

TwinSweep 1150E

EN Instruction Manual
(Translation of the Original Version)



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1 CONTENTS / GENERAL

1.1 CONTENTS

This operating manual contains instructions for using the sweeper.

Carefully keep the operating manual so that you can refer to it later.

Our products are being continuously improved. Design changes after going to print may therefore not be considered. If you have any questions, please contact our Service department (for contact details, see chapter 7.14).



Carefully study the operating manual and the general safety instructions before you unpack the machine any further or undertake first start up.

The operating manual is to be read attentively and followed by any person that operates the sweeper.

1.2 PROPER USE

Only use the sweeper according to the specifications in this operating manual.

The sweeper is only intended for sweeping hard standing areas (e.g.: car parks, pavements, warehouses). The sweeping environment must not be wet.

The sweeper must only be operated by reliable, instructed personnel.

Prevent it from being used by children, young people and other unauthorised persons, e.g. by removing the key after use.

Any other usage beyond this is deemed to be improper use (see "Safety Instructions", chapter 3). The manufacturer is not liable for any damage resulting from this.

The user is solely responsible for the risk.

Proper use also includes following the operating manual, the safety instructions and keeping to the servicing and maintenance specifications.

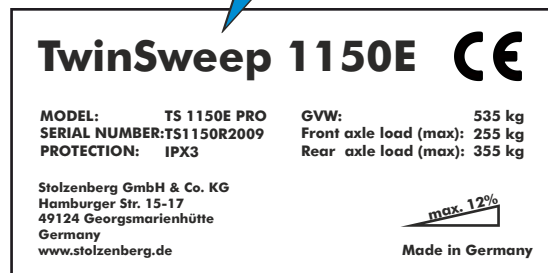
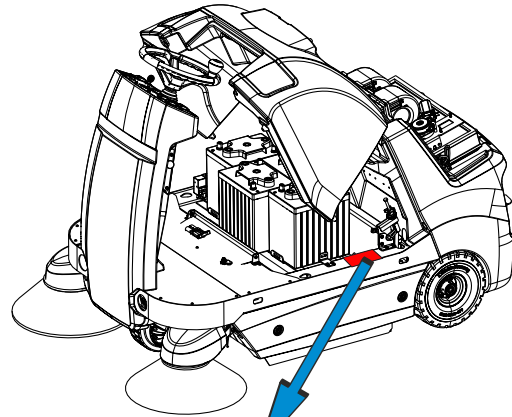
Only operate in expressly assigned routes and places.

Observe the maximum climbing ability specified in the technical data and maximum possible slope inclination for operating across slopes. Due to an abrupt change of direction, particularly on slopes, the sweeper may tip. Adapt your operating manner and speed to the conditions.

Follow the instructions on suitable ground (asphalt, screed, industrial floors, concrete, paving stones etc.)

1.4 RATING PLATE

The rating plate is attached on the top of the frame below the front panel.



1.3 EC DECLARATION OF CONFORMITY



EC Declaration of Conformity

According to the EC Machinery Directive 2006/42/EC, Annex II 1.A

We hereby declare that the machine designated below complies with the essential safety and health requirements of the EC Machinery Directive in its design and construction and in the version marketed by us.

Mister Kai Stolzenberg - Management of Stolzenberg GmbH & Co. KG, Hamburger Straße 15-17, 49124 Georgsmarienhütte - be authorized to compile the technical documentation

Manufacturer: Stolzenberg GmbH & Co. KG
Hamburger Straße 15-17
D-49124 Georgsmarienhütte

Beschreibung der Maschine: Ride-on suction sweeper

Machine type: TT1150E

Description of the machine: 2006/42/EG
2014/30/EU
2000/14/EG

Sound power level (L_{WA} in dB): 86dB (guaranteed 88dB)





Applied harmonized standards, in particular:

DIN EN 60335-1:	2020-08
DIN EN 60335-2-72:	2014-09
DIN EN 55012:	2010-04
DIN EN 61000-6-2:	2019-11
DIN EN 61000-3-2:	2019-12
DIN EN 61000-3-3:	2020-07

Georgsmarienhütte, 04.08.2023


Kai Stolzenberg
(General Manager)

1.5 EXPLANATION OF SYMBOLS

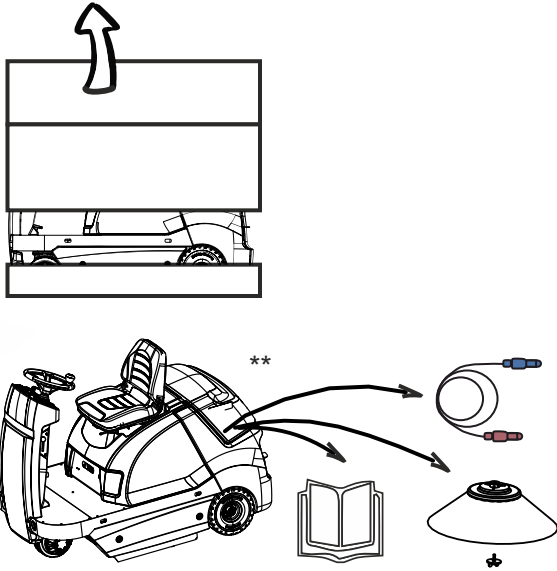
-  **DANGER!** - indicates a possibly dangerous situation that can cause death or serious injuries.
-  **CAUTION!** - indicates a possibly dangerous situation that can cause minor injuries.
-  **WARNING** - indicates a possibly dangerous situation that may cause material damage.
-  **INSTRUCTION!** - indicates important information.

2 CONSTRUCTION, FUNCTION, TECHNICAL DATA

The **TF115R-TRS** is a battery-operated, hand-driven pedestrian-controlled vacuum sweeper fitted with the tandem roller system (TRS).

The TRS allows large sweeping materials to be swept up without difficulty. The sweeper has a powerful vacuum function.

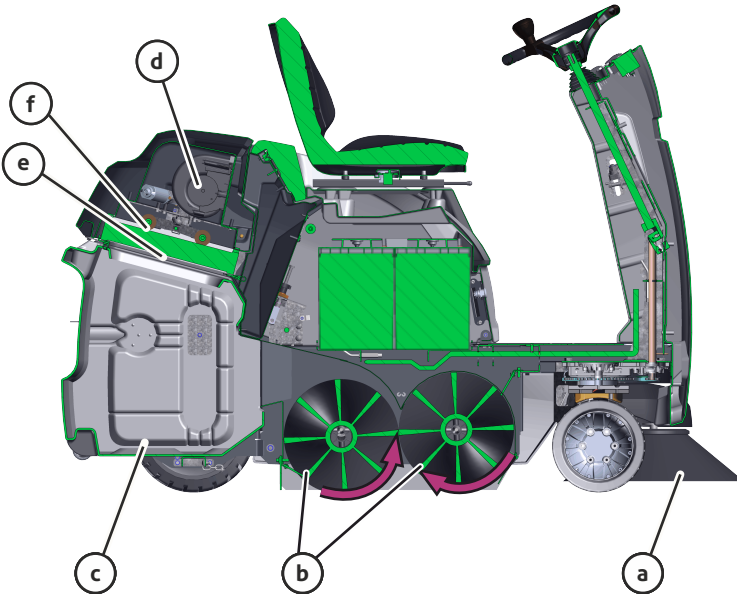
2.1 PACKAGING CONTENTS



** The machine may differ from the illustration

See **Unpacking the Sweeper (Chap. 4.1)**

2.2 FUNCTION



In the tandem roller system (TRS), sweeping materials are first conveyed by means of the **side brush (a)** from the corners and edges of the sweeping area into the centre of the machine and therefore towards the two counter-rotating **roller brush (b)**.

From this, the sweeping material is taken up and conveyed into the **dirt-hopper (c)** situated at the back.

The dust stirred up by the sweeping process is vacuumed up by a **vacuuming system (fan (d))**, filtered by **flat-pleat filter (e)** and thus separated from the clean air.

Electrical Filter cleaning (f) removes the dust caked onto the flat-pleat filter and allows this to drop into the dirt-hopper.

2.3 OPERATING AND FUNCTIONAL COMPONENTS

Overview:

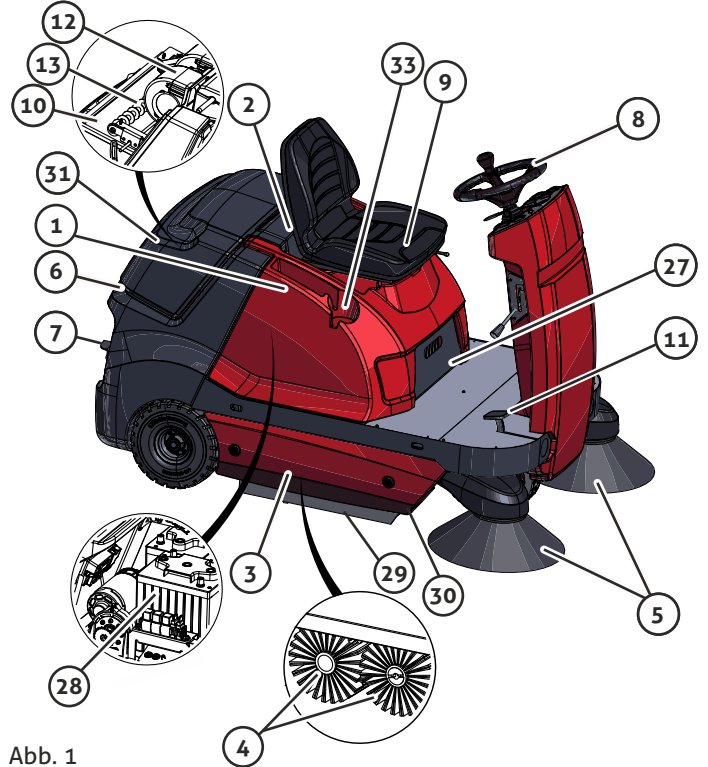


Abb. 1

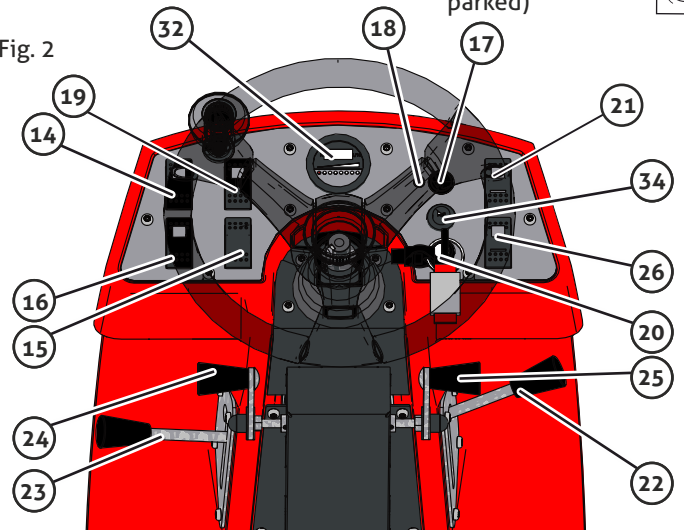
** The version of the machine may differ from the illustration

Operating button + operating lever:

Parking brake
(lights when parked)



Fig. 2



* The version of the machine may differ from the illustration

- | | |
|----------------------------------|---|
| 1 Hood | 19 Switch Sweeping Roller |
| 2 Frame cover | 20 Key Switch (Main Switch) |
| 3 Side cover ri (le) | 21 Indicator ri+le |
| 4 Sweeping Roller (Roller brush) | 22 side brush adjustment ri+le |
| 5 Side brushes | 23 Adjustment lever Sweeping |
| 6 Sweepings container | 24 Side brush adjustment swivelled out le |
| 7 Sweepings container lock | 25 Side brush adjustment swivelled out ri |
| 8 Steering wheel | 26 Direction switch |
| 9 Seat | 27 Flap |
| 10 Dust filter | 28 Batteries |
| 11 Gas pedal | 29 Side sealing rubber |
| 12 Fan | 30 Front sealing rubber |
| 13 Shaker | 31 Filter cover |
| 14 Side Brushes Switch | 32 Charge indicator / hours meter |
| 15 Switch High Emptying | 33 Storage compartment |
| 16 Switch Fan/ Shaker Switch | 34 Horn |
| 17 Parking Brake | |

Function of the switches and operating lever:
(Ch 5.4 Fig.31 + Fig.32)

Technical data			
		Basic	Pro
Machine data			
Machine dimensions (L x B x H)	mm	approx. (1560x900x1250)mm	
Empty weight	kg	ca. 222	
Empty weight (incl. batteries)	kg	ca. 350	
Gross vehicle weight	kg	535	
max. driving- and working speed	km/h	6	
max. climbing capacity (cleaning operation)	%	12	
max. climbing capacity (transport operation)	%	15	
Sweeping width	mm	700	
Sweeping width, one side brush	mm	950	-
Sweeping width, two sides brush	mm	1150	1150
Sweeping width, folded out side brushes	mm	-	1300
Theor. sweeping performance (at 6km/h)	m ² /h	6900	7800
Practical sweeping performance (70%)	m ² /h	4830	5460
Volume of the sweeping container	L	100	
max. load of the sweeping container	kg	50	
IPX-protection class	--	IPX3	
Battery			
Typ	--	4x 6V GEL	
Capacity	Ah	180(C5), 210(C20)	
Weight	kg	4x32	
Running time	h	up to 4,5	up to 4
Theor. charging time with discharged battery (80%)	h	8	
Charger			
Output voltage	V	24	
Charge current	A	25	
Power frequency	Hz	50/60	
Filter- and vacuum-system			
Filter area	m ²	approx. 3	
Filter class	--	M	
Working conditions			
Operating temperature	°C	-15 bis + 40	
Values according to EN 60335-2-72			
Sound pressure level L _{PAP}	dB(A)	65	
Uncertainty K	dB	2	
Sound pressure level L _{WA} + Uncertainty K	dB	88	
Vibration	m/s ²	<2,5	

3 SAFETY

3.1 SAFETY INSTRUKTIONS

As well as the operating manual and the binding regulations for accident prevention applicable in the country of usage and at the place where it is deployed, recognised rules for safety and expert working, and environmental protection, are also to be followed.

Safety Instructions for Operation

- The machine is to be inspected before usage for its perfect condition and operational safety. If it is not in perfect condition, it must not be used.
- In particular, have any errors that may affect safety rectified immediately.
- Operating the machine in ranges at risk of explosion is prohibited.
- Sweeping up of flammable, toxic or explosive materials and combustible gases or undiluted acids and solvents, burning or smouldering objects is prohibited.
- The device is not suitable for accepting fluids, ropes, twines, wires or similar items.
- Very fine dust (e.g. cement dust) leads to clogging of the filter system, do not sweep dust that is too fine!
- Only use the machine with the dirt-hopper inserted to prevent injuries due to parts being projected.
- Do not make any alterations or additions to the machine without the approval of the manufacturer.
- Persons (including children) who, due to their physical, sensory or mental capacities or their inexperience or lack of knowledge, are not capable of using the machine safely must not use this machine without the supervision or instruction of a responsible person.
- Caution: Loose items of clothing may be drawn into rotating parts and cause serious or fatal injuries.
- Transporting loads with the sweeper is not permitted.
- Observe the maximum climbing ability specified in the technical data and maximum possible slope inclination for operating across slopes. The equipment may tip, particularly on slopes. Adapt your operating manner and speed to the conditions.
- The machine is not permitted for use on roads.
- Suitable, non-slip footwear is to be worn to avoid accidents.

Safety information for the battery

- The operating instructions of the battery manufacturer for their product and the specifications of the legislator on handling the battery are to be followed.
- Charge the flat battery directly after usage and only keep in well-ventilated rooms.
- Keep away from naked flames and electrical sparks in the charging area, as a highly-explosive gas mixture can be produced when charging the battery.
- Always keep the battery clean and dry to avoid leakage currents. Never short circuit the battery terminals.
- To avoid damage to health, smoking, eating and drinking in the area of the battery charging station is to be avoided.
- The battery must only be charged with the front panel open and secured by the cover holder.
- Ensure safe and environmentally-friendly disposal of operating and auxiliary materials, as well as replacement parts, particularly the battery!

- To avoid damage to health, smoking, eating and drinking in the area of the battery charging station is to be avoided.
- The battery must only be charged with the front panel open and secured by the cover holder.
- Ensure safe and environmentally-friendly disposal of operating and auxiliary materials, as well as replacement parts, particularly the battery!



Safety Instructions for Care and Maintenance

- Before cleaning and maintaining the equipment, replacing parts or changing to a different function, the equipment is to be switched off and the ignition key is to be pulled out.
- Spare parts must correspond to the requirements laid down by the manufacturer. This is always guaranteed for original spare parts.
- Accessories and spare parts must only be installed by an authorised customer service department.
- For work on the electrical system, the battery is to be disconnected.
- The equipment must not be cleaned with a hosepipe or high-pressure water jet (risk of short-circuits or other damage).
- Repairs must only be made by the permitted customer service centres or by experts in this field familiar with all the relevant safety regulations.
- Follow the safety review according to the locally-applicable regulations for mobile industrial equipment.
- Always wear suitable gloves when working on the equipment.

3.2 SYMBOLS IN THE OPERATING MANUAL

	WARNING! CAUTION! DANGER! THE INSTRUCTIONS DESCRIBED MUST BE FOLLOWED
	WEAR BREATHING PROTECTION!
	WEAR PROTECTIVE GOGGLES!
	WEAR GLOVES!
	UNPLUG FROM THE MAINS!
	DO NOT PUT FORK LIFT TRUCK INTO HERE!

3.3 SYMBOLS ON THE SWEEPER

	WARNING! CAUTION! DANGER! THE INSTRUCTIONS DESCRIBED MUST BE FOLLOWED!
	FOLLOW THE OPERATING INSTRUCTIONS!

3.4 SAFETY EQUIPMENT

All safety equipment is to be inspected for functioning before starting work.

Only allow the sweeper to be switched on if...

- The operator is seated in the driver's seat (seat contact switch activated)
- The start key is in the "I" position
- The batteries have sufficient charge

Only allow the sweeper to be driven if...

- The operator is seated in the driver's seat (seat contact switch activated)
- The starting key is in the "I" position
- The batteries have sufficient charge
- The gas pedal is **not** operated during the starting process (safety driving lock)

The drive lock can only be released by resetting/ releasing the gas pedal.

The power supply to the machine is interrupted when...

- The operator is not completely seated in the driver's seat (seat contact switch not activated)
- The starting key is in the "0" position

All safety equipment attached to the machine must not be put out of operation!

4 SETTING UP / BEFORE START UP / COMMISSIONING / TRANSPORT

4.1 UNPACKING THE SWEEPER

i INSTRUCTION LOOK OUT FOR DAMAGE IN TRANSIT AND IF THERE IS ANY, REPORT THIS TO YOUR SPECIALIST DEALER WITHOUT DELAY.

- REMOVE THE BOX.
- REMOVE WOODEN BLOCKS FOR SECURING THE WHEELS.

SEE PACK CONTENTS 2.1 (OPERATING MANUAL AND SIDE BRUSHES ARE IN THE SWEEPINGS CONTAINER)

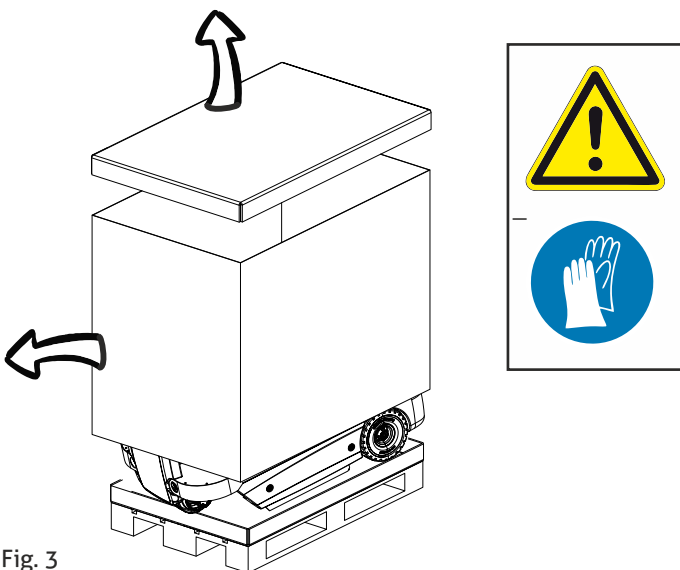


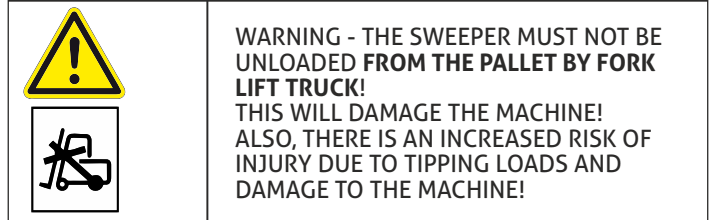
Fig. 3

⚠ DANGER! Risk of injury and/or damage! Take care of the weight of the equipment when charging!

⚠ CAUTION! Charge the batteries fully!

⚠ CAUTION! You must note the following point: Unloading the Machine (in the following text)

Unloading the Sweeper



Standard:

As standard, the sweeper is supplied without batteries and charger.

- Step 1 Open the transport packaging (Fig. 3)
- Step 2 Open the front cover with the square wrench
- Step 3 Remove the hood panel (Ch. 4.6)
- Step 4 Insert the batteries (Ch. 4.9.1)
- Step 5 Connect the batteries. (Ch. 4.9, 4.9.1, 4.9.2)
- Step 6 Refit the front panel (Ch. 4.7)
- Step 7 Fit the side brushes (Ch. 4.3)
The sweeper is functional.
- Step 8 Drive the vacuum sweeper over a ramp out of the transport packaging.

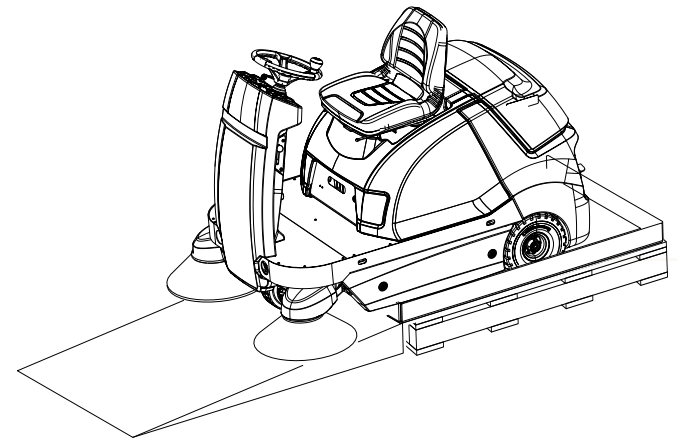
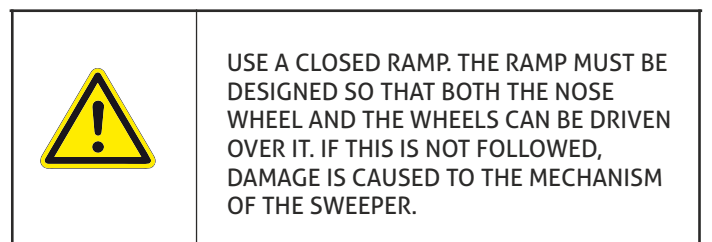


Fig. 4



Optional:

The vacuum sweeper is fitted with batteries.

- Step 1 Open the transport packaging. (Fig. 3)
- Step 2 Open the front panel (see Ch. 4.4)
- Step 3 Secure the front panel with the backplate (see 4.4 Fig. 3) - automatically clicks into place
- Step 4 Connect the plus terminal of the battery.
- Step 5 Close the front panel (see 4.5)
- Step 6 Fit the side brush(es). (see 4.3)
- Step 7 Ensure that the ramp provided is attached.

Drive the vacuum sweeper over the ramp out of the transport packaging. (see Fig. 4)

4.2 WASTE DISPOSAL / RECYCLING



Recycling packaging materials. Do not dispose of packaging materials in normal waste but forward for reprocessing.

For the disposal of all packaging materials, the disposal conditions specific for the location are applicable.

See also: PUTTING OUT OF OPERATION / RECYCLING (Ch. 8)

4.3 FITTING THE SIDE BRUSHES

The side brushes are fastened to the side brush drive motor with a wing bolt. To be able to reach this without any difficulty, the side brush arm must be located in the transport position. When fitting the side brush, ensure that the hub on the side brush cam (Fig. 6) engages with the feather key groove of the motor shaft (Fig. 5) when the side brush is put onto the drive motor.

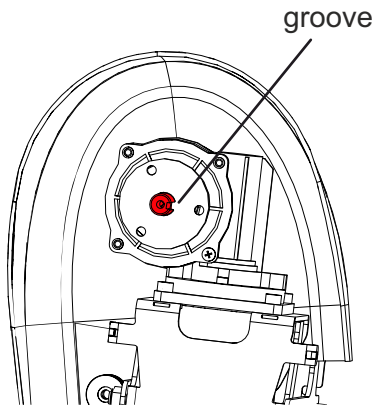


Fig. 5

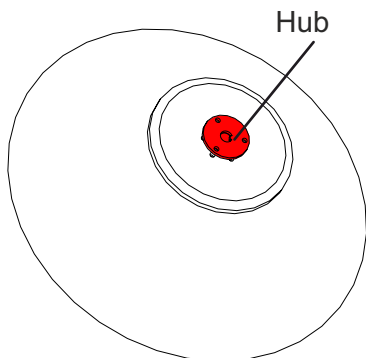


Fig. 6

The side brush now has to be fastened with the wing bolt (and serrated washer) (Fig. 7) and is then operational.

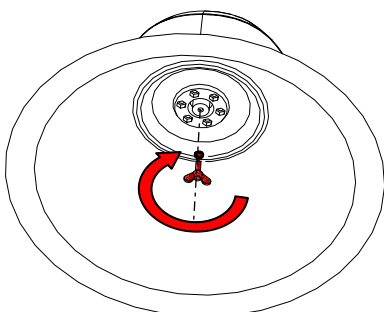


Fig. 7

4.4 OPENING THE HOOD

- The front panel is released on the flap by a front panel wrench (Fig. 8) - turn clockwise -
- Open flap (Fig. 9)

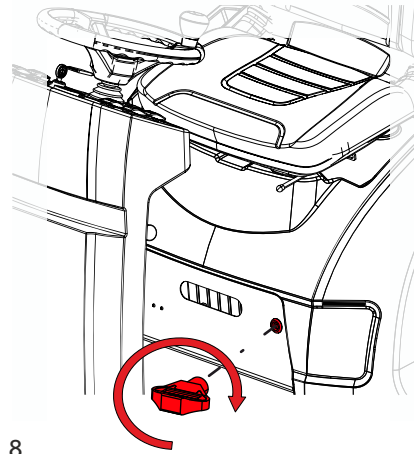


Fig. 8

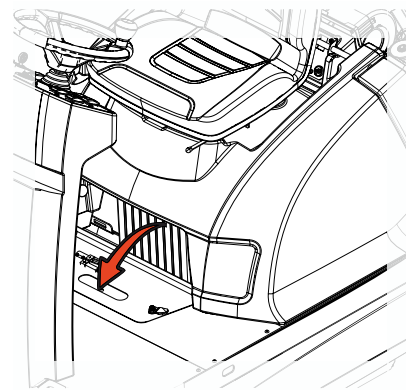


Fig. 9

- Open the front panel and pull into the top position, the front panel automatically clicks into place. (Fig.10)

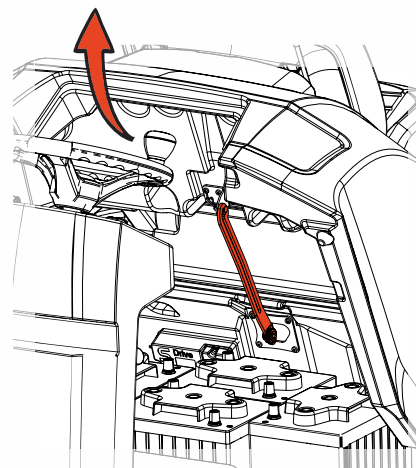


Fig. 10

4.5 CLOSING THE HOOD

- Raise the front panel slightly to close and push the rear panel (holds the front panel) slightly back. (Fig.11)

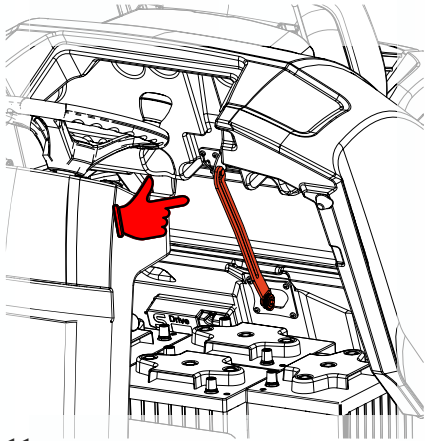


Fig. 11

- Close the front panel and the flap. There is risk of crushing. When closing, remove all body parts from the danger area.

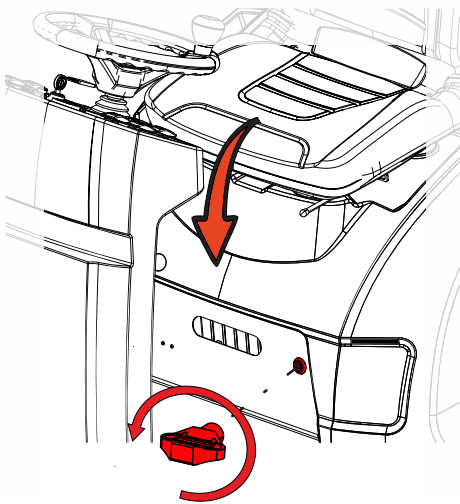


Fig. 12

- The front panel is locked with a front panel wrench on the flap - turn anticlockwise - (Fig. 12)



4.6 REMOVE THE HOOD

- Push the seat forwards.
- Remove the frame cover (by pushing, simply release the Snaploc connection Fig. 13)

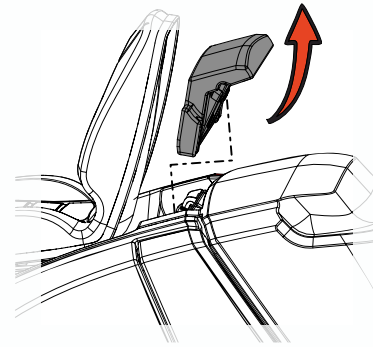


Fig. 13

Open flap with the front panel wrench (clockwise) see (Fig. 14 + Fig. 15)

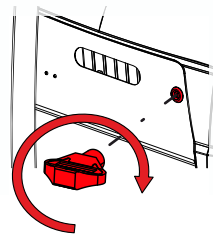


Fig. 14

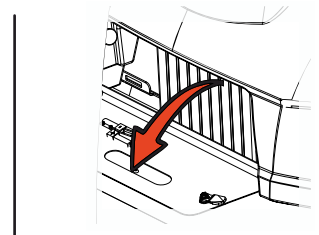


Fig. 15

Disconnect the seat contact switch under the front panel
Release/turn pin and push together, see (Fig. 16)
(Filter cover firmly fitted)

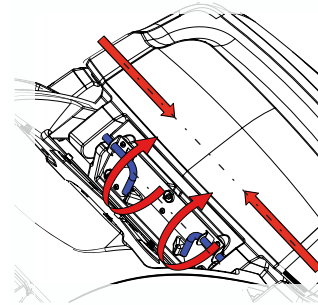


Fig. 16

Adjust/lock the bolts by turning inwards, see (Fig. 17)

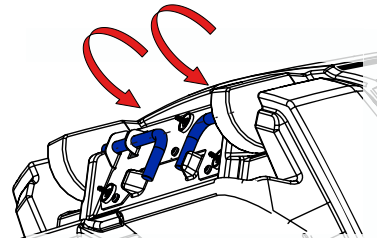


Fig. 17

Remove front panel (Fig. 18)

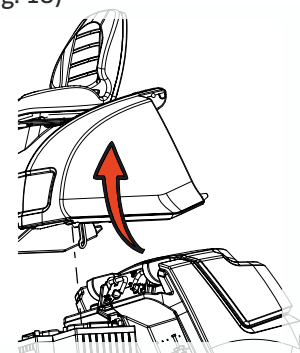


Fig. 18

4.7 FITTING THE HOOD

- Fitting the Hood

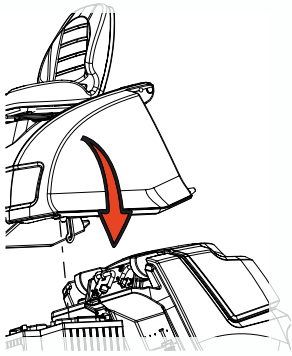


Fig. 19



- Release pins by turning (Fig. 20)

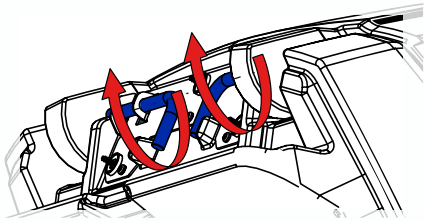


Fig. 20

then lock the pins by turning and pushing apart (Fig. 3)

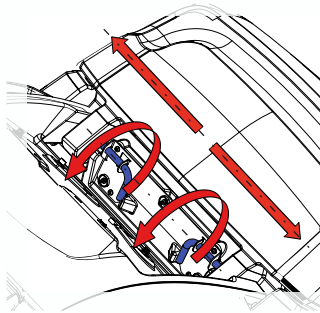


Fig. 21

Connecting the Seat Contact Switch.

Close/lock flap with the front panel wrench anticlockwise (Fig. 22 + Fig. 23)

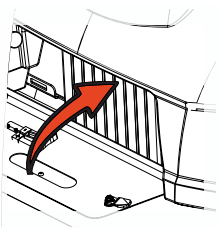


Fig. 22

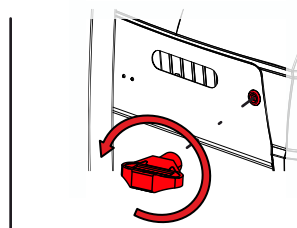


Fig. 23

- Put on frame cover - by pushing firmly/connecting the Snaploc connection (Fig. 4)

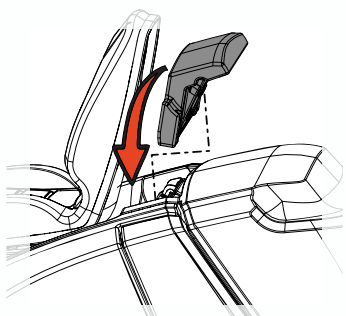


Fig. 24

4.8 BEFORE START UP / TRANSPORT WEIGHT

	WARNING! CAUTION! DANGER! THE INSTRUCTIONS DESCRIBED MUST BE
	FOLLOW THE OPERATING MANUAL OF THE SWEEPER!

- ⚠ **DANGER!** Risk of injury and/or damage! Take care of the weight of the machine when charging!
- ⚠ **CAUTION!** Only operate with the front panel closed and the sweepings container correctly inserted.
- ⚠ **CAUTION!** Charge the battery fully!

- Make sure you are satisfied that the machine has been supplied undamaged and complete. See **UNPACKING THE SWEEPER** (Ch. 4.1)
- If you have any complaints, contact your specialist dealer or your dealer.
- Read the **SAFETY INSTRUCTIONS** (Ch. 3.1)
- Read the operating manual of the charger provided. Take note of the warning instructions for the battery and charger!
- **Connect the terminal clamp (red cable) to the plus terminal of the battery.**
- Push the side brushes on the cam and screw tightly. (Ch. 4.3.)
- Push the side brushes on the cam and screw tightly. (Ch. 4.3.)
- Close the front panel and the sweepings container

4.9 BATTERY / CHARGER

Safety Instructions on Batteries

You must note the following warning instructions for handling batteries:

	WARNING! CAUTION! DANGER! THE INSTRUCTIONS DESCRIBED MUST BE FOLLOWED!
	FOLLOW THE INSTRUCTIONS ON THE BATTERY, IN THE USER INSTRUCTIONS FOR THE BATTERY AND THE OPERATING INSTRUCTIONS.

To do this, you must read the **General Safety Instructions**, particularly the **Battery Safety Instructions** (Ch. 3)!

Please only use original spare parts and contact your dealer.

4.9.1 FITTING BATTERY AND CONNECTING



WARNING! - WEAR GLOVES WHEN WORKING IN THE AREA OF THE BATTERY TO AVOID

- Open the front panel (fold upwards or remove) (Ch. 4.4/4.5)
- Put batteries into the battery holder. (Fig. 25)
- Secure battery with the holding straps
- Adjust the battery clamp (Fig. 25)
- The terminal clamp (red cable) is to be attached to the plus terminal (+) of the battery (Fig.25).
- The terminal clamp (black cable) is to be attached to the minus terminal (-). (Fig. 2)
- Connect 3x terminal clamps, black cable as (Ch. 4.9.2) - Battery Connection Diagram Fig. 1
- Connect charging plug (Fig. 3)

i INSTRUCTION Attach the battery according to the specification (Fig. 26-28)

i INSTRUCTION Charge the battery before putting the equipment into operation! (Chapter. 4.8.3 +4.8.4)

i INSTRUCTION Charge the battery fully!

4.9.2 BATTERY CONNECTION DIAGRAM

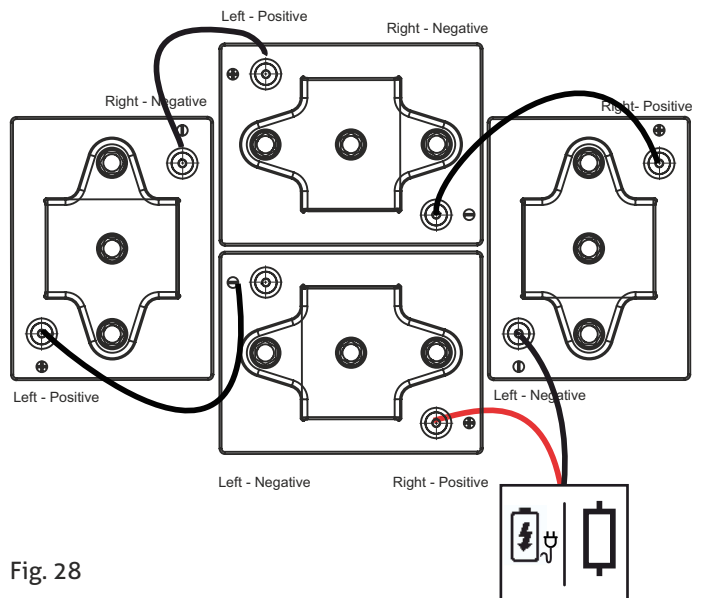


Fig. 28

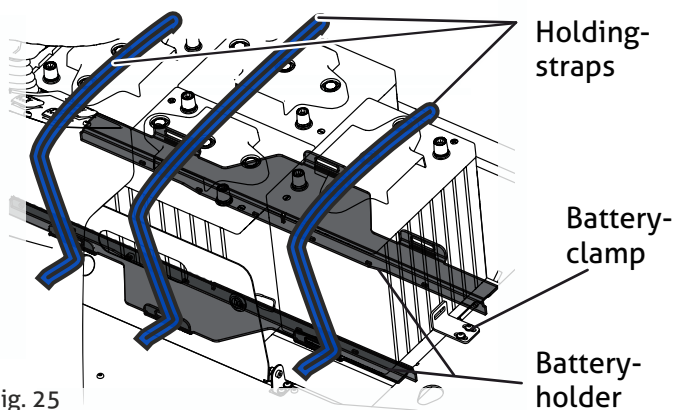


Fig. 25

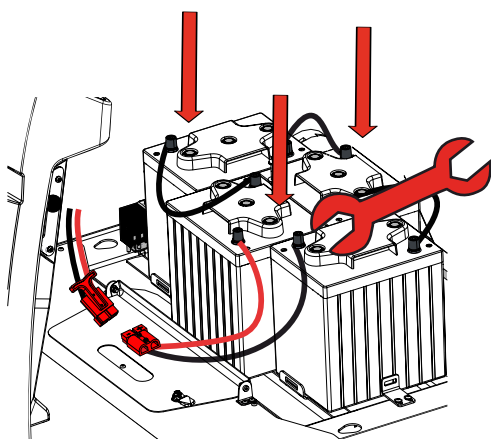


Fig. 26

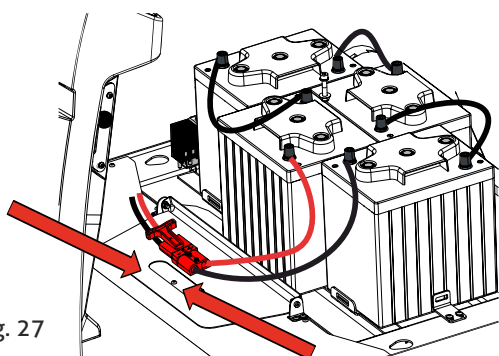


Fig. 27

4.9.3 CHARGING THE BATTERY

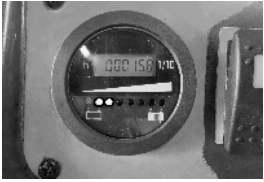
⚠ DANGER Risk of injury. The charger must only be operated if the mains cable is undamaged.
A damaged mains cable is to be replaced immediately by the manufacturer, Customer Service or a qualified person.

⚠ DANGER Danger of electric shock Follow electrical mains and use the correct fuse. Only use the charger in dry areas with sufficient ventilation (e.g. with the front panel open). Observe charging times.

⚠ RISK Risk of Injury Follow the safety instructions when handling the battery.
Follow usage instructions of the charger manufacturer.

Battery charging indicator

i HINWEIS! Das Gerät ist optional mit einer wartungsfreien Batterie ausgestattet.



Operational	lit yellow
Charge battery	lit red
Protection against deep	flashes (equipment shuts down)

4.9.4 CHARGER

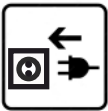
i INSTRUCTION Read the operating manual of the charger manufacturer.

i INSTRUCTION The battery must only be charged at room temperature.

Charging external charger

- Open flap (u.a. Ch. 4.4, Fig. 8 + Fig. 9)
- Disconnect plug (Ch. 4.9.5, Fig. 29). The battery plug is firmly fitted to the flap. • Connect charger plug to battery plug
- Plug the mains plug of the charger into the socket.
- If the batteries are charging, the yellow light of the charger is lit.
- The battery is fully charged if the light of the charger is lit green.

i INSTRUCTION The charger is electronically controlled and stops charging automatically.



Error	lit / flashes red
Charge battery	lit yellow
No battery (connected)	flashes yellow
Fully charged	lit green

After charging

- Unplug mains cable.
- Connect the machine plug back to the battery.
- Close the flap.

4.9.5 REMOVING THE BATTERY

- Open/remove the Hood (Ch. 4.4/4.6)
- Disconnect charging plug (Fig. 29)
- Disconnect terminal clamps from minus terminal (-) (Fig. 30)
- Disconnect terminal clamps from plus terminal (+) (Fig. 30).
- Undo holding straps.
- Remove batteries.
- Dispose of used battery according to the regulations in force (Chapter. 4.2).

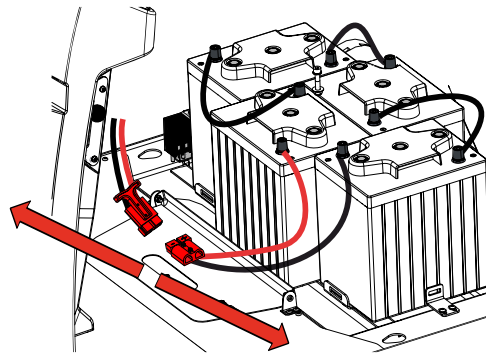


Fig. 29

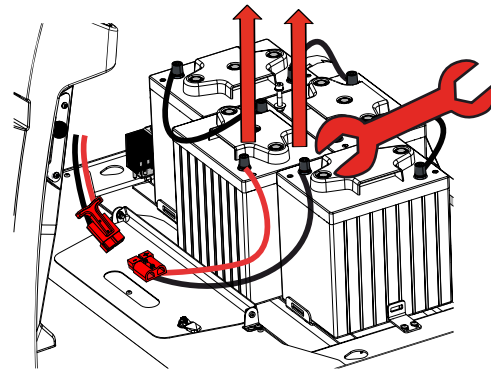


Fig. 30

4.10 START UP

General Instructions

- ⚠ **DANGER!** Risk of injury! Switch off equipment before removing the sweepings container.
- ⚠ **CAUTION!** Only operate with the front panel closed and the sweepings container correctly inserted.

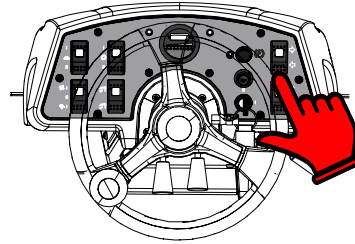
i **INSTRUCTION**
MUST BE FOLLOWED! COMMISSIONING, (Ch. 4.8)

- Make sure you are satisfied that the machine has been supplied undamaged and complete. See **BOX CONTENTS** (Ch. 2.1) **UNPACKING**, (Ch. 4.1)
- If you have any complaints, contact your specialist dealer.

5.2 STARTING SWEEPER / DRIVING THE SWEEPER

- Put the key into the key switch and turn it clockwise to the "I" position.
- Switch off the parking brake,
- Motor starts as soon you start to drive.

Driving the sweeper



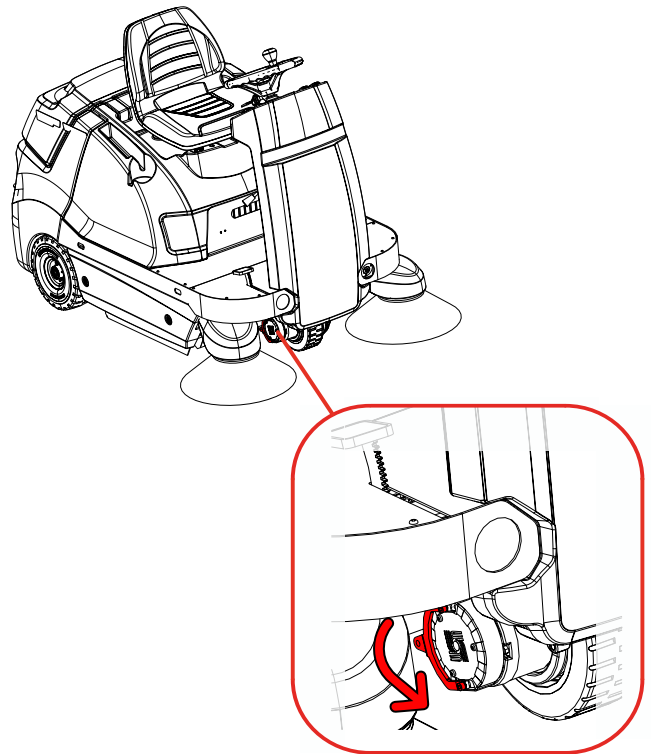
- The direction switch (Ch. 2, Fig. 2, Item 26 / Ch. 5.4) indicates in which direction the sweeper is travelling when the gas pedal is operated. If the direction switch is pointing forwards, then the machine is driving forwards. If the direction switch is pointing backwards, then the machine is driving in reverse.

Running Over Obstacles

- Obstacles must always be run over with a ramp to protect the machine (ground clearance 50mm).

5.3 RELEASE THE BRAKE

Releasing the electrical braking function is achieved by lifting the side lever on the drive wheel by approx. 2-3 mm. Release must only happen for moving the machine manually as required.



5 OPERATION AND USAGE

MUST BE FOLLOWED!

You must only carry out the work described in this chapter if you have completely read and understood the operating manual, particularly Chapter 1-4.

i **INSTRUCTION** Safety equipment is to be inspected for functioning before starting work.

See **SAFETY INSTRUCTIONS**, (Ch. 3)

⚠ **DANGER!** If the equipment is used for extended periods, circulatory disorders in your hands may be caused due to vibrations. A generally-applicable usage time cannot be specified, as this depends on several influencing factors: These include a firm grip, low ambient temperature and personal disposition. It is recommended that you take regular breaks.

i **INSTRUCTION**
Please adjust driving speed to the conditions (different ground surface, type and amount of sweeping material), to obtain a good sweeping result.

i **INSTRUCTION**
When in operation, the dust filter must be cleaned at regular intervals and as required.

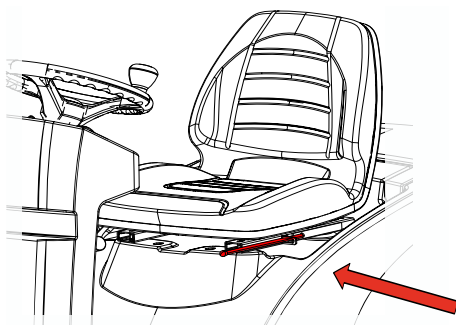
i **INSTRUCTION**
When in operation, the sweepings container must be emptied at regular intervals and as required.

See **CLEANING DUST FILTER**, (Ch. 5.7)

See **EMPTYING SWEEPINGS CONTAINER**, (Ch. 5.8)

5.1 ADJUSTING SEAT

To do this, undo the seat lock and push the driver's seat onto the seat bracket until you are in a suitable seating position and lock the seat.



5.4 SWEEPING OPERATION WITH SIDE BRUSH, ROLLER BRUSH AND FAN

⚠ DANGER! Sweepings that are too large or non-uniform may be disposed of via the raised filter lid directly into the sweepings container.

Risk of dust! After shutting down the machine, wait 5-10 sec. before opening the filter cover!

⚠ CAUTION! Do not sweep up any straps, wires or similar as this may cause damage to the sweeping mechanism.

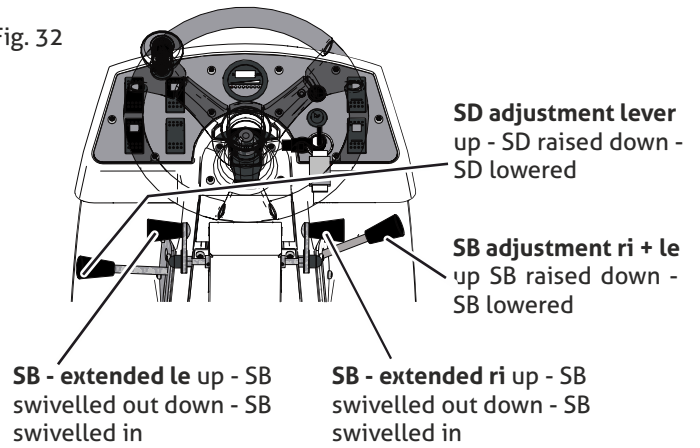
📌 INSTRUKTION MUST BE FOLLOWED!
BEFORE START UP, CH.4.8

As required:

- Side brush switch in **I (ON), 0 (OFF) Position**
- Lower side brush (**Fig. 33**)
- Fan switch in **I (ON) position** (dust vacuuming ON)
- Shaker switch in **II position**, shaker on
- **0 position** fan/shaker OFF
- Activate parking position - how it is lit corresponds to parking
- Activate Sweeping Roller **I (ON), 0 (OFF) position**
- Drive direction forwards **I (Forwards), II (Reverse) position**

Function of the operating

Fig. 32



Key to Abbreviations:

SD Sweeping Roller
SB Side Brush
HE High emptying

Dir. forwards Direction reverse
Dir. forwards Direction forwards

Function of buttons and operating

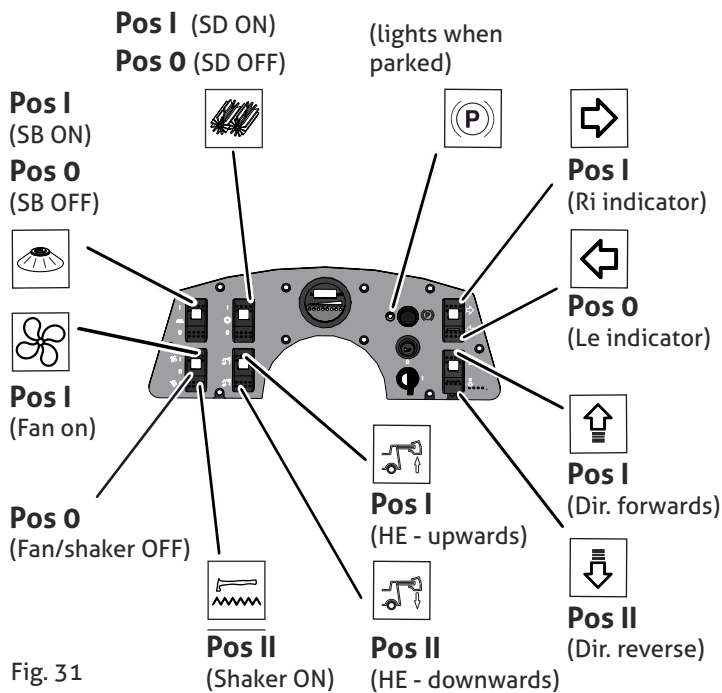


Fig. 31

Operating the side brushes

The side brushes are fastened so that they can swivel, if they collide against an obstacle, they swivel under the sweeper to avoid possible damage.

- Raise the side brushes **SB adjustment ri+le high** - **in transport position** -
- Start the sweeper (Ch. 5.2.1) (Ch. 5.2.1)
- Operate the side brush switch (Fig. 33) - both side brushes rotate.
- The side brushes can now be lowered for sweeping.

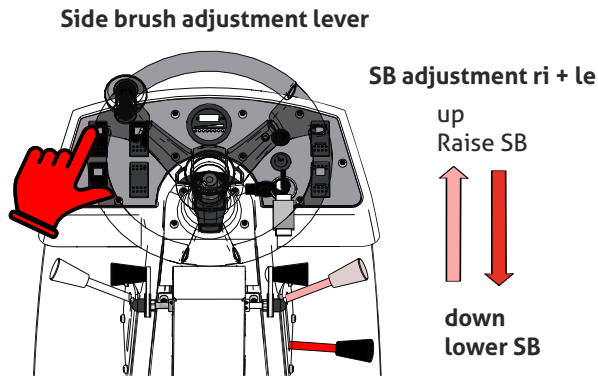


Fig. 33

After sweeping operation, swivel in and raise the side brushes again to clean them.
Side brush switch in 0 position.

Optional as required - Swivel side brushes out:

- while in operation, push the lever for the swivelling side brushes on the right and/or left down (Fig. 34),
- Swivel side brush(es) ri or le out -
- push the lever(s) up
- side brush(es) swivel(s) in -

Side brush adjustment lever swivelled out

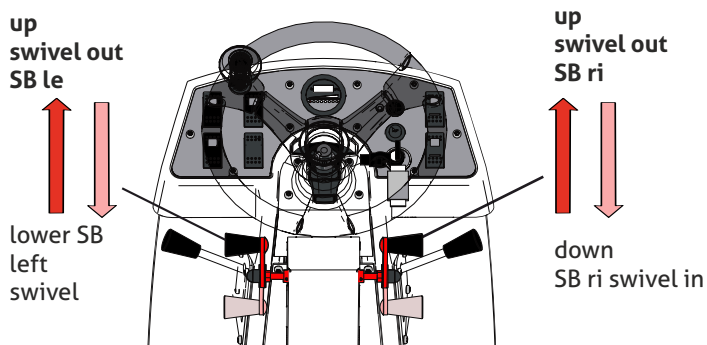


Fig. 34

After sweeping operation, swivel in and raise the side brushes again to clean them.
Side brush switch in 0 position.

Operating the Sweeping Rollers

The Sweeping Rollers are driven by an electrical motor.

- Start the sweeper (Ch. 5.2.1)
- Operate the Sweeping Roller in I position (Fig. 35) - both Sweeping Rollers rotate.
- The Sweeping Roller can now be lowered for sweeping. (Fig. 35)

SD adjustment lever

up
SD raised

down
SD lowered

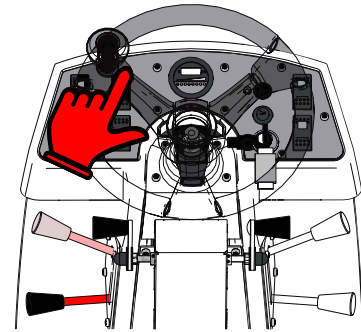


Fig. 35

After sweeping operation, raise the Sweeping Rollers again to clean them. Sweeping Roller switch in 0 position.

5.5 SWITCHING OFF SWEEPER

- Set down the machine on a level, dry and protected surface.
- Switch off the drum drive, side brushes and vacuuming system.
- Put the key into the "0" position turn (anticlockwise) and pull out.
- Fold in the side brushes.
- Raise side brushes and Sweeping Roller.

When setting down, the machine is to be secured against inadvertent

5.6 TRANSPORTING THE MACHINE

⚠ DANGER! Risk of crushing! Observe the weight of the machine!

i INSTRUCTION Do not kink any Bowden cables!

- Switch off sweeper and pull out the ignition key.
- Fold in the side brushes.
- Raise side brushes and Sweeping Roller.
- Fasten the machine with tensioning belts or similar.
- While transporting in vehicles or trailers, the machine is to be secured, according to the relevant applicable guidelines, against sliding and tipping.

For example, see (Fig. 36 + Fig. 37)

Fig. 36

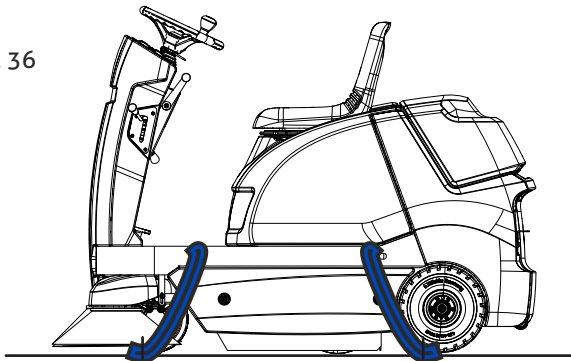
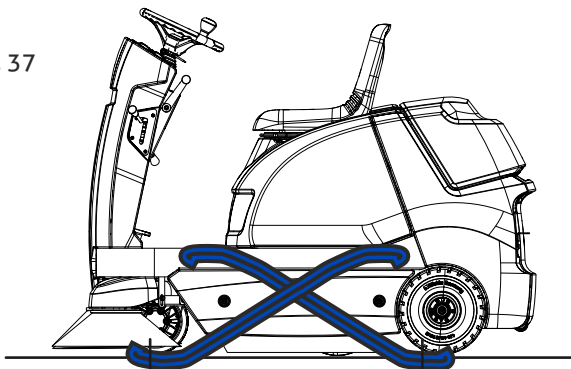
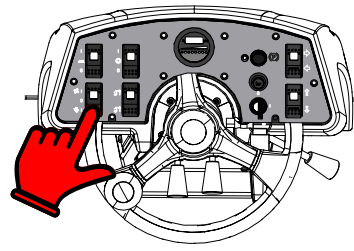


Fig. 37



5.7 CLEANING THE FILTER

⚠ CAUTION! Risk of crushing when closing the filter box.



i Instruction Ensure that the sweepings container has been inserted.

- When using the electric shaker operate (approx. 15-20 sec) the shaker switch (5.4 Fig. 2)

i Instruction It is recommended waiting 5-10 seconds until the fine dust has settled before emptying the sweepings container.

5.8 EMPTYING THE DIRT - HOPPER

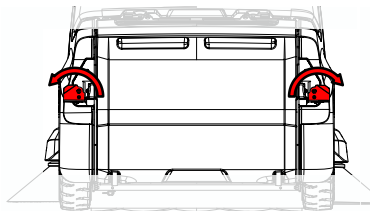


Fig. 38



⚠ DANGER! Risk of injury! Switch off equipment before removing the sweepings container.

i Instruction The maximum permitted load (sweeping material) of the sweepings container is 50 kg.

i Instruction The sweepings container must be emptied at regular intervals to enable perfect sweeping.

- Clean the dust filter.
- Operate the parking brake.
- Remove the sweepings container lock Fig. 38
- Remove the sweepings container from the sweeper using the handle on the top. (Underneath are located rollers for simple transport)

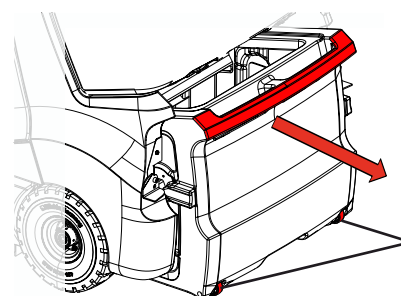


Fig. 39

Rolling for simple transport

- Empty the sweepings container thoroughly after finishing sweeping work.
- Empty the sweepings container into a suitable container.
- Push the sweepings container back into the machine.

6 TROUBLESHOOTING

Help for faults		
Fault	Possible cause	Remedy
Machine must not be switched on	Battery must be charged (battery charge state $\leq 20\%$)	<ul style="list-style-type: none"> ▶ Charge batteries ▶ Check batteries and replace as necessary
	Seat contact switch not functioning	▶ Check seat contact switch and plug connections of the cable
	Batteries not connected correctly	▶ Check battery connection cable
	Machine and battery plug not connected correctly	▶ Connect both plugs behind the flap underneath the driver's seat firmly together
	Battery charge indicator/hours meter not working	▶ Check battery charge indicator and plug connections
	Overload or fault with the main relay	▶ Check main relay and replace if required
	Key switch not working	▶ Check key switch and plug connections of the cable and replace if required
	Cause unclear	▶ Notify your specialist dealer or Customer Services
Machine does not drive	Parking brake active	<ul style="list-style-type: none"> ▶ Deactivate parking brake using switch ▶ Check brake on nose wheel
	Activate safety function of the gas pedal/ steering	<ul style="list-style-type: none"> ▶ Gas pedal cannot be operated when starting / when setting down again ▶ Gas pedal does not operate for 2 seconds, safety function is reset
	Potentiometer of the gas pedal is no longer adjusted or faulty	▶ Check and adjust potentiometer, and replace as necessary
	Fuse to protect the motor has blown	<ul style="list-style-type: none"> ▶ Do not drive on slopes $> 15\%$ ▶ Check fuse of the drive motor and reset
	Drive motor not working	▶ Check drive motor and replace if required
	Direction switch not working	▶ Check switch and electrical plug connection, replace as required
	Driving control not working	<ul style="list-style-type: none"> ▶ Check driving control fuse and replace if required ▶ Check driving control and replace as necessary
	Cause unclear	▶ Notify your specialist dealer or Customer Services
Side brush / drum adjustment with or without limited functioning	Mechanism soiled by sweepings	▶ Clean mechanism (such as with compressed air) and remove sweepings
	Mechanism (of suspension) damaged by collision/sweepings	▶ Check and repair mechanism, replace if required
	Bowden cable worn or damaged	▶ Readjust Bowden cable, replace if required
	Spring worn or faulty	▶ Check spring and replace if required
	Cause unclear	▶ Notify your specialist dealer or Customer Services
Drums do not turn, or produce unusual noises	Straps, large packaging residues etc. have been swept up and have become entangled/jammed	▶ Remove sweepings
	Drum motor has overloaded, fuse has blown	▶ Check fuse of the drum motor and reset
	Drum not correctly fitted or inserted	▶ Cams for the drums (check both sides) are not in the correct position
	Drive chain not under tension or chain wheels have come off	<ul style="list-style-type: none"> ▶ Check helical tunnel and attachments (plates, rubber) ▶ Check chain and chain wheels for wear, replace if ersetzen
	Helical tunnel or attachments damaged by sweepings	▶ Check helical tunnel and attachments (plates, rubber, seals etc.) and replace if required
	Drum motor damaged	▶ Check drum motor and replace if required
	Cause unclear	▶ Notify your specialist dealer or Customer Services

For Customer Services see Customer Services (Ch.7.14)

Help for faults

Fault	Possible cause	Remedy
Side brushes do not turn, or produce unusual noises	Straps, large packaging residues etc. have been swept up and have become entangled/jammed	▶ Remove sweepings
	Side brush motor has overloaded, fuse has blown	▶ Check fuse of the side brush motor and reset
	Side brush motor damaged	▶ Check side brush motor and replace if required
	Unknown electrical fault	▶ Check plug connections of the cables ▶ Check cables for damage
	Cause unclear	▶ Notify your specialist dealer or Customer Services
Bad sweeping result	Drums or sweeping tunnel blocked by sweeping material	▶ Check drums and sweeping tunnel for contamination or blockages and remove them
	Drum or side brushes not completely lowered	▶ Check adjustment ▶ Completely lower drums or side brushes
	Drum or side brush worn or damaged by sweepings	▶ Check drum and side brushes for wear and damage, adjust sweeping clearance as required or replace components
	Drums are not installed according to their direction of rotation	▶ Remove drums and fit in the appropriate direction of rotation (see sticker or operating manual)
	Sealing rubber damaged by foreign bodies or running over obstacles without a ramp (built-up edge when sweeping)	▶ Check all sealing rubbers for damage and correct seating and readjust or replace as necessary
	Drive speed too high	▶ Adjust your drive speed to the ground and the sweepings to be cleared
	The drums and side brushes are not brushing optimally for the intended use	▶ Notify your specialist dealer or Customer Services
	Cause unclear	▶ Notify your specialist dealer or Customer Services
Machine creates dust	Dust filter must be cleaned	▶ Clean dust filter electrically or manually
	Dust filter inserted wrongly or faulty	▶ Insert dust filter correctly (follow label) ▶ Replace filter fins immediately if damaged
	Sweepings container is full	▶ Empty the sweepings container ▶ Clean the dust filter
	Seals damaged or wrongly fastened	▶ Check all seals on the filter cover and sweeping tunnel, replace as required
	Cause unclear	▶ Notify your specialist dealer or Customer Services
Electrical filter cleaning not working	Shaker motor has overloaded, fuse has blown	▶ Check fuse of the shaker motor and reset
	Mechanism is blocked or damaged	▶ Check mechanism of the filter cleaning unit
	Shaker motor damaged	▶ Check mechanism of the filter cleaning unit
	Shaker motor without electrical connection	▶ Check plug and electrical cabling
	Cause unclear	▶ Notify your specialist dealer or Customer Services
Unknown electrical fault	Fuse has blown	▶ Check and reset all fuses, replace if required
	Electrical plug connection without contact	▶ Check all electrical plug connections, fasten if required
	Wear, overload or fault of electrical components is unclear	▶ Notify your specialist dealer or Customer Services

For Customer Services see **Customer Services (Ch.7.14)**

7 CARE AND MAINTENANCE (MINOR REPAIRS)

Regular maintenance of the sweeper is useful for the serviceability of the machine, its components and the sweeping result.

As a result of the following described and regularly undertaken maintenance work, the lifetime of the machine can be extended.

⚠ DANGER There is a risk of injury when cleaning. During cleaning, always wear a dust protection mask, as well as protective goggles and gloves.

i INSTRUCTION Repair work is only to be carried out by permitted customer service centres or specialists for these machines, familiar with all the safety-relevant regulations.

i INSTRUCTION For any care or maintenance: Set down the machine on a level surface. Secure the machine from rolling away. Always switch off the machine and pull out the ignition key.

i INSTRUCTION For work on the electrical system, disconnect the battery.

7.1 GENERAL CLEANING

⚠ CAUTION! There is a risk of damage to the machine. The sweeper must not be cleaned with a hosepipe or high-pressure water jet. There is a risk of damage to the machine or the electrics.



7.2 CHANGING / CLEANING THE FILTER

⚠ CAUTION! Before starting to change or clean the dust filter, clean off the dust filter and empty the sweepings container. Wear dust protection mask and protective goggles when working on the filter system. Follow the safety instructions for handling fine dust!

i INSTRUCTION Clean the dust filter before changing.

i INSTRUKTION Empty the sweepings container before changing

i INSTRUCTION The filter may be damaged by blowing from too small a distance from the filter material with too much pressure.

See SWITCHING OFF SWEEPER, (Ch. 5.5)

See CLEANING DUST FILTER, (Ch. 5.7)

See EMPTYING SWEEPINGS CONTAINER, (Ch. 5.8)

Removing filter

Starting mechanical filter cleaning

- Switch off the sweeper, pull out the ignition key.
- Raise the filter cover until this engages in the backplate. (Fig. 40)

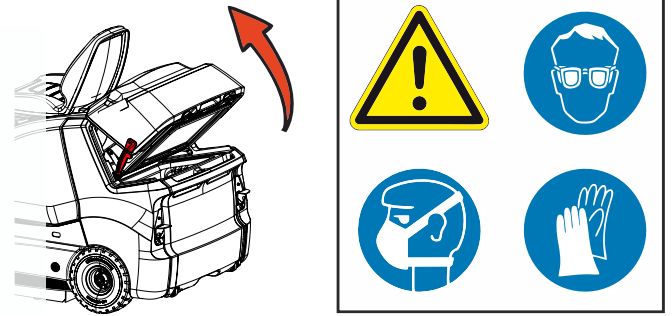


Fig. 40

- Hold the filter holder firmly and undo the dust filter lock on the left and right. (Fig. 41)
- Slowly release the filter holder inc. dust filter until this is held. (Fig. 42)
- Take the dust filter out of the machine. (Fig. 43)

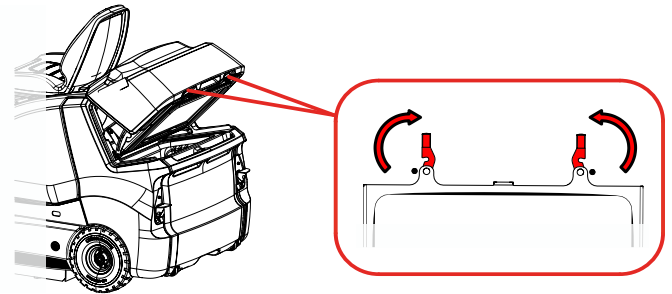


Fig. 41

- Hold the filter holder firmly and undo the dust filter lock on the left and right. (Fig. 41)
- Slowly release the filter holder inc. dust filter until this is held. (Fig. 42)

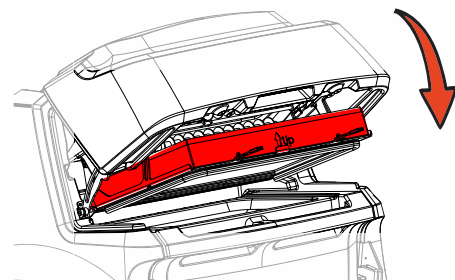


Fig. 42

- Take the dust filter out of the machine. (Fig. 43)

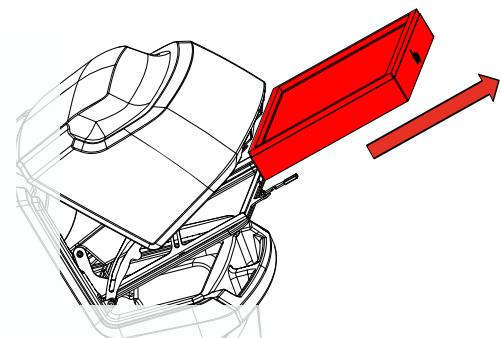


Fig. 43

- Clean or replace as required.
- As required, **carefully** blow out with compressed air from the "clean" side.
- Reinsert dust filter

See INSERTING THE DUST FILTER Chapter 7.3

7.3 INSERTING THE FILTER

- Insert dust filter in the installation direction - see symbol on the filter - into the filter holder. (Fig. 44)

⚠ **DANGER RISK OF CRUSHING** when closing the filterbox.

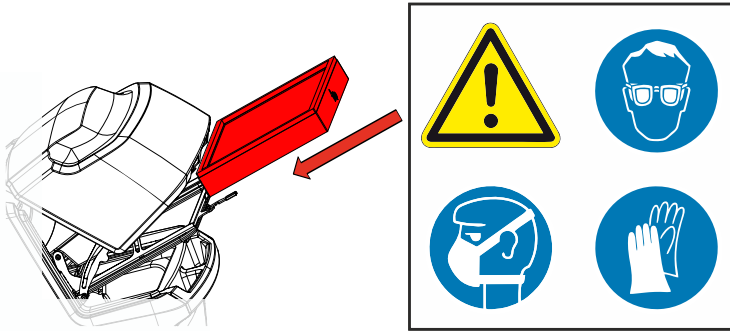


Fig. 44

- Lock dust filter on the left and right. (Fig. 45)
- Remove hands from the risk area to avoid crushing.

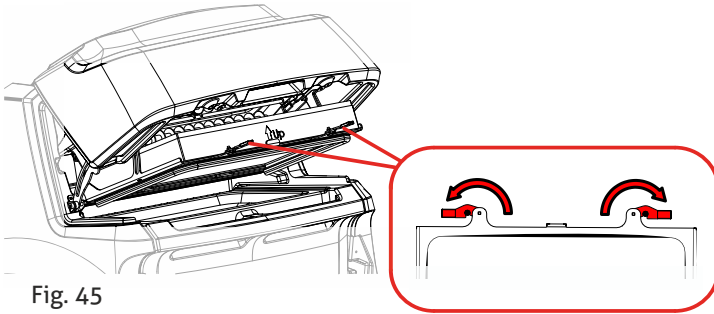


Fig. 45

- Raise the filter cover slightly to close and push the rear panel (holds the filter cover) slightly back (Fig. 46).

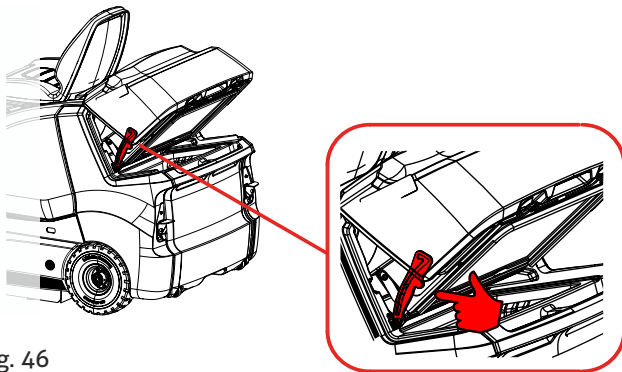


Fig. 46

- Raise the filter cover slightly to close and push the rear panel (holds the filter cover) slightly back (Fig. 46).

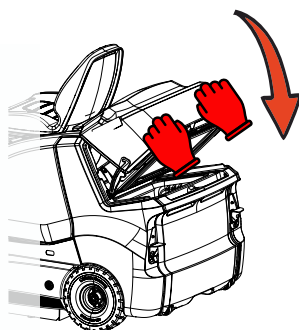


Fig. 47

7.4 FITTING / REMOVING THE SIDE COVER

Remove side cover by unlocking with the wrench, right side anticlockwise, left side clockwise (Fig. 48). Attaching is done in precisely the opposite way. (Fig. 49)

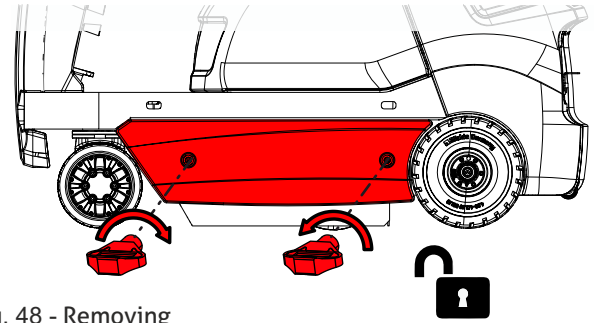


Fig. 48 - Removing

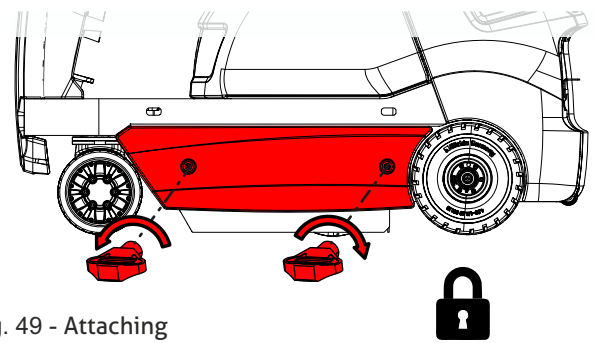


Fig. 49 - Attaching

7.5 ROLLER BRUSH MAINTENANCE

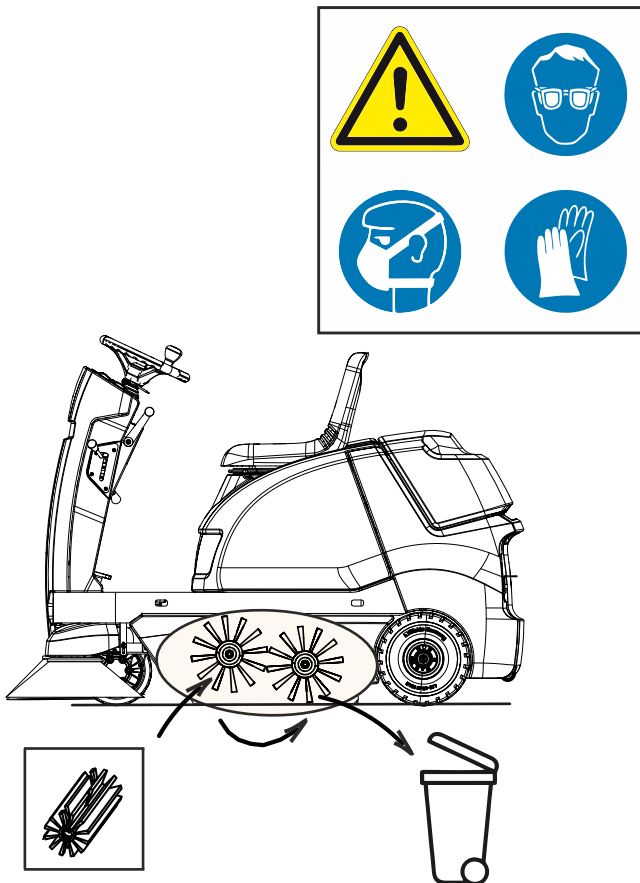
Sweeping drum

- The front drum is not subject to any wear and must not be replaced, except where it is damaged.
- The sweeping drum does not have to be replaced if the sweeping result is visibly worse due to wear of the brushes, and readjustment of the sweeping drum is no longer possible.
- **Recommendation:** When replacing the rear sweeping drum, changing the front sweeping drum on the rear side (Fig. 1) is recommended, then inserting the new sweeping drum forwards, **V direction must be followed!** (Fig. 50)

See **IMPORTANT SPARE PARTS AND CONSUMABLES**, Ch.5.12

CAUTION! Risk of crushing when fitting and removing sweeping drums.

CAUTION! There is a risk of damage to the sweeping drum if the brushes become jammed during fitting.



CAUTION! When replacing the V direction (if present) must be observed

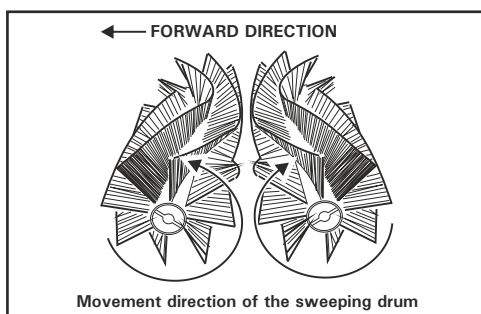


Fig. 50

Remove sweeping drums

CAUTION! Risk of crushing when fitting and removing sweeping drums.

CAUTION! There is a risk of damage to the sweeping drum if the brushes become jammed during fitting



- Raise sweeping drums (Ch. 5.4)
- Remove the side cover (Ch. 7.4)
- Remove the three star handles (Fig. 51)
- Pull out sweeping drum blade on the handles (Fig. 51)

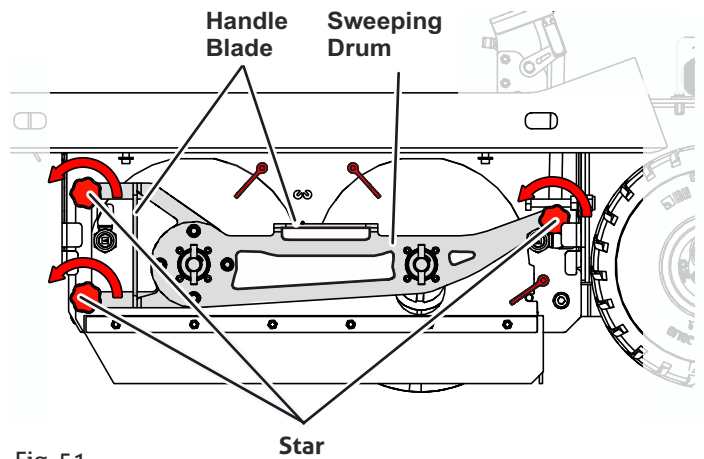


Fig. 51

- Remove the sweeping drum cover (Fig. 52) by releasing the locking handle

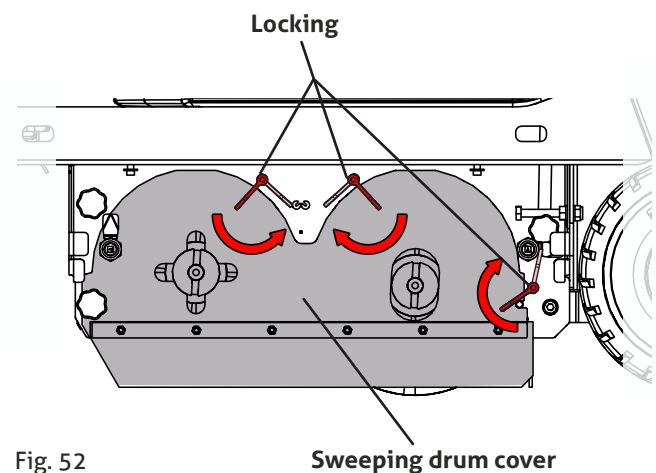


Fig. 52

- Removing and replacing sweeping drum, Recommendation see Ch. 7.5 Sweeping Drums

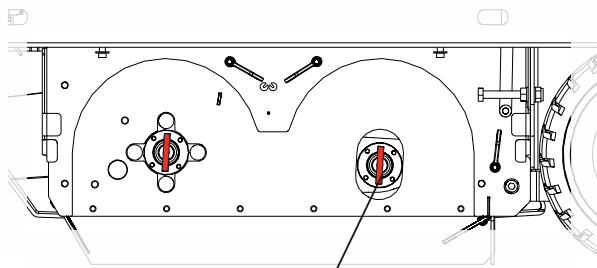


Fig. 53 Tension rod

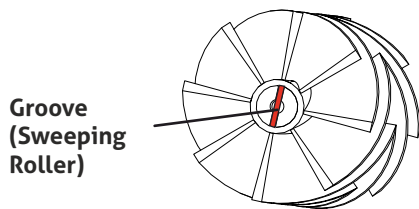


Fig. 54

- Push the sweeping drum into the sweeping tunnel, The direction of rotation of the sweeping drums must be observed. (Fig. 50)
- Respectively turn the sweeping drum until the synchronisation mandrel of the rear sweeping drum blade (Fig. 53) fits into the groove of the sweeping drum (Fig. 54), and push the sweeping drum in as much as possible.
- Put the sweeping drum cover back on and fasten the three locking handles.
- Put the sweeping drum blade back onto the free ends of the sweeping drum (Fig. 55)
- On the sweeping drum blade are located two turning levers each with a synchronisation mandrel
- Turn the turning lever until the respective synchronisation mandrel fits into the sweeping drum.
- **Ensure that both sides of the sweeping drum plug into the groove, so that all four locking handles fasten the sweeping drum cover and all three star handles are firmly tightened. (Fig. 55)**

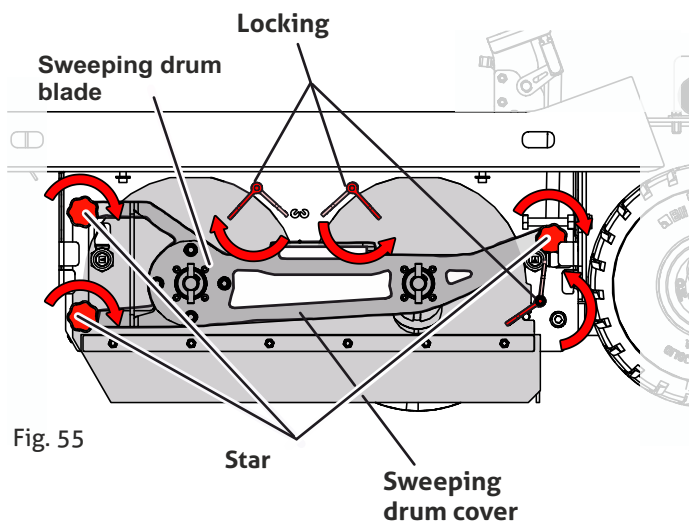
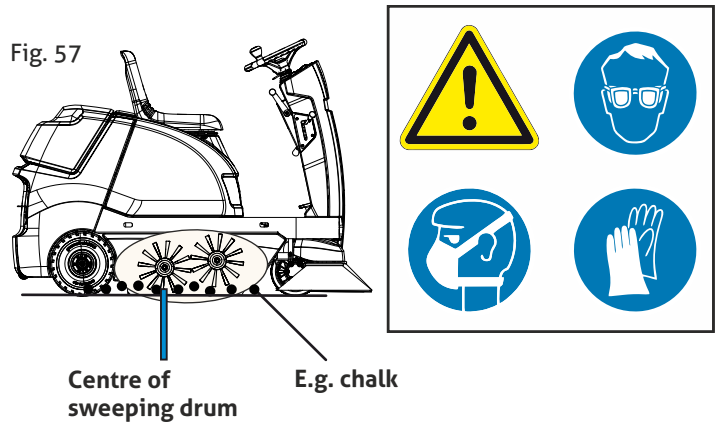


Fig. 55

- Reattach side cover (Ch. 7.4)
- Lower sweeping drum again
- **Readjust sweeping drums as required, or adjust the sweeping clearance.**

- Switch off the sweeper.
- Raise the side brushes.
- Operate with the middle of the sweeper behind the sweeping drum on level and smooth ground that is recognisably covered with dust, sand or chalk. (Fig. 57)

Fig. 57



- Set the sweeping drum adjustment to the centre position of the whole setting area.
- Switch on the machine and allow the sweeping drum to rotate for approximately 15 seconds. Reset the machine
- Drive the sweeper from the impression of the sweeping drum that occurs (=sweeping clearance).
- **The shape of the sweeping clearance should produce a uniform rectangle (see Fig. 58).**

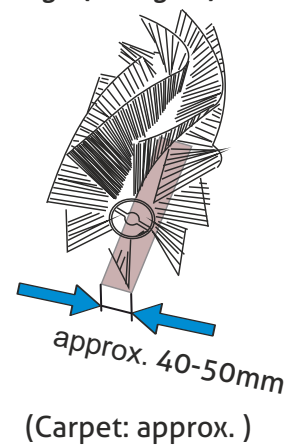


Fig. 58

- Remove the side cover (Ch. 7.4 Fig. 48 + 49)
- You can adjust the height of the sweeping drum with the knurled knob.
- The star handle is used for fastening.

See **Adjusting Sweeping Drums** on the next page.

Adjust the sweeping

- Raise sweeping drums (Ch. 5.4)
- Remove the front panel (Ch. 4.6)
- Remove the star handle (Fig. 56)

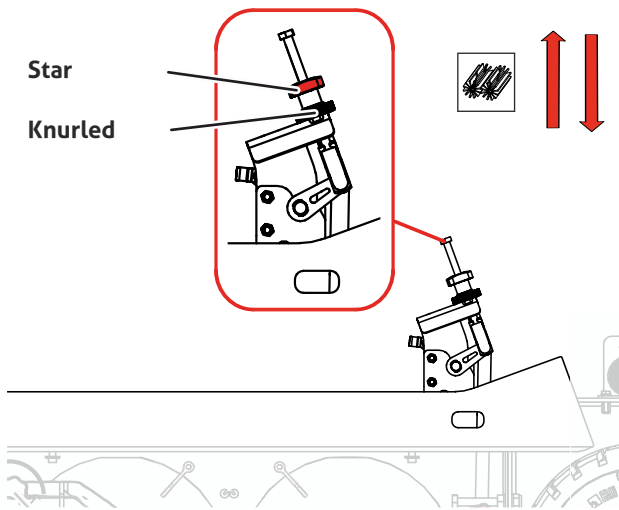


Fig. 56

- By turning the knurled nut upwards the sweeping drum is lowered (sweeping clearance increases)
- By turning the knurled nut downwards the sweeping drum is raised (sweeping clearance decreases)
- Correcting the drum height
- As appropriate, repeat the adjustment process with the knurled knob until the desired sweeping clearance is reached. (Ch. 7.6, Fig. 58)
- Close and lock the front panel (Ch. 4.7)

7.7 CHANGING THE SIDE BRUSH

The side brushes are subjected to wear. On abrasive surfaces, wear to the brushes is faster than on smooth floors.

It is necessary to change the sweeping brushes if these are worn or damaged. Changing due to wear is necessary if the sweeping result of the side brushes is visibly worsened and it is no longer possible to readjust.

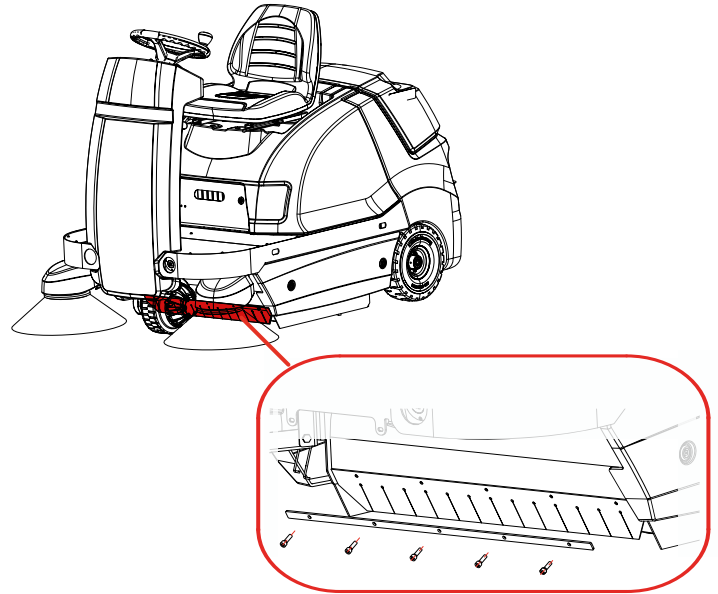
- Put ignition key into the "0" position and pull out.
- Raise the side brushes (transport position)
- Remove the side brushes (undo wing bolt).
- Change the side brushes.
- Put the side brushes on the take-up of the driver and fasten

See also FITTING THE SIDE BRUSHES (Ch. 4.3, Fig. 5-7)

7.8 Changing the Front Sealing Rubber

The front sealing rubber must be replaced if there are tears or it is worn, to guarantee a good sweeping result.

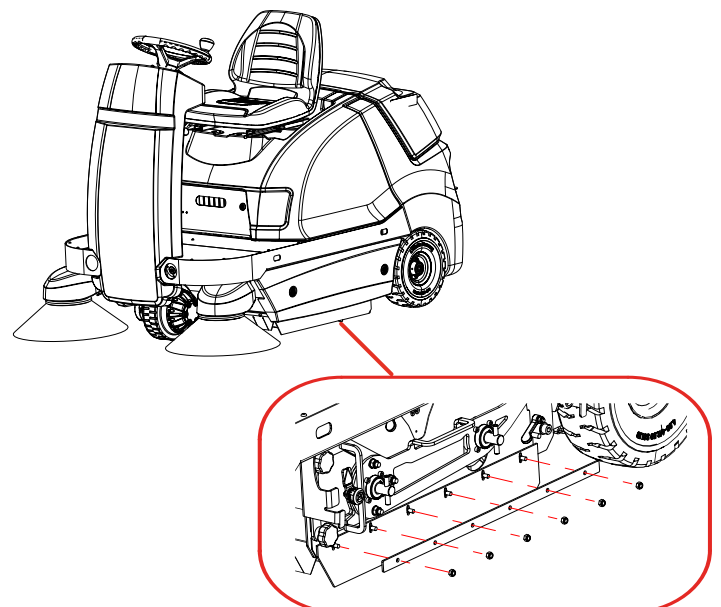
- Put ignition key into the "0" position and pull out.
- Raise the side brushes (transport position).
- Undo all five screws on the front sealing rubber and remove the holding plate.
- Replace the front sealing rubber.
- Refasten holding plate with front sealing rubber.



7.9 SETTING / REPLACING SIDE SEALING RUBBER

The basic setting for the side sealing rubbers is 1mm from the floor.

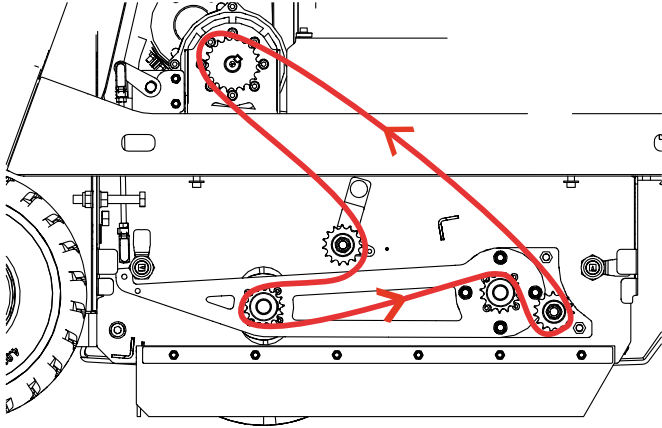
- Put ignition key into the "0" position and pull out.
- Remove side cover (Ch. 7.4)
- To change or readjust the side rubbers undo 6 nuts and remove the holding plate
- Readjust or replace the side sealing rubber, align and refasten.



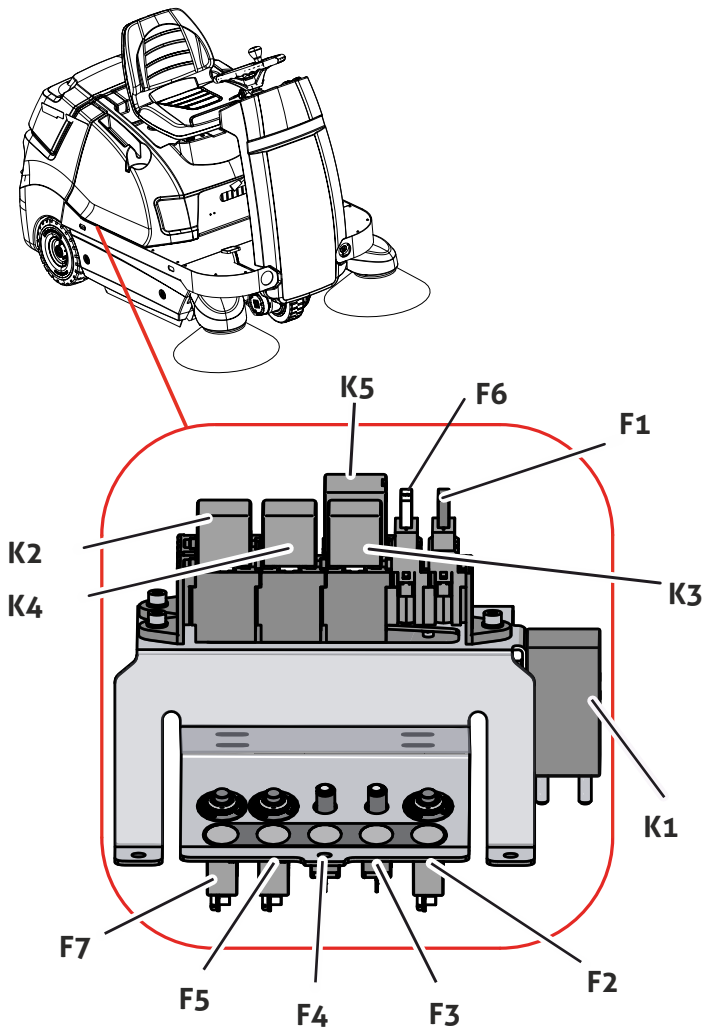
7.10 WHEELS

- The sweeper has three wheels.
- As standard, the drive wheels are made of solid rubber that doesn't leave marks
- The rear wheels are available as pneumatic and solid rubber tyres. For tyre care see (Ch. 7.14) Maintenance Table.

7.11 COURSE OF THE CHAIN



7.12 ELECTRICAL SYSTEM FUSE EXPLANATION



F1 = Drive control fuse 1A	K1 = Main relay	24V/ 70A
F2 = Thermal switch for driving drive 45A	K2 = Drum drive	24V/ 70A
F3 = Thermal switch	K3 = Side brushes	24V/ 70A
Main sweeping drum 25A	K4 = Fan / shaker	24V/ 70A
F4 = Thermal switch	K5 = Indicator	24V/ 70A
Side brushes (10A/15A)		
F5 = Shaker/fan 10A		
F6 = Control panel fuse 5A		
F7 = Thermal switch		
high-emptying 10A		

7.13 Important Spare Parts and Consumables / Contact

Filter	Article-No. 500001
Sweeping Roller PP 1,0 V	Article-No. 106240
Sweeping Roller PP 0,7 V 2-row	Article-No. 106241
Sweeping Roller PP+Wire V	Article-No. 106243
Sweeping Roller Natur V	Article-No. 106244
Sweeping Roller PP 1,0	Article-No. 102128
Side brush Wire 1,0	Article-No. 102130
Side brush Natur 1,0	Article-No. 102131

7.14 CONTACT DATA

Manufacturer:

Stolzenberg GmbH & Co. KG
Hamburger Straße 15-17
49124 Georgsmarienhütte

T: +49 (0) 5401 / 8353-0

F: +49 (0) 5401 / 8353-11

E: service@stolzenberg.de

Dealer:

7.15 Maintenance Work / Maintenance Table

i Instruction: The following maintenance work must be carried out by instructed and authorised specialist staff at the set intervals.



CAUTION! In the event that damage to the machine is established, it must not be used until the damage has been remedied by specialist staff.

⚠ RISK Risk of Injury! The motors need to overrun for several seconds after being shut off. In this time, you must keep clear of the drive area.

⚠ CAUTION!

- Allow the equipment to cool down sufficiently before all maintenance and repair work.
- Unplug the charger from the socket.
- Disconnect the plus terminal from the battery.

Maintenance Intervals

Activity	Intervalle				Chapter
	daily	every 50 Std.	every 100 Std.	every 200 Std.	
Check sweeper (including safety elements, control elements, seals and lighting) for damage and functional faults, and remedy.	•				
Clean the dust filter	•				5.8
Empty the sweepings container	•				5.9
Check Sweeping Rollers and side brushes for foreign bodies, damage or wear, remove foreign bodies as required/ clear or replace Sweeping Rollers	•				7.5
Check the battery charge and charge batteries as appropriate.	•				4.9.3
Check sealing rubbers in the area of the Sweeping Rollers for wear and damage, replace if required		•			7.8/ 7.9
Check sweeping tunnel, Sweeping Rollers and side brushes for damage and drawn-in sweepings, clean or replace if required.		•			
Check Bowden cables and all moving parts for their smooth running and wear, replace if required		•			
Check electrical components for moisture and wear, clean or replace if required		•			
Check all bearings (including ball-bearings) for damage and smooth running, replace if required		•			
Check all screw and connection elements, tighten or replace if required		•			
Check dust filters for damage, replace if required		•			7.2/7.3
Check battery condition; replace if required		•			4.9
Check braking power, replace braking elements if required		•			
Check air pressure in tyres (max. 7.5 bar; 110 psi)		•			7.10
Check all tyres for wear, replace bearings as required			•		
Check electrical cables and Bowden cables for damage, replace if required			•		
Check firm connection of plugs			•		
Lubricate chain of the steering and drum drive			•		
Check drive chain of the drum for wear, replace if required			•		
Check chain wheels for wear, replace if required			•		
Check the operation of the dust vacuuming			•		
Clean battery terminals and grease with terminal grease				•	
Check the operation of electric motors				•	
Check chain tensions of steering and drum drive				•	

8

SHUTDOWN, DISMANTLING, DISPOSAL

LONG-TERM STOPPAGE OF THE SWEEPER

INSTRUCTION

If it is stopped for a long period, the battery must be charged at intervals of approximately 2 months so they are not damaged by a deep discharge.

- Charge batteries fully
- Set down the sweeper onto a level, dry and protected surface.
- Put ignition key into the "0" position and pull out.
- Secure sweeper against rolling away.
- Raise Sweeping Roller. To do this, move the adjustment lever to the lowest position and stop..
- Raise the side brushes.
- Clean the dust filter
- Empty the sweepings container.
- Clean the sweeper inside and out.
- Disconnect the battery.

DECOMMISSIONING / RECYCLING



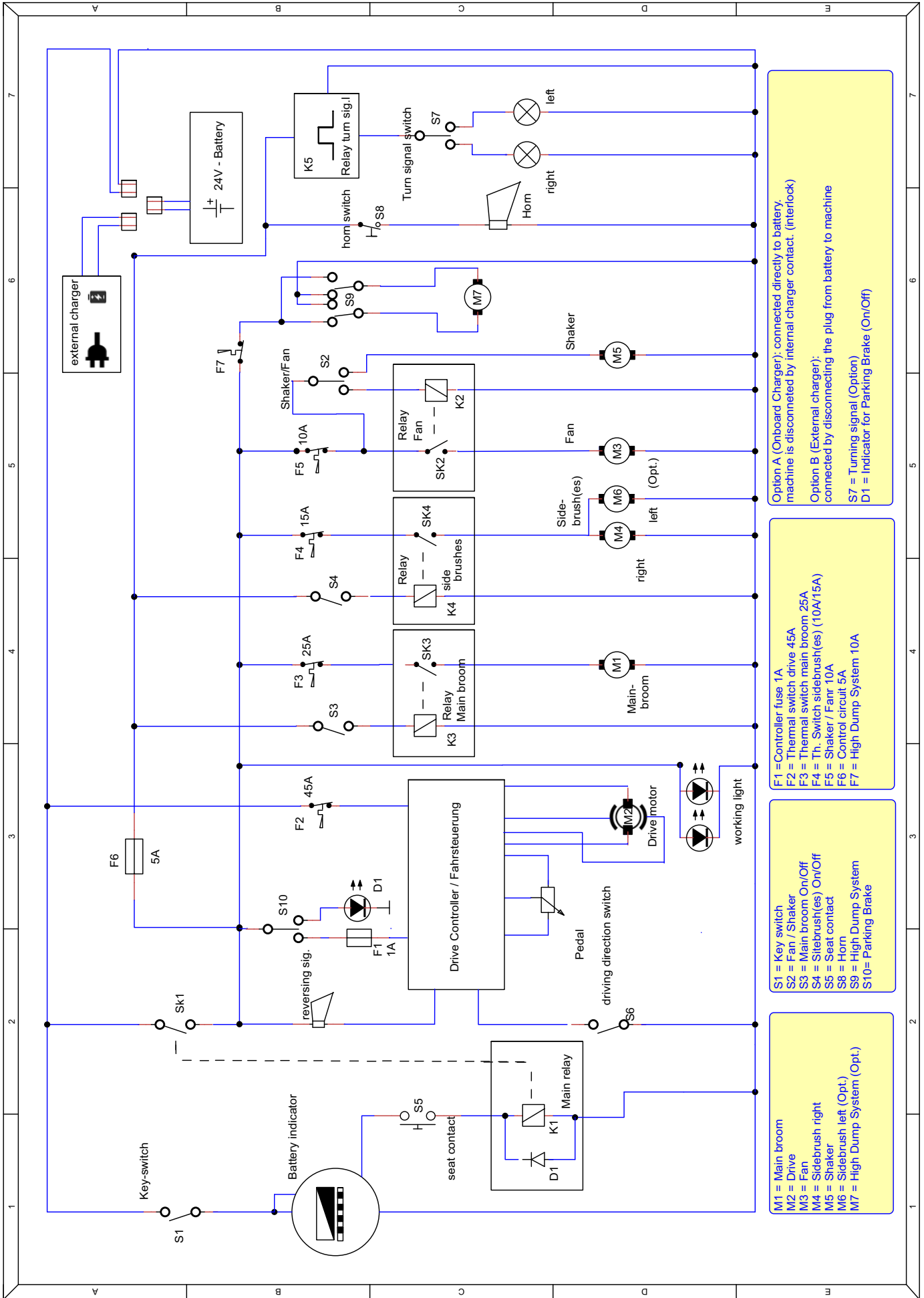
After the useful life of the machine is over, it must be disposed of expertly. However, individual parts may be thoroughly reused.

For the disposal of all equipment parts, the disposal conditions specific for the location are applicable.

INSTRUCTION Please ask your supplier about disposal of the equipment.

See WASTE DISPOSAL / ENVIRONMENTAL PROTECTION,
chapter 4.2

9 CIRCUIT DIAGRAM



Option A (Onboard Charger): connected directly to battery. machine is disconnected by internal charger contact. (interlock)
 Option B (External charger): connected by disconnecting the plug from battery to machine
 S7 = Turning signal (Option)
 D1 = Indicator for Parking Brake (On/Off)

F1 = Controller fuse 1A
 F2 = Thermal switch drive 45A
 F3 = Thermal switch main broom 25A
 F4 = Th. Switch sidebrush(es) (10A/15A)
 F5 = Shaker / Fanr 10A
 F6 = Control circuit 5A
 F7 = High Dump System 10A

S1 = Key switch
 S2 = Fan / Shaker
 S3 = Main broom On/Off
 S4 = Sidebrush(es) On/Off
 S5 = Seat contact
 S6 = Horn
 S7 = High Dump System
 S10 = Parking Brake

M1 = Main broom
 M2 = Drive
 M3 = Fan
 M4 = Sidebrush right
 M5 = Shaker
 M6 = Sidebrush left (Opt.)
 M7 = High Dump System (Opt.)