



## **BK 900**



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## Nilfisk ALTO Why Compromise

303000049

# Description

## 1 Description

### 1.1 General view



### 1.1.1 Intended use

This machine is designed only for sweeping on solid, level surfaces.

Any other form of use is regarded as contrary to its intended use. The manufacturer will accept no liability for any damage or injury resulting from such forms of use.

Unauthorised modifications to the sweeping machine also relieve the manufacturer of any liability for resulting damage or injury.

The brush sweeping machine is not suitable for use in sweeping up inflammable, explosive, toxic, carcinogenic or any other form of healthendangering substances and materials.

### 1.2 Technical data

Total width with side brush	mm	790
Total height without/with handle		
Total length without handle	mm	1,030
Working width with side brush	mm	670
Working width with roller brush	mm	480
Weight	kg	25
Dirt collecting tank capacity	1	40
Sweeping capacity		

## Operation

## 2 Operation

## 2.1 Important safety instructions



Do not sweep up burning or smouldering objects, e.g. cigarettes, matches or similar objects.

When removing any glass, metal or similar materials from the dirt collecting tank, wear sturdy gloves to avoid the risk of injury.

The dirt collecting tank should be emptied after every use of the sweeping machine.

The sweeping machine is not suitable for use with liquids.

Do not use the sweeping machine in the immediate vicinity of heat sources (fire, radiators, heater fans or similar heat radiating equipment).

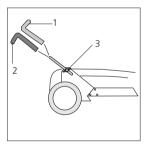
Use only original Alto accessories and spare parts.

### 2.2 Assembly

The handle and side brushes must be fitted

 Unpack the machine and place it on a level surface.
 Do not dispose of packaging until all parts have been removed.

### 2.2.1 Mounting the handle



- Mount handle on housing at left and right with wing nuts
   (3). Only tighten wing nuts hand-tight!
- Handle can be mounted in position 1 or 2, depending on height of user.

### 2.2.2 Fitting the side brush



### NOTE!

Bent bristles can be straightened by laying the side brush in lukewarm water.

- Remove dirt collecting tank.
  NOTF!
  - Always stand tank on feet on front side to prevent damage to the rubber strip.
- Push side brush (1) onto shaft and tighten hexagon bolt (2) with open-end spanner without damaging hub.
- Lay V-belt in groove of righthand wheel (3).
- Mount side brush arm with pin (push in from outside) and retaining clip (4).
   Swivel down arm.

### CAUTION!

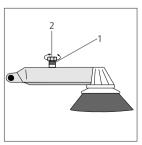
Side brush must rotate anticlockwise when sweeper is pushed forward.

- 2.3 Starting operation and functional check
- 2.3.1 Mounting dirt collecting tank



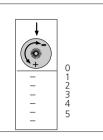
- Place tank on frame and swivel downward.
- To remove tank, swivel upward by handle.

## 2.3.2 Adjusting the side brushes



 Loosen knurled nut (1) and turn handwheel (2) until a maximum of 2/3 of brush circumference touches ground. Retighten knurled nut as anti-twist lock.

### 2.3.3 Adjusting brush roller



 Adjust brush pressure with handwheel. Adjustment can be checked on scale next to right-hand wheel. First follow our recommendations and then adapt brush pressure to wear of brush roller or, if necessary, to your local conditions.

No. on scale	Material swept	Surface	
1	light, dry	smooth	
1.5	Basic setting		
2	heavy, damp, sticky large quantity	rough, uneven	

### NOTE!

Excessively high roller pressure increases brush wear and requires greater pushing force.

### 2.3.4 Functional check

 Push the machine at normal walking speed over the surface to be cleaned:

The cleaning capacity is dependent on the working speed (number of revolutions of the brush roller).

The side brush allows edges and corners to be swept clean.

 Check the sweeping result and then correct the brush pressure if necessary.

## 2.4 Supervision of operation

### CAUTION!



String, wire, packing tape and similar long objects should be picked up from the floor by hand and not

swept up with the sweeping machine:

This will help to maintain the

sweeping capacity of the machine and prevent machine damage caused by jamming of the drive.

Empty the dirt collecting tank at regular intervals. Sweeping is no longer possible when the tank is full.

### 2.5 After completing work

Empty the dirt collecting tank.

To transport or for space-saving storage:

Swivel up side brush arm

 Loosen wing nuts on handle, spread handle apart somewhat and swivel forward.

# Maintenance

### 3 Maintenance

## 3.1 Important safety instructions

### CAUTION!

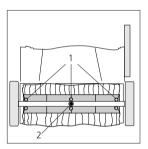
Carry out only the maintenance work described in the operating instructions.

Contact Alto Service for all other maintenance work.

Use only original Alto accessories and spare parts.

### 3.2 Maintenance and care

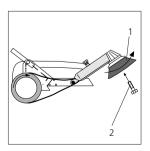
### 3.2.1 Replacing brush roller



- Remove dirt collecting tank.
- Swivel up side brush arm and tip machine back onto handle.
- Screw 3 Phillips screws (1) out of brush roller. Turn brush roller 180 and screw screws out of second half. (sectional drawing)
- Pull drive pin (2) out of brush roller
- Install brush roller in reverse order.
- Refit dirt collecting tank.

Brush roller Order No. 60642

### 3.2.2 Replacing side brush

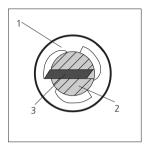


- Swivel up side brush arm.
- Unscrew hexagon bolt (2) and pull out of brush shaft.
- Pull off side brush (1), push on new side brush and slightly tighten hexagon bolt without damaging hub.
- Adjust side brush with handwheel (see 2.3.2).

### Side brush Order No. 60641

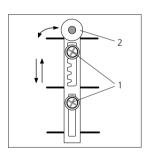


### 3.2.3 Replacing V-belt



- Remove dirt collecting tank.
- Swivel up side brush arm and remove side brush (see 3.2.2).
- Take off washers and guard plate, remove circlip with Seeger circlip pliers and pull belt pulley (1) off shaft (2). Make sure that drive wedge (3) does not fall out of shaft.
- Lay new V-belt in belt pulley groove and reassemble in reverse order.
- Remount dirt collecting tank.

### 3.2.4 Tensioning V-belt



- Swivel up side brush arm, unscrew screws (1) on roller bracket (2) and lift roller bracket out of rib.
- Swivel roller bracket (diagram) and push into next detent.
- Tighten screws, swivel down brush arm and check belt tension.

### NOTE!

Excessive tensioning of the V-belt reduces the sweeping performance and leads to premature wear.

### 3.2.5 Sealing strips

The sealing strips prevent dust from escaping during sweeping. Check them regularly and replace if damaged.

### 3.2.6 Greasing pinion

Insert two screwdrivers in the slots of the hub caps and lever off evenly. Remove circlip from wheel axle and pull off wheel.

Grease wheel axle and pinion. Mount wheel in reverse order. Watch marking when mounting the hub cap.



### 3.3 Troubleshooting



### CAUTION!

With the exception of the adjustments and setting explained in this

operating manual, the user should never try to carry out any repairs on his/her own.

Leave repairs to a qualified Alto technician or authorised expert.

The following table will help in locating and eliminating operating faults in the machine. Should it not be possible to remedy the problem as described below, please contact your local Alto service department.

## Problem **‡** Machine is difficult to push

### Cause

### Remedy

- > Brush pressure too high
  - > Strings or other parts have become stuck in the brush roller
- Adjust brush pressure as described in 2.3.3
- Remove the parts

- Poor dirt pick-up performance
- > Tank full
- > Strings or other parts have become stuck in the brush roller
- > Side brush worn
- > Brush roller worn

- · Empty tank
- Remove the parts
- Replace side brush (see 3.2.2)
- Replace brush roller (see 3.2.1)

#### 3.4 Warranty

The warranty and warranty period are defined in our General Conditions for Sale and Delivery.

Subject to changes in the course of technical innovations.

