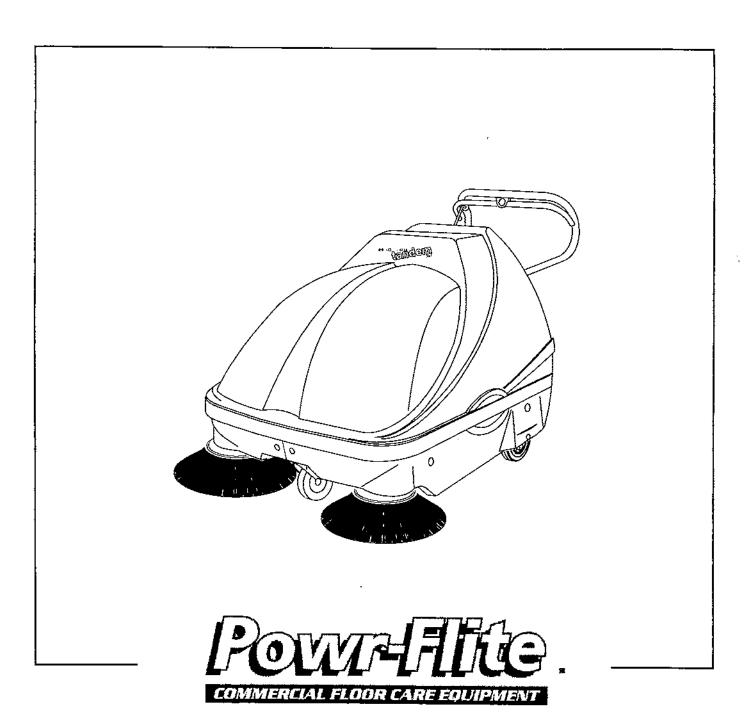
Operating Instructions PS1000



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Table of Contents

maduction	
About these Operating Instructions	
Symbols Used in the Text	
Safaly Information	•
Safety Information	
Correct Application	
Device Description	í
Safety Devices	
Initial Startup	
Operation	
Safety Information	
Adjusting the Driving Hoop	
Priving	
Driving	8
Sweeping	
Safety Information	,
Operating the Sweeping Rollers	
Operating the Side Brushes.	
Turning off the Sweening & Suction Machine	5
Turning off the Sweeping & Suction Machine	10
Emptying the Dust Container	11
Replacement of Filter	12
Cleaning	40
	1
Service and Maintenance	
Safety Information	14
Side brushes	•
Replacing the Side Brush	16
Adjustment of the Side Brush	40
Sweeping Rollers	10
Replacing the Sweeping Rollers	16
Adjustment of the Sweeping Rollers	17
Drive	
Adjustments	19
Inspecting the drive	10
Inspecting the drive of the frictional wheel	40
Inspecting idling of the drive.	15
Adjustment of the drive	18
Adjustment of the drive	19
Cafety Information	
Safety Information	20
Charging the Batteries	21
Maintenance Chart	22
Troubleshooting	23
Circuit Diagram	24
Diepocal	25

Introduction

About these Operating Instructions.

In this section you will find information on the format of the Operating Instructions and explanations of the used designations and symbols.

These Operating Instructions pertain to the operation of the Ps1000.

Our products are subject to continuous improvement; constructive changes that have been made after the printing of these operating instructions could not be taken into account. If you have any questions, feel free to contact our service department.

The Operating Instructions must be read and observed by anybody using or operating the PS1000.

Besides applying the Operating Instructions, the operator is reminded to observe safety regulations as well as general rules of professional and safe working methods.

Symbols Used in the Text

The following designations and/or symbols are used in the Operating Instructions to indicate information of special importance.



Danger!

Safety information that must be observed to prevent danger to persons are pointed out by this sign.

This sign is used where immediate danger of death or severe injury is at hand.



Caution!

This symbol is used in cases of danger of minor injuries.



Please Observe!

This picture signifies danger of damage to the device or other objects.



It points out instructions that ought to be observed by anybody using the Ps1000.

- A dot in front of the text signifies: this is what you have to do.
- A dash in front of the text signifies:
 This item is part of an enumeration.

Safety Information

The PS1000 is designed and built in accordance with state of the art know-how and standard safety regulations. In spite of this, physical danger to the operator or third parties or the impairment of the PS1000 or other valuable objects may arise during operation.

Always use the Ps1000 in a flawless condition and in a way that accords with general rules of operational and personal safety, and always observe these Operating Instructions! Eliminate malfunctions that may impair operational safety immediately!

Keep Operating Instructions ready at hand wherever the Ps1000 is used!

In addition to the Operating Instructions, observe the generally applicable legal or other binding guidelines for accident prevention and environmental protection!

Do not modify, expand, or reconstruct the Sweeping & Suction Machine in any way without explicit approval by the manufacturer.

Replacement parts must comply with the specifications defined by the manufacturer. This will always be the case if only original replacement parts are applied.

Observe the prescribed maintenance intervals and those stated in these Operating Instructions!

Be sure to dispose of operational and auxiliary materials as well as replacement parts in a safe and environmentally sound way!

Prevent manipulation by unauthorized persons, for example by removing the ignition key after use.

Correct Application

The Ps1000 is designed exclusively for heavy-duty commercial applications of sweeping dry refuse on solid surfaces.

Never use this machine to sweep inflammable or toxic or explosive substances.

Any application different from or exceeding this definition is incorrect.

The manufacturer is not to be held responsible for any damage arising from such applications.

Any risk is to be assumed by the operator.

The Ps1000 is not suitable for taking up cords, strings, wires or similar materials.

Correct application includes the observation of Operating Instructions as well as inspection and maintenance intervals.

Device Description

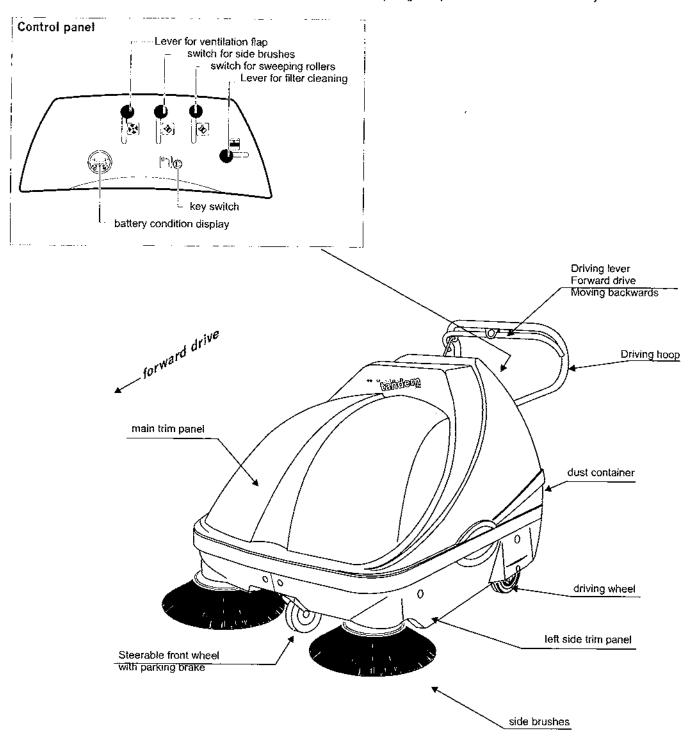
An electric motor drives the suction sweeper which includes forward and reverse movement.

The sweeping mechanism of the PS1000 features two lateral brushes which carry the refuse to two sweeping rollers that are mounted parallel to the direction of motion. These project the sweepings overhead into the dustcontainer positioned behind it.

If necessary, the dust stirred up by the sweeping rollers is caught by the dust suction unit in a lamellar filter nside the machine.

The lamellar filter can be cleaned through a mechanicallyoperated filter cleaning device.

If necessary the dust extraction can be closed off with a diaphragm to protect the filter from humidity.



Safety Devices

The suction sweeper cannot be started unless:

- the key-operated switch is in the ON position (1);
- the main panelling has been closed properly.

The power supply to the electric motor will be interrupted, if

- you open the main panelling;
- you turn the key-operated switch to the OFF (O) position.

Initial Startup

Unpacking and mounting

 Open the packaging and carefully lift the machine off the pallet.



Caution!

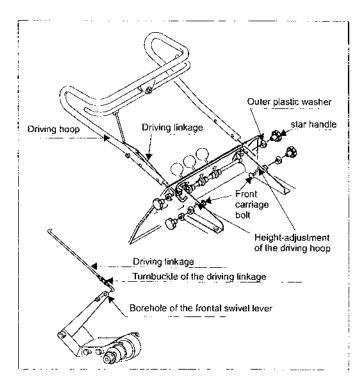
Make sure you do not damage the side and rear rubber flaps.

- Lift the main panelling at the rear, and take the pins of the hood out of their nests.
- · Remove the entire main panelling.
- If batteries were included in delivery, lift both batteries out of the machine.
- Unscrew the four star handles and remove the outer plastic washers.
- To define the height adjustment of the driving hoop, you will have to remove the frontal carriage boits and set it to one of the three height-levels.



In doing so observe the following:

- Upper most position: driving hoop low.
- Lowest position: driving hoop high (tall operators)
- Push the driving hoop and the driving linkage through the opening of the control panel.





Caution!

Make sure that the driving linkage is guided through the corresponding opening of the control panel. If the driving linkage is not properly installed, the suction sweeper will not operate.

Do not change the screw connection of the driving linkage. This screw connection is preset to the highest driving hoop adjustment, meaning the lowest position of the frontal carriage bolts. If you change the screw connection, the drive of the machine will be effected.

- Push the four carriage boits through the boreholes of the driving hoop.
- Push the four outer plastic washers on the ends of the carriage bolts.
- · Re-fasten the star handles to the carriage bolts.
- Place the driving linkage in the borehole of the frontal swivel lever.
- Secure this linkage with the set collar.
- Place the batteries in their position in the machine.

Caution!



By all means, make sure that the suction sweeper is turned off before you connect the battery poles. Key of the key-operated switch to **0**. Remove key.

- Connect the poles of the battery. Refer to the switching diagram in Technical Data.
- To mount the lateral brushes, push the lateral brushes on the lateral brush axle.

(see Mounting the lateral brushes, page 15). Fasten the lateral brushes by sliding the spring plug through the boreholes of the lateral brushes and the ateral brush axle.

Caution!



By all means, make sure that the brushes of the lateral brushes are approximately 5-10 mm from the ground with the lateral brush lever in raised position!

Should you neglect to adhere to this distance, it will result in poor sweeping or increased wear and tear of the brushes.

- · Re-attach the main panelling.
- · Close the main panelling.

The suction sweeper is ready for operation.

Operation

Safety Information

The Sweeping & Suction Machine may only be operated by dependable persons.

Only deploy trained and instructed staff,

The areas or responsibility of staff must be clearly defined Examine the Sweeping & Suction Machine before starting and check serviceability and technical safety.

Do not use the machine in case of malfunctions of any kind. Only drive on specifically assigned pathways and lots. The Sweeping & Suction Machine is designed as a one-man device.

Carrying along further persons or load is not permitted.

Adjusting the driving hoop

Should you need to adjust the height of the driving hoop, please refer to page 7 Initial Start Upg and adjust the driving belt as described on page 18.

Driving

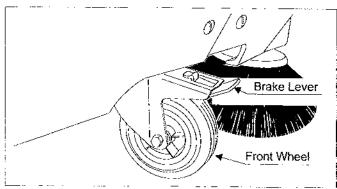
Starting the Sweeping & Suction Machine



Caution!

Make sure the suction sweeper is on level ground when you loosen the parking brake, or secure the suction sweeper to prevent accidental rolling. (also refer to Parking of the Suction Sweeper)

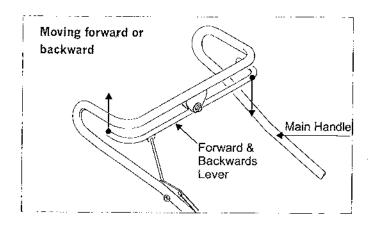
- · Loosen the parking brake of the front wheel.
- To do this use the upper unlocking lever.



- · Insert the key into the key-operated switch.
- •Turn the key clockwise.

The machine starts.

· Release the key.



- Moving forward:
- · Pull the right-hand part of the driving lever upwards.

The suction sweeper moves forward.

- Moving backwards:
- Pull the left-hand part of the driving lever upwards.

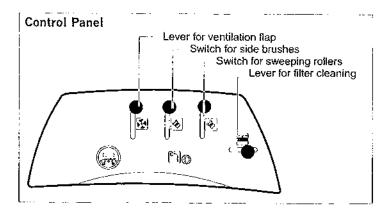
The suction sweeper moves backwards.

Sweeping

Safety Information

Do not switch on suction when sweepings are wet. This will cause damage to the suction device and the filter. Provide good aeration when using the machine in closed rooms or buildings.

Do not sweep up materials that may cause health impairment.





Operating the Sweeping Rollers



Lever down = working position Lever up = sweeping rollers will not operate

- · Start the Sweeping & Suction Machine
- · Unlatch the lowering lever of the sweeping roller.
- Push down the lowering lever.

Stopping Sweeping Rollers Operation

- Lift the sweeping rollers and arrest the lowering lever of the sweeping rollers
- · Let the lever snap in arresting position.



Operating the Side Brushes



Lever down = working position Lever up = lateral brushes will not operate

- · Start the Sweeping & Suction Machine.
- · Unlatch the lowering lever of the side brushes.
- Push the lever down.

Stopping Side Brush Operating,

- Pull up the lowering lever for the side brushes.
- · Let the lever snap in arresting position.



Operating the ventilation flap



Lever down = ventilation on Lever up = ventilation off

The purpose of the ventilation flap is to protect the machine when sweeping moist surfaces.

If the ventilation is on, the dust extraction will be turned off.

- To turn on the ventilation, pull the lever of the ventilation flap upwards.
- If you want to sweep on a dry surface again, you will have to push down the lever down.



If you are sweeping a dry surface and the sweeping performance is poor or a lot of dust swirls up, you will have to check the position of the lever for the ventilation flap.



Operating the filter-cleaning device

The filter cleaning device prevents the lamellar filter from being blocked by debris.

· Close the ventilation flap.

Make sure the dust collector has been installed

- Move the lever of the filter vibrating device continuously, about ten times back and forth.
- · Afterwards open the ventilation flap.

Turning Off the Sweeping & Suction Machine

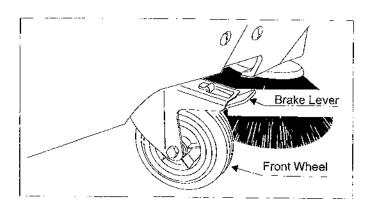


Caution!

Make sure the suction sweeper is on level ground when you loosen the parking brake, or secure the suction sweeper to prevent accidental rolling.

- · Release the driving lever.
- Lift the lateral brushes and arrest the lowering lever of the Lateral brushes.
- Lift the sweeping rollers and arrest the lowering lever of the sweeping rollers.
- Turn the key counterclockwise and take it out off the keyoperated switch.
- Pull the machine towards in yourself, to ensure that the front wheel is straight.
- Secure the machine from rolling by kicking down the Brake lever of the front wheel.

If the brake is relieved afterwards, the brake lever has to remain depressed position.





Danger

Incorrect handling of the Sweeping & Suction Machine may lead to severe harm to persons or objects!

Make sure the Sweeping & Suction Machine is not used by unauthorized persons.

Never leave the Sweeping & Suction Machine unattended in ready for operation condition.

Remove the key of the key-operated switch when you leave the suction sweeper. (e.g. at the end of work or depending on the work application)

Keep the battery master switch and the key in a place separate from the Sweeping & Suction Machine.

Emptying the Dust Container

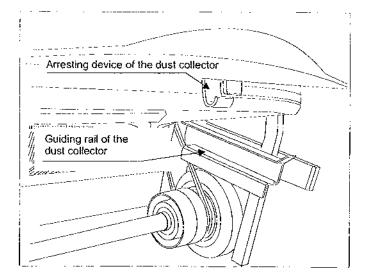
The dust container is the place where the sweepings are collected. It is positioned at the back of the Sweeping & Suction Machine.



The dust container must be emptied regularly and especially after each use.

Removing the Dust Container

- · Push the arresting device of the dust collector to the top.
- Pull out the dust container from the Sweeping -& Suction Machine by the gripping handle until the front dust container guide rails are free.





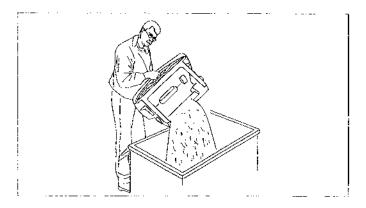
At the back of the dust container two guiding rollers are installed to make the removal more easy.

· Lower the dust container to the ground



A number of rollers and a recessed grip are positioned at the bottom of the dust container.

- Remove the dust container completely from the Sweeping & Suction Machine.
- In order to empty the dust collecting box use the free hand to take hold of the recessed grip.
- Empty the refuse by means of the lower edge of the dust collector.
- · Empty sweepings into appropriate containers only.



Reinserting the Dust Container

- Place the dust container before the dust container retaining.
- Bring the dust container's front guides up to the same level as the guide rails.
- Slide the dust container into the Sweeping & Suction Machine.
- Push the arresting device to the top.
- Push the arresting device to the bottom.

Replacement of Filter

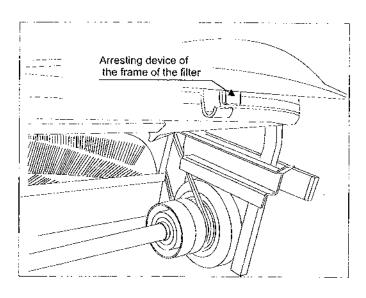
The filter removes fine dust. The filter is cleaned mechanically by means of the vibrating device.

Disassembly

- · Park the suction sweeper as described on page 10.
- Pull the dust collector out of the machine
- · Push the arresting device of the filter to the back.

The filter is situated on a frame.

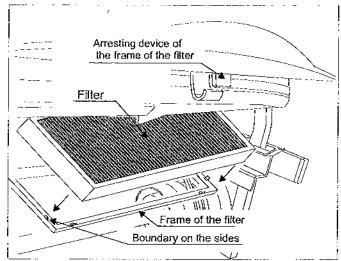
- · Pull down the frame with its filter.
- · Take the filter out of its frame.



Reinsertion

The frame of the filter has boundaries on its sides.

- Insert the filter in between the boundaries on the sides of the frame.
- · Tilt the frame upwards.
- Push the frame to the top until it latches in the arresting device.
- · Push the dust collector back into the machine.



Cleaning

The Sweeping & Suction Machine is a machine with electrical system components.



Please observe!

Humidity will damage the electronics and the mechanics of the machine.

Moisture may lead to leak current and short-circuits.

Do not use high-pressure cleaning devices.

The Sweeping & Suction Machine may only be dry-cleaned.

For cleaning park the suction sweeper as described on page 10.

Service and Maintenance

Safety Information

To prevent turning on the machine by accident, the suction sweeper has to be turned off when working on the machine and the key has to be taken out of the key-operated switch.

The open hood always has to be secured by the hood arresting device.

Guide the hood arresting into the drill hole at the bottom of the hood.

When working on the electrical system the negative pole of the battery always has to be disconnected.

Only use appropriate and flawless tools for maintenance work.

Every twelve months or after each 200 operating hours an inspection by a trained and authorized person must be carried out (preferably by the manufacturer or an expert appointed by him).

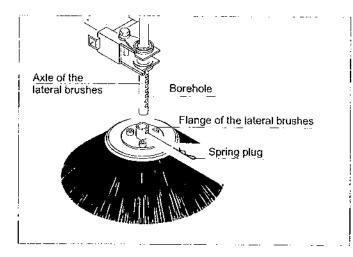
The results of the inspection have to be recorded in writing and must be saved at least until the next inspection.

Side Brushes

Replacing the Side Brush

Dismounting the Side Brush

- · Park the suction sweeper as described on page 10.
- Take the key out of the key-operated switch.
- · Pull up the lowering lever for the side brushes.
- · Arrest the lowering lever.
- Pull off the spring plug from the axle of the lateral brushes.



- Pull the side brush down and off.
- · Replace the side brush.

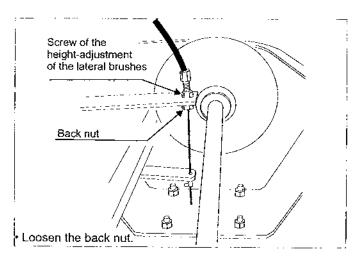
Mounting the Side Brush

- · Fasten the flange plate to the side brush.
- · Push the lateral brush on the axle of the lateral brushes.
- Push the spring plug through the borholes of the lateral brush flange plate and through the borehole of the axle of the lateral brushes.

Adjustment of the Side Brush

Operational wear necessitates additional adjustment of the side brushes.

- Park the suction sweeper as described on page 10.
- · Take the key out of the key-operated switch.
- · Unlatch the lowering lever of the side brushes.
- · Push down the lowering lever.
- · Remove the entire main panelling.



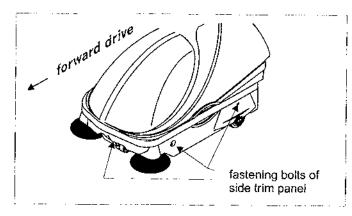
- To lower the lateral brush, you will have to turn the screw of the height-adjustment of the lateral brushes clockwise.
- To raise the lateral brushes, you will have to turn the screw of the height-adjustment of the lateral brushes counterclockwise.
- · Set the lateral brushes to their desired position.
- Tighten the back nuts.
- · Put on the main panelling.

Sweeping Rollers

Sweeping Rollers Replacement

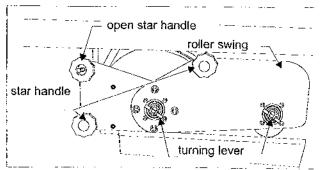
Dismounting the Sweeping Rollers

- · Park the suction sweeper as described on page 10.
- · Take the key out of the key-operated switch.
- · Pull lowering lever of the sweeping rollers.
- · Arrest the lowering lever.
- Loosen the bolts of the left side trim panel facing in driving direction.
- · Remove the side panel.



The roller swing is held in place by three star handles.

- · Loosen the star handles.
- · Remove the roller swing.

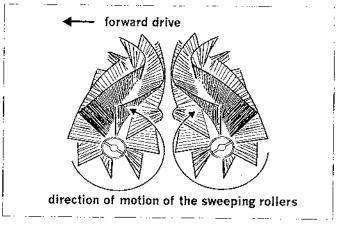


 Pull the sweeping rollers out of the machine and remove any debris, cords, etc., from the roller tunnel and from the pick-up pins.

Installing the Sweeping Rollers

· Push the sweeping rollers under the machine.

Observe the sweeping rollers' sense of rotation while sliding them in.



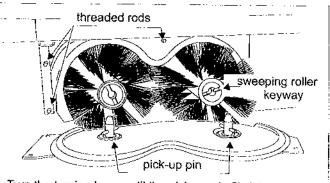
Each roller end is equipped with a keyway.

Turn the sweeping roller until the pick-up pin of the rear roller swing fits into the keyway of the sweeping roller.

Silde the sweeping rollers in as far as possible.

Set the front roller swing onto the free sweeping roller ends,

The roller swing is equipped with two turning levers. Each turning lever end is equipped with one pick-up pin.



Turn the turning lever until the pick-up pin fits intothe keyway of the sweeping rollers.

- Push the roller swing over the threaded rods.
- Make sure the sweeping rollers are fitted on both sides by the keyway into the pick-up pins and that all star handles are firmly tightened.
- · Fasten the side trim panel.

Setting the Sweeping Rollers Sweeping Contour Adjustment

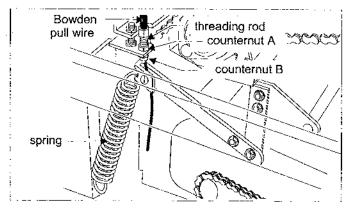
For best cleaning results and to ensure the highest possible device efficiency, the sweeping rollers are equipped with a sweeping contour. The sweeping contour should be set to approx. 30-40 mm at the rear roller.

Establishing the Sweeping Contour:

Drive the Sweeping & Suction Machine to an area to be cleaned. Switch on the sweeping rollers without moving the sweeping machine. Allow the sweeping rollers to run for about one or two minutes without moving. Lift the sweeping rollers. Stop sweeping rollers operation and drive forward a few meters. The sweeping track visible on the ground is the sweeping contour.

Adjusting the Sweeping Contour

- · Park the suction sweeper as described on page 10.
- Take the key out of the key-operated switch.
- Lift the sweeping rollers and arrest the lowering lever of the sweeping rollers
- · Let the lever snap in arresting position.
- · Open the hood.
- · Secure the hood position by the hood arresting device.
- Remove the right side trim panel facing in the direction of motion.



Increasing the Sweeping Contour by Lowering Sweeping Rollers

- Loosen counternut A on the threading rodof the Bowden pull wire.
- Turn counternut A counterclockwise.
- · Now lock counternut A in place by counternut B.

Decreasing Sweeping Contour by Lifting Sweeping Rollers

- · Loosen counternut B
- · Turn counternut B clockwise by a few more threads.
- Lock counternut B in position by counternut A.

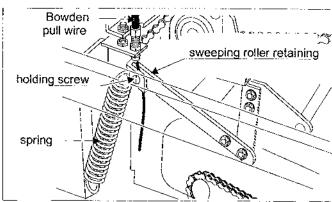
Attention!

The sweeping rollers are pendulous and adapt to uneven surfaces up to a certain degree. They are put into operating position by means of the rotation only.

Only the tips of the brushes will touch the ground when lowering the device during standstill. That is why force on the sweeping roller lever will only be exerted when the brushes are rotating.

Further Possible Adjustment:

- Park the suction sweeper as described on page 10.
- . Take the key out of the key-operated switch.
- Lift the sweeping rollers and arrest the lowering lever of the sweeping rollers
- · Let the lever snap in arresting position.
- · Open the hood,
- · Secure the hood position by the hood arresting device.
- Remove the right side trim panel facing in the direction of motion.
- · Loosen the holding screw.
- Move sweeping roller retaining to desired position.
- Tighten up the holding screw again and mount the side trim panel.



For your Information:

Original roller diameter: 230 mm.

When diameter has decreased to 200 mm, the roller needs to be replaced.

Drive

Adjustments

Adjustment of the frictional wheel will be necessary, if the forward driving performance is unsatisfactory despite high motor speed, due to damage of the frictional wheel, or it is not adequately pushed against the roller of the frictional wheel. If the driving performance is not satisfactory in reverse, check the driving belt for dirt or damage.

Inspecting the drive

- · Park the suction sweeper as described on page 10.
- · Take the key out of the key-operated switch.
- Remove the main panelling.
- Check the frictional wheel and the driving belt for damages and dirt.



If the frictional wheel and/or the driving belt are damaged or unfit for use, please inform customer service. (see page 29) Clean the frictional wheel if it is dirty. (see page 23 malfunctions)

Inspecting the drive of the frictional wheel

If the frictional wheel is not damaged:

· Release the parking brake.

Danger!

- Insert the key into the key-operated switch.
- · Start up the suction sweeper.

Λ

Danger of injury due to moving parts!
When starting up the suction sweeper make absolutely sure that noone is present in the immediate vicinity of the opened suction sweeper. Make sure that the suction sweeper is secured to prevent accidental rolling.

· Carefully actuate the driving lever to move forward.

The swivel lever pushes the frictional wheel in the direction of the frictional roller.

The suction sweeper has to move forward.

If there is no forward motion, if the frictional wheel does not push against the frictional rolle:

- · Park the suction sweeper as described on page 10.
- Adjust the frictional roller as described below.

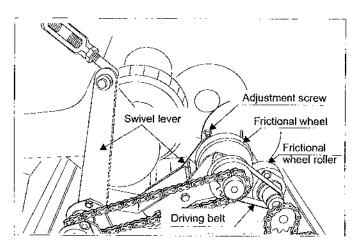
Attention!

If the frictional wheel pushes against the frictional wheel roller, the driving belt has to be freely movable to drive in reverse!

Inspecting idling of the drive

Inspection is necessary to prevent the suction sweeper from moving forward or backward, if the driving lever is in neutral position (horizontal position) when the engine is running.

- Park the suction sweeper as described on page 10.
- · Take the key out of the key-operated switch.
- · Remove the main panelling.



The adjustment screw of the frictional wheel and the driving belt is located on the swivel lever.

Check the position of the swivel lever:

- · Insert the key into the key-operated switch.
- Start up the suction sweeper.
- Put the driving lever in neutral position (horizontal position)
 - The swivel lever cannot push the frictional wheel against the frictional roller.
 - The driving belt has to be freely movable.

Should this not be the case, continue as described in the chapter on Adjustment of the drive, (see page 19).

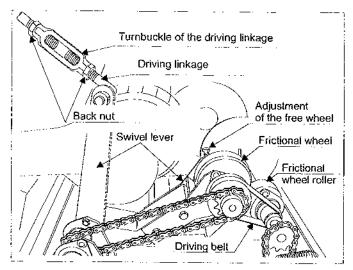
If the swivel lever is positioned correctly:

- park the suction sweeper.
- · Re-attach the main panelling.

Adjustment of the drive

Re-adjustment is necessary due to wearing of the frictional wheel depending on use.

- Park the suction sweeper as described on page 10.
- · Take the key out of the key-operated switch.
- · Remove the main panelling.



- Loosen the back nuts of the turnbuckle of the driving linkage.
- To reduce the distance between the frictional roller and the frictional wheel, you will have to turn the turnbuckle counterclockwise



Caution!

Make sure you only only turn the turnbuckle one or two threads. Turning the the turnbuckle too far, could result in the dangerous possibility that both rods of the driving linkage might not find sufficient support and fall apart during operation.

Check the position of the swivel lever:

- Insert the key into the key-operated switch.
- · Start up the suction sweeper.
- · Carefully actuate the driving lever to move forward.
 - The swivel lever has to push the frictional wheel against the frictional roller.
 - The driving belt has to be freely movable.
 - The suction sweeper has to move forward.
- · Carefully actuate the driving lever to move backwards.
 - The swivel lever has to separate the frictional wheel from the frictional roller.
 - The driving belt has to be tight.
 - The suction sweeper has to move backwards.

Attention!

If the frictional wheel pushes against the frictional roller, the driving belt has to be freely movable to drive in reverse! When actuating the driving lever to move backwards the driving belt has to be tight and the frictional wheel has to be separated from the frictional roller.

Should these conditions be evident:

- re-tighten the back nuts.
- · re-attach the main panelling.

Should the suction sweeper not move forward and/or backwards:

· repeat these adjustments

Note

When making adjustments should the condition arise that while the driving lever is in no-load condition, the machine, with the engine running, should "creep" forward or backwards, then the neutral position of the free wheel has to be adjusted.

 To do this, loosen the back nut of the free wheel adjustment.

If the machine "creeps" backwards:

 turn the screw of the free wheel adjustment counterclockwise, until you can move the driving belt freely.

If the machine "creeps" forward:

 turn the screw of the free wheel adjustment clockwise to tighten the pull-back spring.

If the free wheel works properly again:

· tighten the back nuts.

Battery

Safety Information for Battery Handling

When servicing the batteries, please absolutely observe the following warning information and safety regulations:

Battery acids are strongly caustic. Wear safety gloves and eye protectors. Do not tilt battery for this will result in acid leaking through degassing openings.

Never replenish unimpaired battery cells.

When filling level is too high, battery acid will spill out of the degassing openings.

Rinse any acid spray form eyes or skin immediately with clear water. Then visit a doctor without delay.

Use only destilled water to replenish battery cells.

Keep away children from the battery and the battery acid as well as from the charging device.

Avoid spark formation while handling cables and electrical devices.

Never short-circuit battery poles.

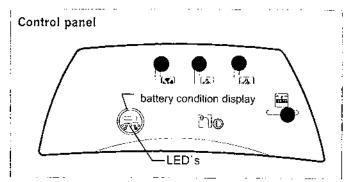
Danger of injury by highly charged sparks.

Always keep batteries in a clean and dry place to avoid leak current.

Only charge batteries in well ventilated rooms.

Don't smoke and keep away open flames and electric sparks, because the charging process produces a highly explosive combustive mixture. In order to prevent health impairment do not smoke, eat, or drink in the vicinity of the battery charging device.

Two batteries supply the suction sweeper with electricity. The charging condition of the batteries is indicated by the battery condition display on the control panel.



When the Sweeping & Suction Machine is switched on the red LED flashes five times.

Subsequently the electronic system of the Sweeping & Suction Machine carries out a self-testing operation of the battery charging state.

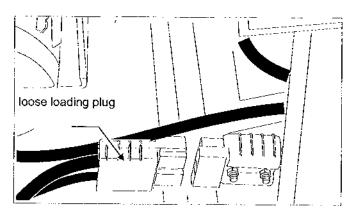
The result of this self-testing is displayed by the 5 LED's.

Information provided by LED indicators on the battery condition display:

lit LED	charging condition of battery		
Bed Ashan Clest Clest			
教教教教教	condition fully charged		
*** *** *** O	operating/charging condition uncritical		
**************************************	operating/only for a short time longer		
	operating/soon critical		
 ※○○○○	operating/critical		

Charging the Batteries

- · Turn off the Sweeping & Suction Machine.
- · Open the hood.
- Secure the hood position by the hood arresting device.
- · Pull apart the red main battery connector.
- Connect the loading device to the loose loading plug of the suction sweeper.
- Connect the mains plug of the charging device to a power supply socket.



The green signal light of the loading device included in delivery indicates that charging has been completed.

The charging process lasts for approx. 10 hours when the batteries have been completely used up (with the device originally provided by the manufacturer). The original charging device of the manufacturer can/should remain connected after charging is completed, because it is equipped with a charge saver allowing it to provide highest possible battery capacities even after long periods of no use.

Be careful only to use the Sweeping & Suction Machine if there is enough voltage left in the batteries. The machine automatically switches itself off if the batteries are discharged to such a degree that damages may arise (exhaustive discharge protection.)

Maintenance Chart

Daily maintenance

- Check battery acid level, if required replenish destilled water.
- Charge battery.
- Check if machine is damaged or impaired in any way.
- Check condition of dust filter and clean if necessary.
- Empty dust container.
- Search brush roller tunnel for jammed particles and seized up dirt that may narrow the brush tunnel and obstruct free roller brush movement.

After each 50 operating hours also

- Check if battery leaks acid.
- Clean and grease battery poles.
- Check if sweeping rollers are worn or cluttered. Replace if required.
- Check sweeping contour, readjust if required.
- Check if side brush adjustment is worn, if required readjust or replace.
- Cleaning the frictional wheel and the driving belt (with nitro-thinner, benzene or brake cleaner)

After each 100 operating hours also

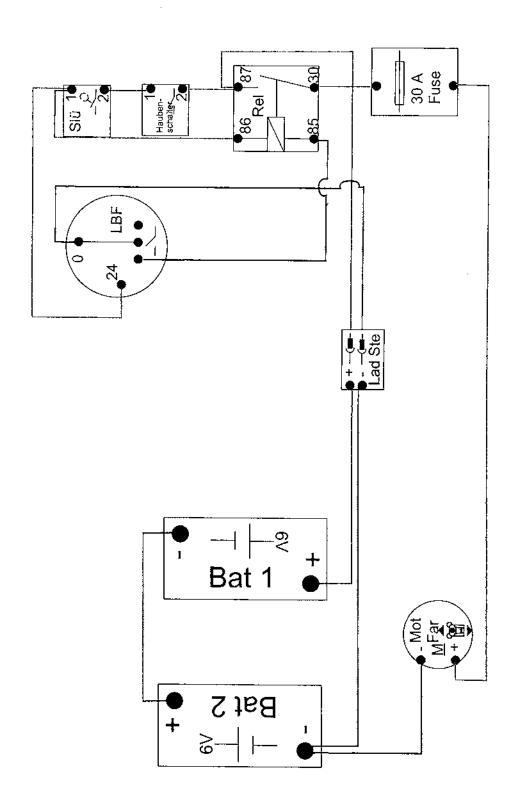
- Check cable isolation, replace cables if required.
- Check if cable connections are tight.
- Clean dust filter, replace if necessary.
- Search suction for obstacles, clean.
- Conduct trial run to check all operating elements.
- Check if roller drive chain is elongated or loosened.
- Check all bearings for wear.
- Check if seals are damaged or dislocated.

After each 200 operating hours also

- Check operation of electric motor.
- Check if carbon brushes are worn, replace if required.

Troubleshooting

Problem	Possible Cause	Remedy
No operating display at control panel:	Key switch not switched on Hood contactor not actuated	Turn key switch and check correct load Check the fit of the main panelling.
	Fault in electrical wiring Battery empty	Check plug connections Charge battery
Sweeping result unsatisfactory:	Side brush(es) or main sweeping rollers not lowered	Lower
	Side brush(es) or main sweeping	Adjust
	rollers worn Trajectory clogged by dirt Sweeping roller(s) do not operat Dust formation too great	Check if roller trim panel is impaired by jammed debris. Correctly fitted? Does motor revolve? if required switch off side brushes
	Filter heavily polluted Filter not correctly fitted	Open the ventilation flap Clean filter
,	Leakage and subsequent aspiration of false air in the filter chamber mer	check for tight fit check if false air is sucked in
	Brush rollers are jammed by dirt, cords, strings or the like	Dismount brush rollers and clean them Compare page 16
	Side brushes are jammed by dirt, cords, strings or the like	Check side brushes and remove obstacles
	Ator does not move freely	Check ventilator wheel and remove any obstruction
	Drive wheels obstructed	Jack up the Sweeping & Suction Machine check differential operation of wheels and free running
Drive is unsatisfactory	Frictional wheel worn out	Re-adjust at the swivel lever or replace the frictional wheel
	Drive of frictional wheel oily or dirty	Cleaning (with nitro-thinner, benzene or brake cleaner)
	!	Check, replace if necessary



Disposal

Disposal of defective parts, specifically electric component parts, batteries and plastic elements in compliance with legislator's waste disposal regulations.