacing and adjusting the side brush	.....	Page 8
5.5	Replacing and adjusting the center brush	.....	Page 8
5.6	Replacing and adjusting the belts	.....	Page 9
5.7	Replacing and adjusting the flaps	.....	Page 10
5.8	Replacing and positioning the cables	.....	Page 11
6.1	Wiring diagram	.....	Page 12
6.2	Trouble shooting	.....	Page 13
6.3	Scrapping the machine	.....	Page 13

## GENERAL INFORMATION – KEY

Indications such as **RIGHT** or **LEFT**, **CLOCKWISE** or **COUNTER-CLOCKWISE** used in this booklet relate to the forward movements of the machine.

**NOTE** This symbol draws your attention to operations that could cause **damage to the machine** if improperly executed.



This symbol draws your attention to operations that could cause **injury to the operator** if improperly executed.



This symbol draws your attention to operations that must be read about **very carefully**.

Consult this manual carefully to gain confidence with your machine and learn how to use it more efficiently.

### 1.1 SAFETY WARNING



All the paragraphs in the following chapter may cause damage to people and/or objects if improperly executed.

**ALWAYS KEEPS THE MACHINE OUT OF THE REACH OF CHILDREN.**

#### IMPORTANT NOTE:

##### ***Precautions to be taken before attempting to start the machine.***

To facilitate transport, the side brush and the handlebar have not been assembled in their actual work position. Therefore before using the machine, assemble them as shown in this handbook.

Do not use the machine to pick up (recover) liquid.

The machine must be used by authorized personnel only. Before cleaning or servicing the machine, always turn it off.

As the machine is not provided with a parking brake or service brake, pay attention when you are using it on sloping surfaces.

Do not leave the machine unattended on sloping surfaces.

The machine must be used only by qualified and authorized personnel.

For this purpose, **NEVER**:

- use the machine to transport people;
- touch the moving parts of the machine;
- remove the machine's guards when it is running;
- do not leave the operating machine unattended.

Always wear clothing suiting the kind of work you are carrying out.

If you are working in a particularly dusty environment (for instance; cement factories, sawmills, marble processing factories), it is recommended that you wear:

- a mask
- protective goggles
- gloves

Do not use a jet of water to wash the machine.

The machine must not be used for the recovery of toxic or hazardous substances.

The machine can only work in presence of light.

NEVER LEAVE the machine with the key in the dashboard unattended.

In case the machine is being used in a place where there is a danger for falling little objects, a helmet must be worn by the operator.

Do not use the machine to sweep up cables, straps, wire, or similar material. Do not use the machine near cables, wire, or similar material.

**IMPORTANT:** The manufacturer cannot be held responsible for damage in the event that the machine is used for purposes other than those it was designed for.

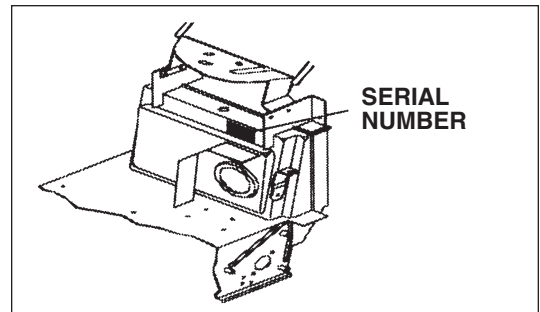
The machine must never be tampered with for any reason whatsoever; in this event, the manufacturer will accept no responsibility for improper use or damage to the machine.

### 1.2 MACHINE REGISTRATION SHEET

<b>Model:</b>	<b>BPS-28</b>		
<b>Serial number:</b>	_____	<b>Date of manufacture:</b>	_____
<b>Commissioned on:</b>	_____	<b>Commissioned by:</b>	_____

### 1.3 SERIAL NUMBER AND CE MARKING

Always ensure that the machine is provided with a name plate giving the **serial number and CE marking**. If not, advise your dealer immediately.



### 1.4 TECHNICAL FEATURES AND SPECIFICATIONS

- Maximum width with side brush . . . . .810 mm
- Maximum length with side brush . . . . .1160 mm
- Maximum height with side brush . . . . .1000 mm
- Actual cleaning width – main brush . . . .520 mm
- Weight . . . . .68 kg
- Weight of empty battery . . . . .12.8 kg
- Waste bin capacity . . . . .32 lt.
- Working life . . . . .3.5 h.
- Filtering surface . . . . .1.25 m $\Delta$
- Productivity . . . . .2500m $\Delta$ /h
- Installed power . . . . .360W/28A
- Battery type . . . . .12V 105A
- Noise level . . . . .68 dBA
- Vibrations . . . . .2.5 m/Sec $\Delta$

## 1.5 FOREWORD

The purpose of this manual is to inform the operator of the basic rules, safety rules and criteria which must be observed when using, adjusting and maintaining the machine. The machine has been developed and has been developed and manufactured to ensure excellent performance and the utmost comfort and ease of operation in a variety of working conditions. Before delivery, the machine has been checked at our factory and by our dealer to make sure it is handed over to you in perfect working order: To maintain the machine in this condition and ensure problem-free operation, it is essential to follow the routine maintenance instructions given in this handbook.

## 1.6 MACHINE APPLICATION

The machine, composed of a brush and a suction system, is to be used **EXCLUSIVELY** to clean dry surfaces. Any other use could be cause of damage to people or things and is therefore **PROHIBITED**.

## 1.7 UNPACKING THE MACHINE

Unpack the machine with the utmost care; avoid carrying out any operation that that could damage it. Once it has been unpacked, check whether it is damaged. If you notice that it is not in correct working order, **DO NOT** use it and inform your dealer. For packaging and transport purposes, some parts and accessories are supplied disconnected from the machine. To assemble them, carefully follow the instructions given in the relevant sections.

### **Contents of package:**

- 1 Machine
- 1 Side brush
- 1 Instructions and spare parts manual.
- 2 Ignition keys
- 1 Declaration of conformity
- 1 Warranty slip
- 1 Handle's fixing key

If one of the above mentioned parts is missing, please inform your dealer right away.



Take care to keep the packaging materials (bags, cartons pallets, hooks, etc) out of the reach of children.

### **NOTE**

For security during transport, the ignition keys and Handle's fixing key have been fixed to the handle.

## 2.1 PREPARING THE MACHINE FOR OPERATION

### 2.1.1 MOUNTING THE SIDE BRUSH

- Switch the brush lift lever to OFF.
- Remove the screw from the side brush drive shaft.
- Fit the brush on the shaft.
- Screw on the screw and washer.

### 2.1.2 MOUNTING THE HANDLEBAR (FIG. 2A)

Locate the handle at the right height, by using one of the fixing holes (Pos.1 or Pos.2). Fix the handle to the frame by means of 2 screws "A."

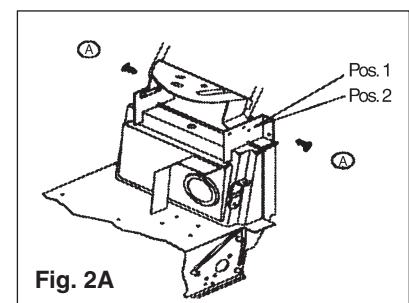


Fig. 2A

## 2.2 PREPARING THE BATTERY



The battery must be prepared before it is mounted on the machine. This simple precaution will prevent the machine from being damaged by the electrolytic liquid of the battery. Always prepare the battery in a sufficiently ventilated environment. Do not smoke or use flames during this operation (see the section on battery maintenance). Once the battery has been charged, make sure the electrolytic liquid containers are stored in a safe place **AWAY FROM CHILDREN**.

## 3.1 CONTROLS

1. **Side brush control lever:** Switch the lever to **ON** and the side brush will move to work position and start spinning. To stop the brush, switch the lever to **OFF**.
2. **Key switch:** This switch starts and stops all the machine's functions.
3. **Battery charger socket:** By plugging a battery charger in this socket you will recharge the battery.
4. **Charge indicator light:** This light indicates the state of the battery during operation.
5. **Traction lever:** By pressing this lever, the machine will start moving forwards.
6. **Filter shaker lever:** This lever operates the filter shaker to clean the filter (see the section on filter maintenance).
7. **Mains led**
8. **Suction switch**

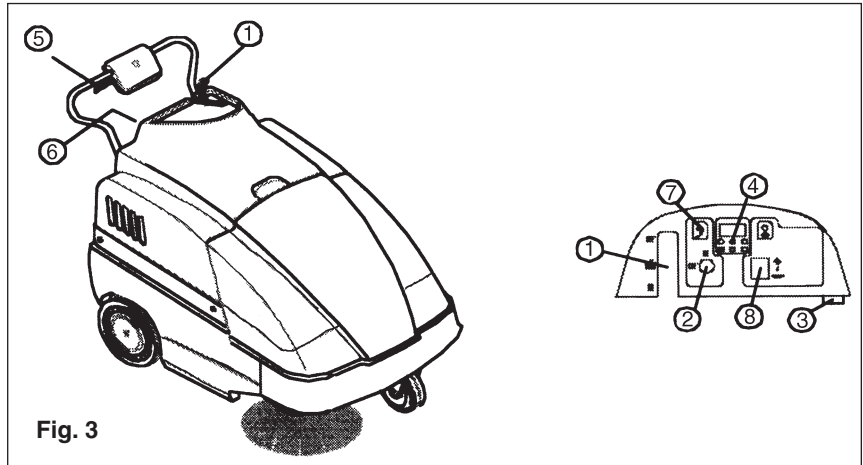


Fig. 3

## 4.1 STARTING

**ATTENTION!** The machine must be used by authorized personnel only. **DO NOT** leave the machine **UNATTENDED** when it is running. Do not use the machine to soak up liquid. Take out the key before leaving the machine. **KEEP THE MACHINE OUT OF THE REACH OF CHILDREN.**

To start the machine, carry out the following operations:

- Make sure the side brush (#1, Fig. 3) is **OFF**.
- Turn the switch (#2, Fig. 3) **ON**. Wait 10 seconds before the machine sets off.
- Before the machine sets working, check the indicator (#4, Fig. 3) to assess whether the battery is fully charged. If it is not, proceed to recharge it.
- Pull the traction lever (#5, Fig. 3) to start cleaning.

If necessary, operate lever (#1, Fig. 3) by turning it **ON**, to start the side brush. If you have been using the side brush, at the end of your work remember to turn it **OFF**. Switch off the machine and remove the key from the control panel. An automatic device will prevent you from using the machine beyond a certain battery charge limit. When this limit is reached, the machine will stop and the battery **must be recharged**.

## 4.2 CORRECT OPERATION

After you have become familiar with the operations required to start the machine, you can actually start using the sweeper. To obtain the best results, it is always wise to take a few precautions. These will help you to get the best from your machine and reduce damage to a minimum.

In particular:

- Do not use the machine to clean up wires, ropes or straps or pick up water and other liquids.
- When using the machine on light but bulky material (sheets of paper, leaves, etc.), raise the front part of the machine by pressing down the handlebar so that the machine can tackle the rubbish.
- Operate the filter shaker at the end of your work (see the "Panel Filter" section).
- Make sure the center brush is correctly regulated (see the section on adjusting the centre brush).

## 4.3 CLEANING THE WASTE BINS

Before carrying out this operation, make sure all parts are off.

**(\*) ATTENTION: WASTES MUST BE DISPOSED OF STRICTLY IN ACCORDANCE WITH THE LAW.**

### 4.3.1 FRONT BIN/DIRT HOPPER

Lift the hood.

Lift and turn the two bin locks.

Grasp the handle and remove the bin by pulling it upwards.

Empty the bin (\*).

*To put the bin back in place:*

Put the bin back in the machine from the top.

Turn and lower the two locks.

### 4.3.2 REAR BIN/BACK DRAWER

Lift and turn the two bin locks.

Grasp the handle and pull the bin out of the machine.

Empty the bin (\*).

*To put the bin back in place:*

Fit the bin back into the machine.

Turn and press the two locks.

**NOTE**



## 5.1 ROUTINE MAINTENANCE

ALL ROUTINE MAINTENANCE AND SPECIAL MAINTENANCE MUST BE CARRIED OUT BY COMPETENT PERSONNEL OR BY AN AUTHORIZED SERVICE CENTER .ALWAYS USE ORIGINAL SPARE PARTS. ATTENTION: ALL MAINTENANCE OPERATIONS MUST BE CARRIED OUT WITH THE MACHINE OFF.

<b>CHECK</b>				
Check the battery liquid	X	X		
The belts for slackening				X
The tightness of nuts and screws			X	
The brushes for wear			X	
The gaskets for wear and leakage		X		
If all the functions are in working order	X			X

## 5.2 BATTERY MAINTENANCE

The battery must be kept clean and dry. Keep the terminals and poles clean. Every 10 hours, remove the caps and check the electrolyte level. If necessary, top-off with distilled water.

The battery should be serviced in a properly ventilated area. During this operation, do not expose the battery to open flames and do not smoke.



### 5.2.1 BATTERY RECHARGE

When the machine is off:

Remove the caps from the battery cells.

**NOTE**

Top up with distilled water.

Plug in a battery charger (#3, Fig. 3) bearing up .

The life of the battery will depend on its routine maintenance and on its discharge level. Do not allow the battery charge to drop below the limit signalled by indicator lights (#4, Fig.3). At the max. discharge level, the machine stops and needs to be recharged in order to resume working.

### **CHARGE INDICATOR LIGHTS**

**GREEN LIGHT:** The battery is charged.

**YELLOW LIGHT:** The battery is running out;recharge as soon as possible:

**RED LIGHT:** The battery has run out. DO NOT operate the machine.

### **CARBON BRUSH FOR ELECTRIC MOTOR:**

Always try to replace these brushes before they reach **1000 hours** of work.



## 5.3 FILTER MAINTENANCE

### *CLEANING THE FILTER*

The filter is one of the machine main components. It is essential for the best results from your machine. If you notice that dust forms when the machine is at work, check the filter.

#### *The filter is cleaned as follows:*

- A. Press and release the lever of the appropriate filter shaker, (#6, Fig. 3). The lever operates a rod that will unclog the filter. Repeat this operation 5 or 6 times.
- B. Apart from the filter shaker, it is advisable every now and again to remove the machine's filter and clean it out with a blast of air or a vacuum cleaner.

For this purpose, the filter is removed as follows:

- Remove the rear bin/back drawer.
- Lift the blocking handle (#1, Fig. 4).
- Rotate the handle, in order to remove the filter
- Remove the filter (#3, Fig. 4) while holding up the filter shaker rod.
- To remount the filter (#3, Fig. 4) carry out the operation in reverse order.
- **ATTENTION:** The filter features an arrow that shows you the direction in which it should be fitted.

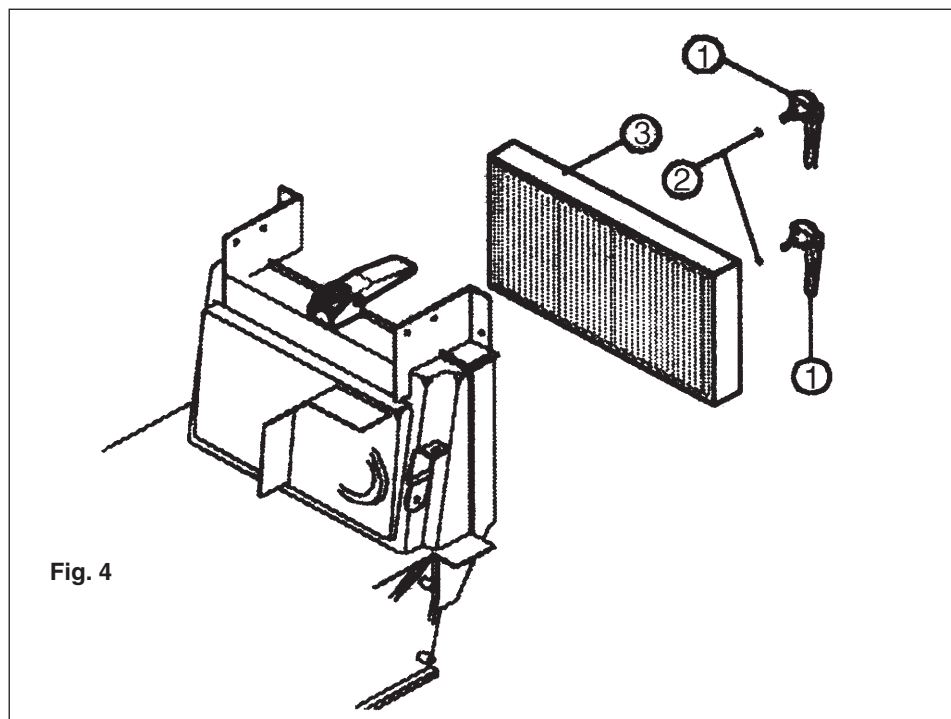
**DUSTY ENVIRONMENTS:** If you are using the machine in a particularly dusty environment (cement factories, sawmills, marble processing factories), it is wise to use the filter shaker more frequently.

### *REPLACING THE FILTER*

Every 200 hours of work, the filter must be replaced. Follow the operations listed in point B.

After the filter has been remounted, make sure the gasket and filter are dust tight.

**WASTES MUST BE DISPOSED OF IN ACCORDANCE TO THE LAW.**



## 5.4 REPLACING AND ADJUSTING THE SIDE BRUSH

### *REPLACING*

After lifting the front part of the machine, replace the side brush by loosening the brush fixing screw and removing the brush. Replace the brush and secure the new one in place with the screw and its washer.

### *ADJUSTING*

The side brush is adjusted by loosening screws and using the slots to position the brush at the required height. Once you have positioned it, tighten the two screws.

## 5.5 REPLACING AND ADJUSTING THE MAIN BRUSH

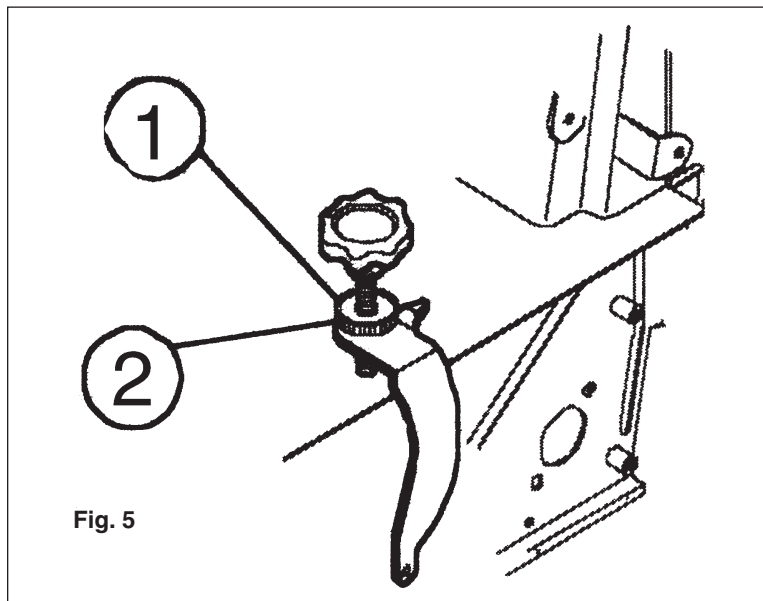
### *REPLACING*

To replace the main brush, remove the front bin and loosen the four fixing screws to remove the brush.

When mounting a new brush, pay attention to the direction in which the brush will spin: it must direct dirt toward the center of the machine.

### *ADJUSTING*

To adjust the main brush, lift the top bonnet, loosen the lock nut (#2, Fig. 5) and turn adjusting handle (#1, Fig. 5) in the direction required (counterclockwise to increase pressure). By pulling up the handle, the brush will turn idle. This will allow you to position the brush in a place where it will not prevent the top bonnet from closing.



## 5.6 REPLACING AND ADJUSTING THE BELTS

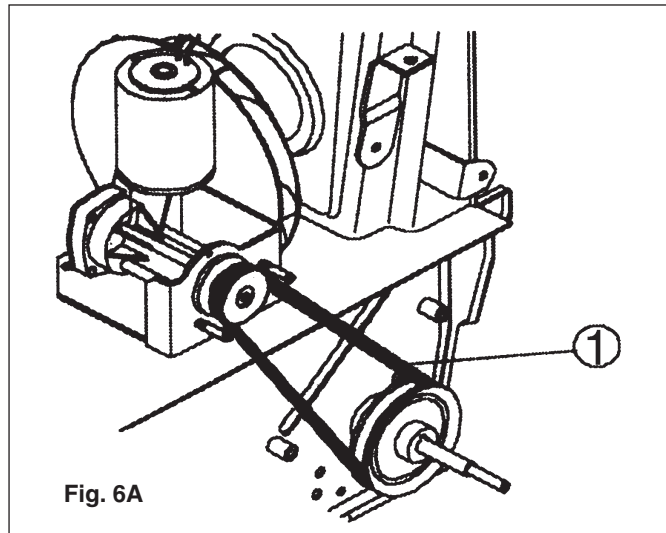
*To prepare the machine for belt replacement, carry out the following operations:*

- Remove the top bonnet and the front bin.
- After removing the right wheel, loosen the screws that secure the bumper and right side guard in place and remove the latter.

With the machine dismantled in such a manner, you can replace the damaged belt.

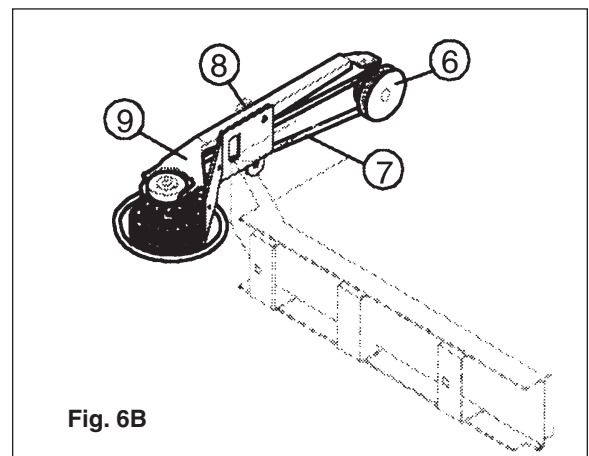
### 5.6.1 REPLACING THE DRIVE BELT

- Remove belt (#1, Fig. 6) from the grooves of pulley.
- Position belt on pulley



### 5.6.1 REPLACING THE SIDE BRUSH BELT

- Remove belt (#7, Fig. 6) from pulley (#6, Fig. 6). Loosen fixing pin (#8, Fig. 6) and let the hooks of side arm (#9, Fig. 6) come out of the idle toothed ring.
- Remove belt (#7, Fig. 6) from side arm (#9, Fig. 6).
- Replace the belt.
- Hook side arm (#9, Fig. 6) to the idle toothed ring.
- Tighten pin (#8, Fig. 6).
- Place belt (#7, Fig. 6) on pulley (#6, Fig. 6).



## 5.7 REPLACING THE FLAPS

### 5.7.1 OUTER SIDE FLAPS

To replace the side flaps (#1, Fig. 7), remove the rear wheels and the relevant side guards. Loosen the screws that secure the flaps to frame (#2, Fig. 7) and replace the old flaps with new ones.

### 5.7.2 INNER SIDE FLAPS

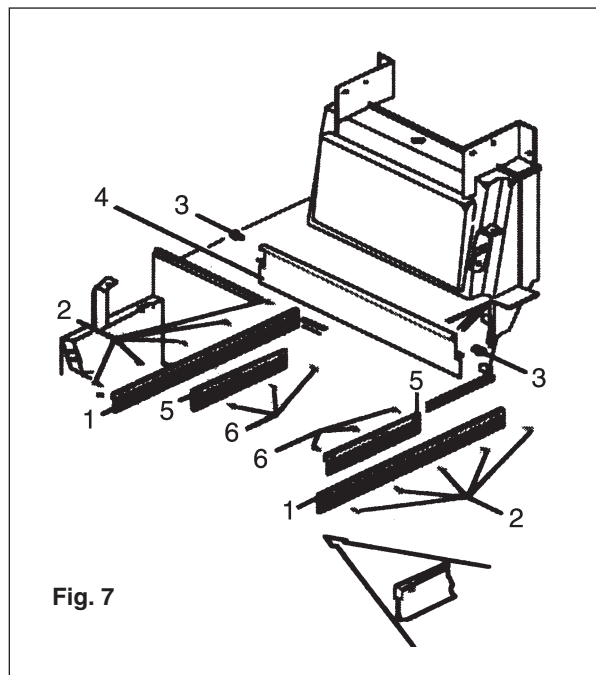
To replace the inner side flaps (#5, Fig. 7), lift the front part of the machine and loosen screws (#6, Fig. 7) that secure the flaps to the frame. Replace the old flaps with new ones.

### 5.7.3 CENTER FLAPS

- Remove the rear wheels and the relevant side guards.
- Remove the rear door.
- Loosen the two flap fixing pins (#3, Fig. 7), located on the sides of the frame. Grasp flap (#4, Fig. 7) and pull it outward.

#### Remounting

- Fit the flaps in the same direction in which they are removed.
- Insert the two references in their holes.
- Tighten the two fixing pins and



## 5.8 REPLACING THE TRACTION CABLE

### 5.8.1 REMOVE THE TRACTION CABLE AS FOLLOWS:

- Open the upper hood of the machine.
- Lift the security dowel located on the cable fixing pin.
- Open the traction handle casing.
- Pull the cable out of the fixing pin and remove the adjusting screw mounted on the handle.
- Press the handle and pull the cable out of its sheath.

#### ***To remount the cable:***

- Fit one end of the cable into the adjustment screw of the handle (i.e. the end without the blocking ball).
- Insert the cable into its sheath.
- Hook the blocking ball to the handle.
- Slot the cable through the turned adjustment screw secured to the machine frame and then through the fixing pin.
- Tighten the security dowel.

The position of the cable is adjusted by acting on the two adjustment screws.

### 5.8.2 REPLACING THE SIDE BRUSH LIFTING CABLE

#### ***To replace the side brush lifting cable, proceed as follows:***

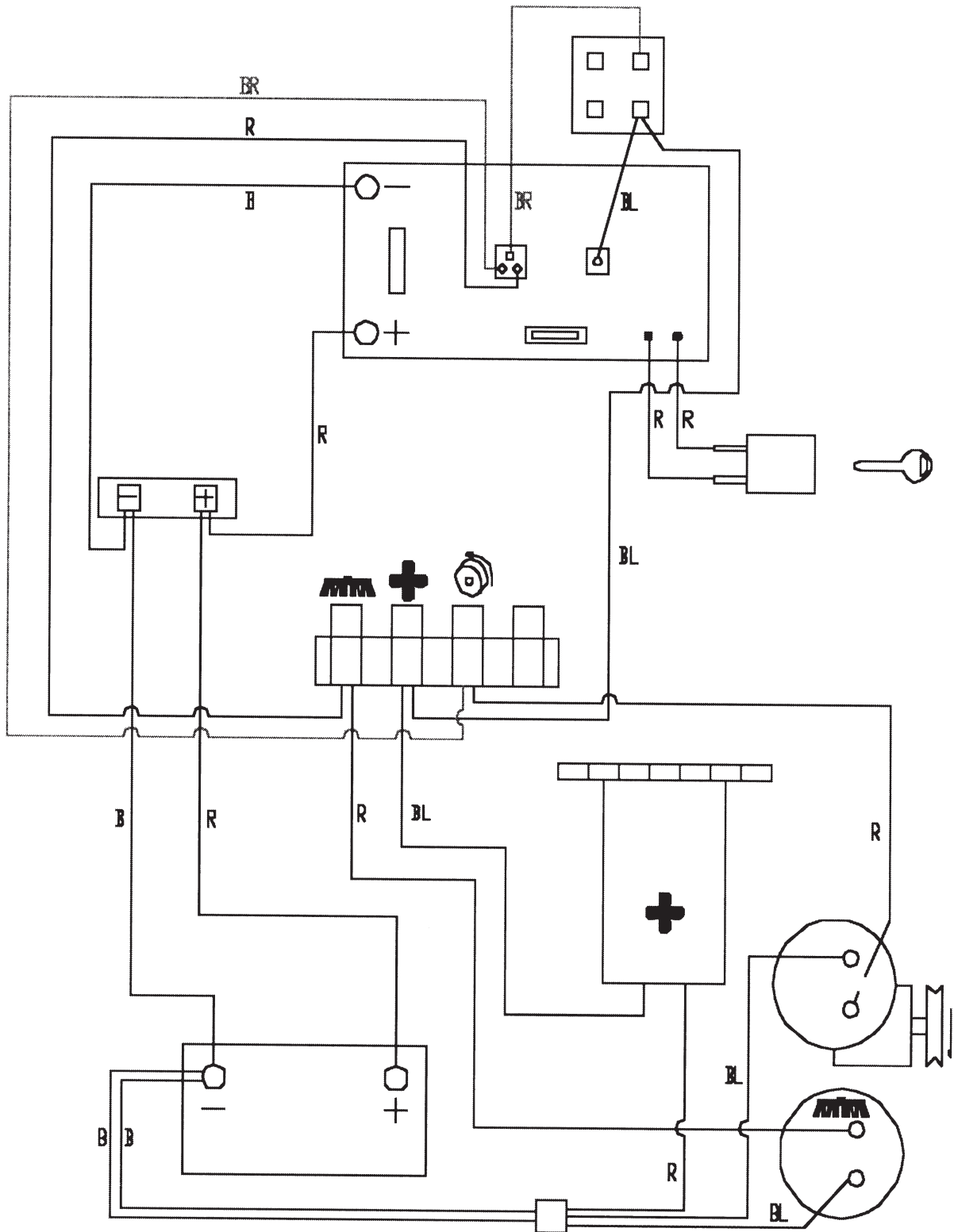
- Remove the upper hood and the front hopper of the machine.
- Remove the front bumper, the right wheel and the right hand side guard.
- Loosen the cable clamp.
- Loosen the security dowel on the fixing pin.
- Remove the handle from the support and open it up.
- Pull the cable out of the two sheaths.

#### ***To remount the cable:***

- Put the cable inside the handle.
- Close up the handle and fix it to its support.
- Insert the cables into their sheaths.
- Secure one end of the cables in place with the clamp and the other end with the fixing pin.

The position of the cable is adjusted by acting on the two adjustment screws.

# 6.1 WIRING DIAGRAM



## 6.2 TROUBLESHOOTING

Trouble	Cause	Remedy
<b>The main brush is not spinning</b> .....	The belt is broken.....	Replace
	The motoriduct has burnt out.....	Replace
	A wire is detached.....	Check
<b>The side brush is not spinning</b> .....	The belt is broken.....	Replace
<b>The battery does not stay charged</b> .....	The liquid is insufficient .....	Top-off
	The terminal is loose .....	Tighten
<b>Dust comes out of the fan</b> .....	The filter is broken.....	Replace
	The filter is in the wrong position .....	Position correctly
	The gaskets are worn.....	Replace
<b>The brushes wear out too quickly</b> .....	The brushes are too low.....	Adjust
<b>Dust forms during operation</b> .....	The flaps are worn .....	Replace
	Clogged filter .....	Cleaning
<b>The suction motor does not work</b> .....	The motor has burnt out.....	Replace
	The wire is disconnected.....	Check
<b>The machine does not come on</b> .....	The battery terminals are disconnected.....	Check
	The battery is discharged.....	Recharge

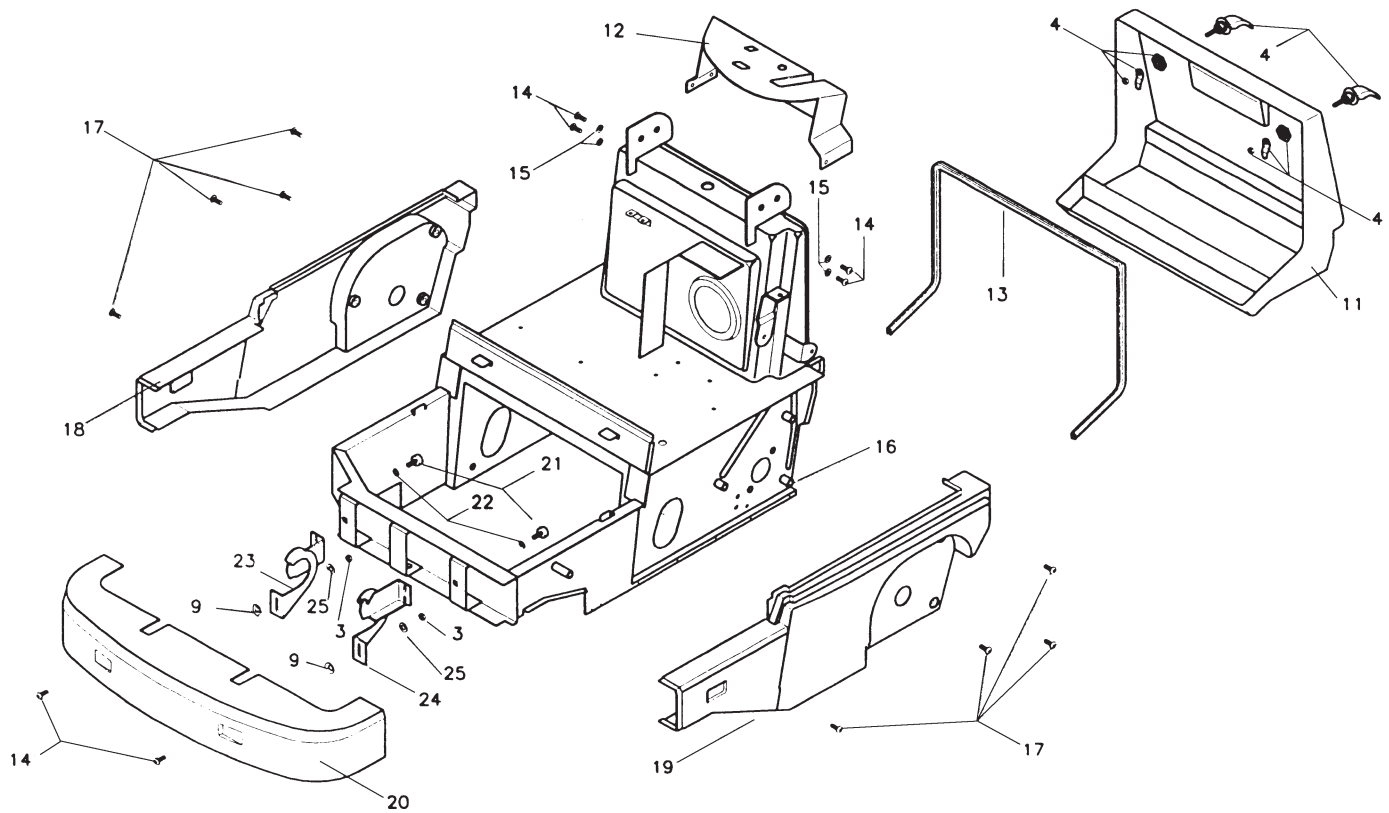
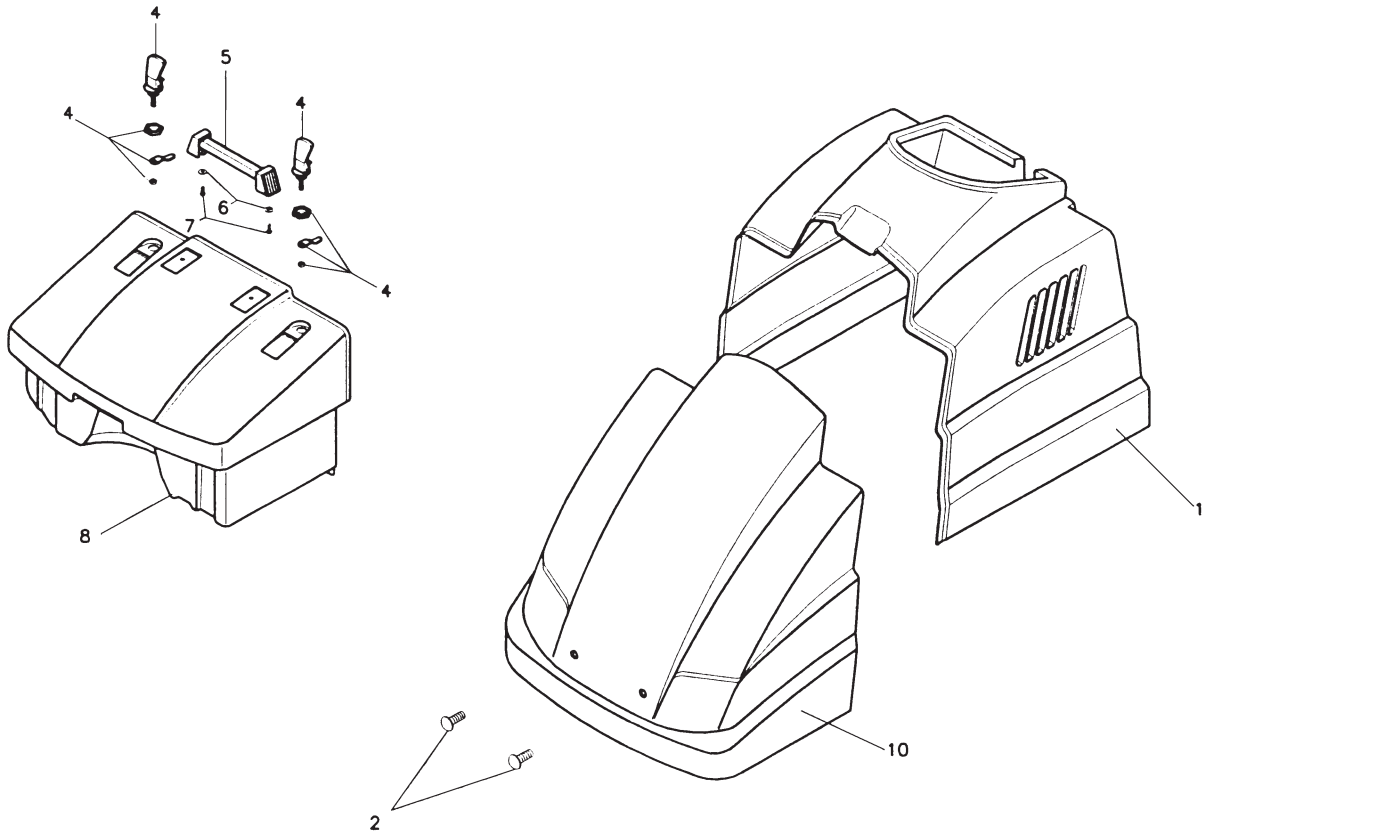
## 6.3 SCRAPPING THE MACHINE

In the event the machine must be scrapped, please remember that batteries are not common waste materials. They must be disposed of in accordance with the relevant laws.

The machine is composed of different parts. Dismantle it and prepare the wastes for disposal or recycling in accordance to their type.

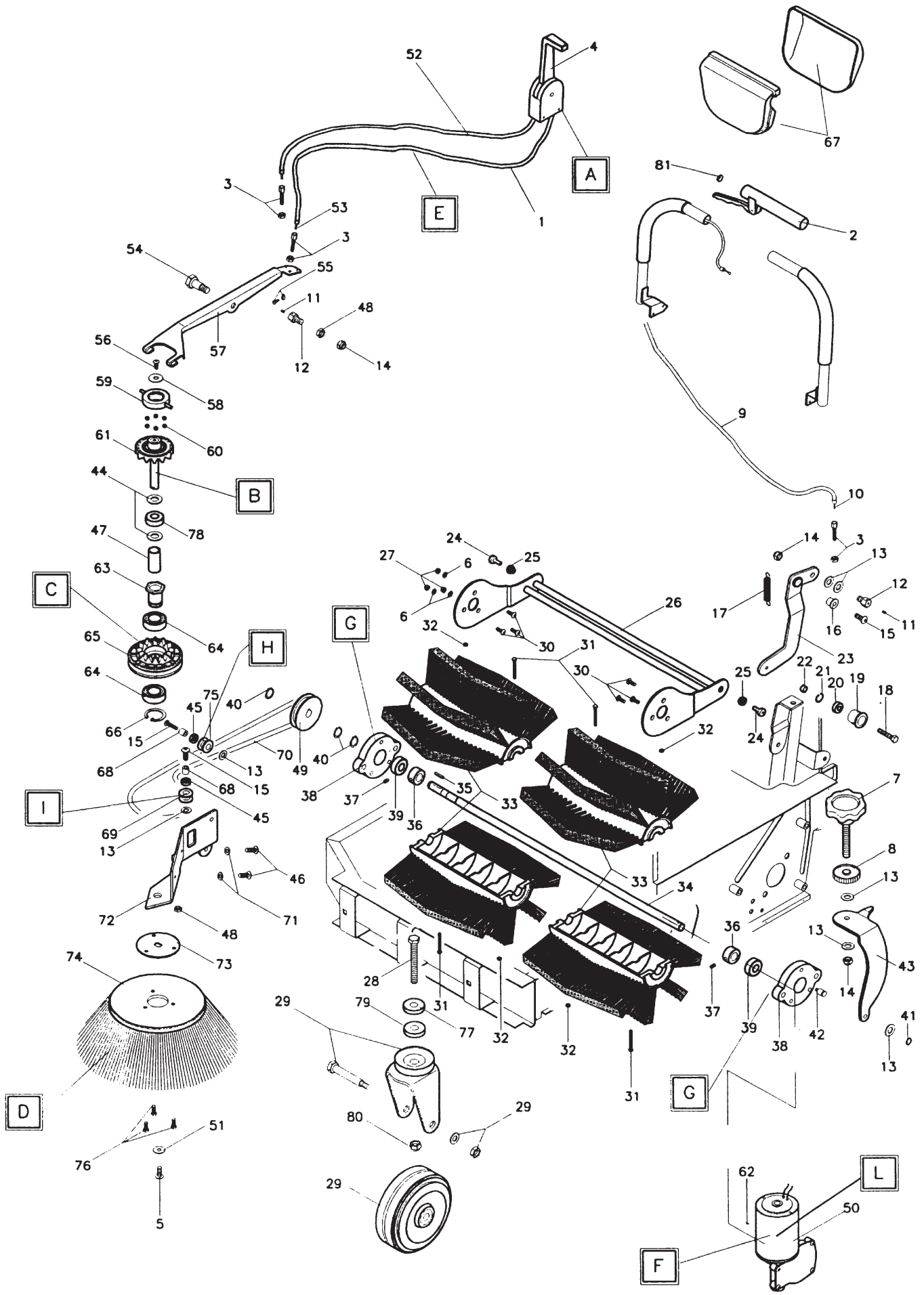
**DO NOT USE THE SCRAP PIECES AS SPARE PARTS.**

**KEEP SCRAPS OUT OF REACH OF CHILDREN.**





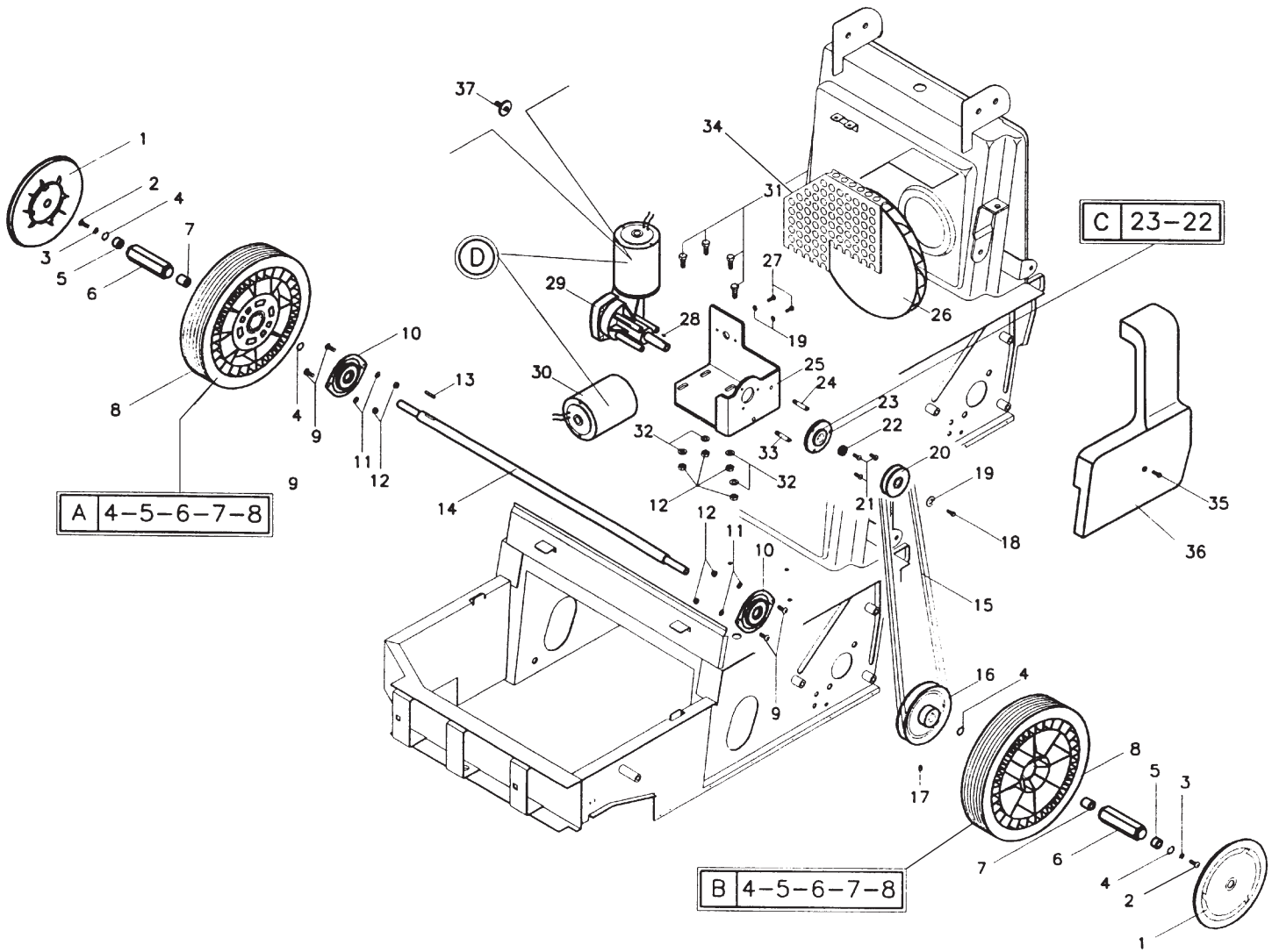
<i>Ref.</i>	<i>Part No.</i>	<i>Description</i>	<i>Qty.</i>
1.	2120417	Upper cover	1
2.	2300405	Fixing screw	2
3.	1105220	Block nut M8	2
4.	2300111	Locking	4
5.	2310097	Complete handle	1
6.	1105325	Washer 6x24x2	2
7.	1105361	Screw 6.3x19	2
8.	2120422	Front drawer	1
9.	2110402	Bushing	2
10.	2120418	Front cover	1
11.	2120424	Back drawer	1
12.	2260406	Dashboard	1
13.	2160090	Back drawer gasket	1
14.	1105239	Screw 8x16	6
15.	1105304	Washer 8x17	4
16.	2270407	Frame BPS-28	1
17.	1105230	Screw 8x10	8
18.	2120427	Right side casing	1
19.	2120426	Left side casing	1
20.	2120428	Front casing	1
21.	1370003	Foot 20x9 M6x18	2
22.	1105123	Nut M6	2
23.	2300411	Right hinge	1
24.	2300412	Left hinge	1
25.	2110403	Bushing	2



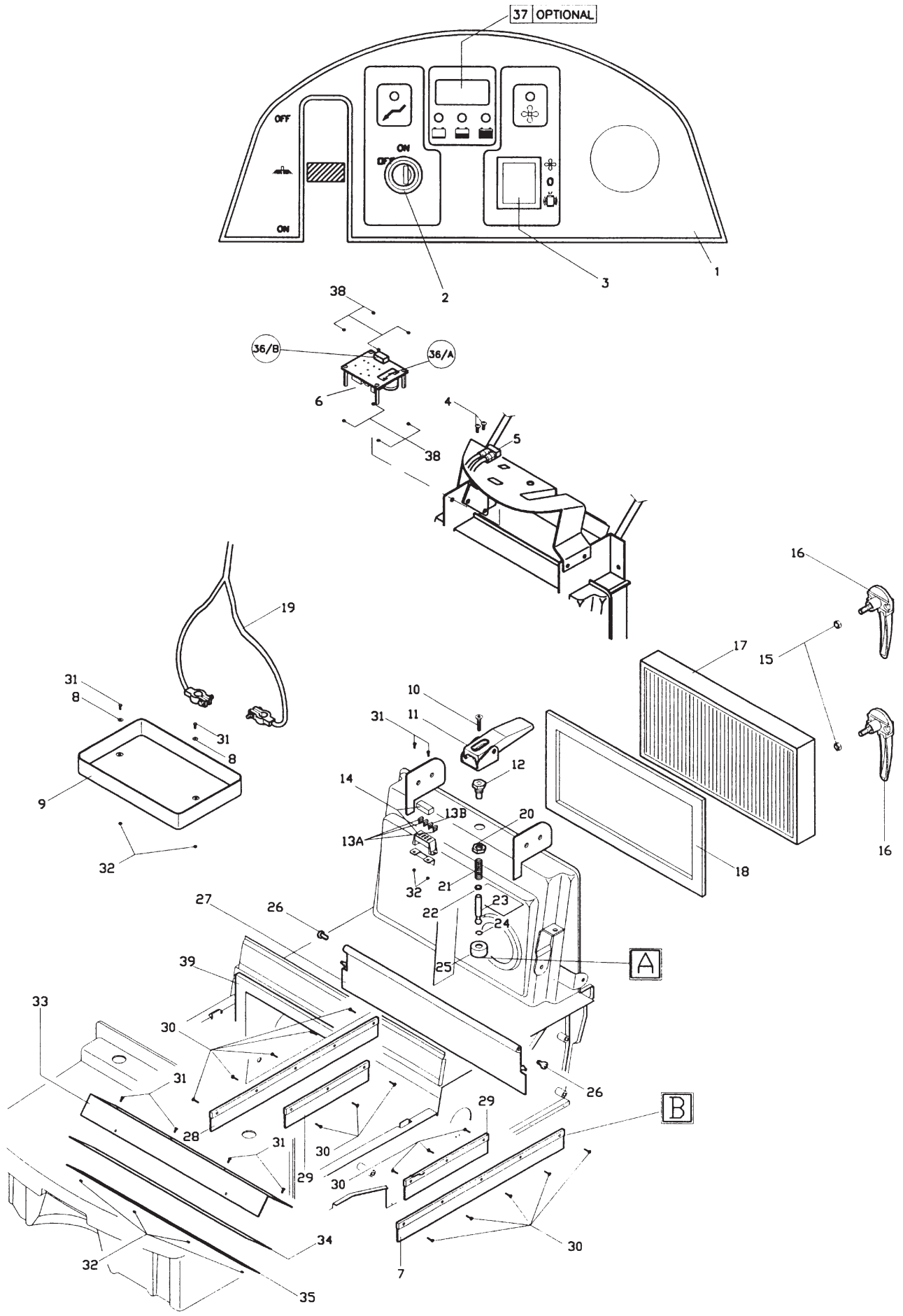
<b>Ref.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
1.	2125017B	Side brush sheathing	1
2.	2310454	Traction handle	1
3.	1105229	Turned adjuster Ø7	3
4.	1125005	Sidebrush drive lever	1
5.	1105162	Screw 6x16	1
6.	1105303	Washer 6x12	3
7.	1320031	Handwheel, Ø60 12x67	1
8.	1110005	Knurled ring nut, Ø40 M12	1
9.	2125013	Drive cable sheath	1
10.	2125013C	Drive cable	1
11.	1105485	Dowel 5x6	2
12.	2290004	Wire fixing screw	2
13.	1105304	Washer 8x17	7
14.	1105134	Block nut M8	3
15.	1105238	Screw 8x25	3
16.	2110025	Belt tightener lever b.	1
17.	2205005	Traction spring	1
18.	2290001	Fixing screw belt tightener roller	1
19.	2250001	Belt tightener roll h15	1
20.	1390005	Bearing 608 2RS	1
21.	1105701	Inner snap ring Ø22	1
22.	2130001	Spacer	1
23.	2190011E	Belt tightener bracket	1
24.	2290007	Pin for rocker	2
25.	2110016	Rocker bushing	2
26.	2110017	Rocker	1
27.	1105133	Block nut M6	3
28.	1105096	Screw 12x60	1
29.	1250085	Rotary support wheel 0100 grey	1
	1250067	Rotary support wheel 0100 black	
30.	1105503	Screw 6x20	6
31.	1105551	Screw 5x70	4
32.	1105122	Nut M5	4
33.	2350027	Center brush	1
34.	2100009	Brush shaft	1
35.	1105461	Key 5x5x15	1
36.	2130003	Spacer brush'shaft	2
37.	1105482	Dowel 6x5	2
38.	2260028	Ø80 Bearing support	2
39.	1390009	Bearing 6202 2RS	2
40.	1105405	Outer snap ring Ø15	3

<b>Ref.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
41.	1105420	Outer snap ring Ø12	1
42.	2230029	Brush adjusting fixing pivot	1
43.	2190005	Main brush adjustment bracket	1
44.	2105001	Side arm felt washer	2
45.	1390013	Bearing HK 1012	2
46.	1105230	Screw 8x10	2
47.	2130011	Side brush shaft spacer	1
48.	1105220	Nut M8	2
49.	2250019	Pulley	1
50.	1340008	Gearmotor, Ø77	1
51.	1105325	Washer 6x24	1
52.	2125017D	Side brush sheathing	1
53.	2125018E	Side brush lifting cable	1
54.	2230002	Pin 17x34	1
55.	1125004	Clamp Ø7	1
56.	1105231	Screw 8x22	1
57.	2190004	Side brush lifting lever	1
58.	1105327	Washer 8x32	1
59.	2100012	Ring for the side brush bearing	1
60.	1260029	Balls 11/32"	6
61.	2100019N	TK Side brush mov. toothed ring	1
62.	1105463	Key 3x3.7	1
63.	2110012N	Bushing for bearings	1
64.	1390012	Bearing 6005 2RS	2
65.	2100020	Idle toothed ring	1
66.	1105416	Outer snap ring Ø25	1
67.	2120425	Traction handle casing	1
68.	2110042	Spacer	2
69.	2250079	Pulley Ø27x15	1
70.	2330102	Belt Ø8x1000	1
71.	1105326	Washer 8x24	2
72.	2260024	Side brush support	1
73.	2250034	Side brush dragging flange	1
74.	2350020	Side brush	1
75.	2250080	Pulley Ø30x15	1
76.	1105160	Screw 6x10	3
77.	2130005	Spacer h10	1
78.	1390015	Bearing HK 1412	1
79.	2130012	Spacer h16	1
80.	1105136	Block nut M12	1
81.	2110405	Bushing	1

<b>Ref.</b>	<b>Part No.</b>	<b>Items Included</b>	<b>Description</b>
A.	2125100	4+E	Complete brush-lifting lever
B.	2315003	44+47+56+58+59+60+61+78	Complete movement ring
C.	2315008	63+64+65+66	Complete idle tooth ring
D.	2310127	73+74+76	Complete side brush PPL 70
E.	2310262	1+52+53	Side brush sheathing + cable
F.	1380005		Carbon brush
G.	2310112	38+39	Complete Ø80 Bearing support
H.	2310291	75+45	Complete pulley Ø27x15
I.	2310292	69+45	Complete pulley Ø30x15



<b>Ref.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
1.	2120084	Wheel cover Ø200	2
2.	1105234	Screw 6x10	2
3.	1105325	Washer 6x24	2
4.	1105418	Outer snap ring Ø28	4
5.	1390016	Bearing HFL 1426	2
6.	2110033	Exagonal bushing	2
7.	1390015	Bearing HK 1412	2
8.	2250071 2250086	Wheel Ø250x55 black / black Wheel Ø250x55 grey / black	2
9.	1105222	Screw 6x10	4
10.	1390017	Support SBPFL 203	2
11.	1105303	Washer 6x12	4
12.	1105133	Block nut M6	8
13.	1105464	Key 5x5x25	1
14.	2100006	Driveshaft	1
15.	1330006	Belt Z30 3/4	1
16.	2250029	Pulley Ø140	1
17.	1105481	Dowel 6x10	1
18.	1105001	Screw 4x12	1
19.	1105323	Washer 5x20	3
20.	2250030	Pulley Ø55	1
21.	1105235	Screw 6x20	3
22.	1390007	Bearing 6000 2RS	1
23.	2260032	Bearing support	1
24.	2230005	Belt support pin	1
25.	2260026	Motor support	1
26.	1290002	Fan Ø200	1
27.	1105022	Screw 5x10	2
28.	1105463	Key 3x3.7	1
29.	1340008	Drive gearmotor Ø77	1
30.	1340002	Motor with 077 smooth shaft	
31.	1105162	Screw 6x16	4
32.	1105324	Washer 6x18	4
33.	2230404	Pivot	1
34.	2260401	Fan protection grid	1
35.	1105160	Screw 6x10	1
36.	2120412	Air conveyor	1
37.	1250059	Reductor's gear	1
A.	2310099N 2310402	Complete right wheel black/black Complete right wheel grey/black	
B.	2310100N 2310401	Complete left wheel black/black Complete left wheel grey/black	
C.	2310117	Complete support	
D.	1380005	Carbon brush	



<b>Ref.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
1.	6911400	Dashboards plate	1
2.	13801001	Keyswitch	1
3.	1380009	Bipolar switch	1
4.	1105363	Screw 5x20	2
5.	1380008	Batt. charger connector	1
6.	2180009	12V motor blocking driving	1
7.	2160107 2160060	Left side flap grey Left side flap black	1
8.	1105302	Washer 5x10	2
9.	2120125	Battery container	1
10.	1105504	Screw 6x25	1
11.	2310105	Complete filtershakers lever	1
12.	2165005	Filtershakers rail	1
13A.	1380023	Fuse 30A	3
13B.	1380017	Fuse 20A	1
14.	1380004	Fuse box + cover	1
15.	1105124	NutM8	2
16.	2310410	Unlocking filter handle	2
17.	2360002 2360005	Paper filter Polyester filter	1
18.	2160052	Filter gaskets kit	1
19.	1180037	Electrical installation	1
20.	1105221	Nut M18	1
21.	2205006	Filtershaker spring	1
22.	1160049	OR 106 Gasket	1
23.	2230018	Pin	1
24.	1105702	Inner snap ring Ø16	1
25.	2205007	Articulated bar	1
26.	1105232	Screw 10x16	2
27.	2160035	Backside flap	1
28.	2160106 2160036	Right side flap grey Right side flap black	1
29.	2160105 2160055	Inner flap grey Inner flap black	2
30.	1105356	Screw 3.5x9.5	16
31.	1105002	Screw 4x16	8
32.	1105121	Nut M4	8
33.	2150028	Flap fixer	1
34.	2160406	Rubber	1
35.	2160407	Flap	1
36A.	1380038	50A fuse	1
36B.	1380037	1.6A fuse	1
37.	13801000	Hour meter	1
38.	1105121	Nut M14	8
39.	2160033	Adhesive kit for front drawer	1
A.	2310106	Complete filtershaker jointed rod	
B.	2310095 2310400	Grey frame flap kit Black frame flap kit	