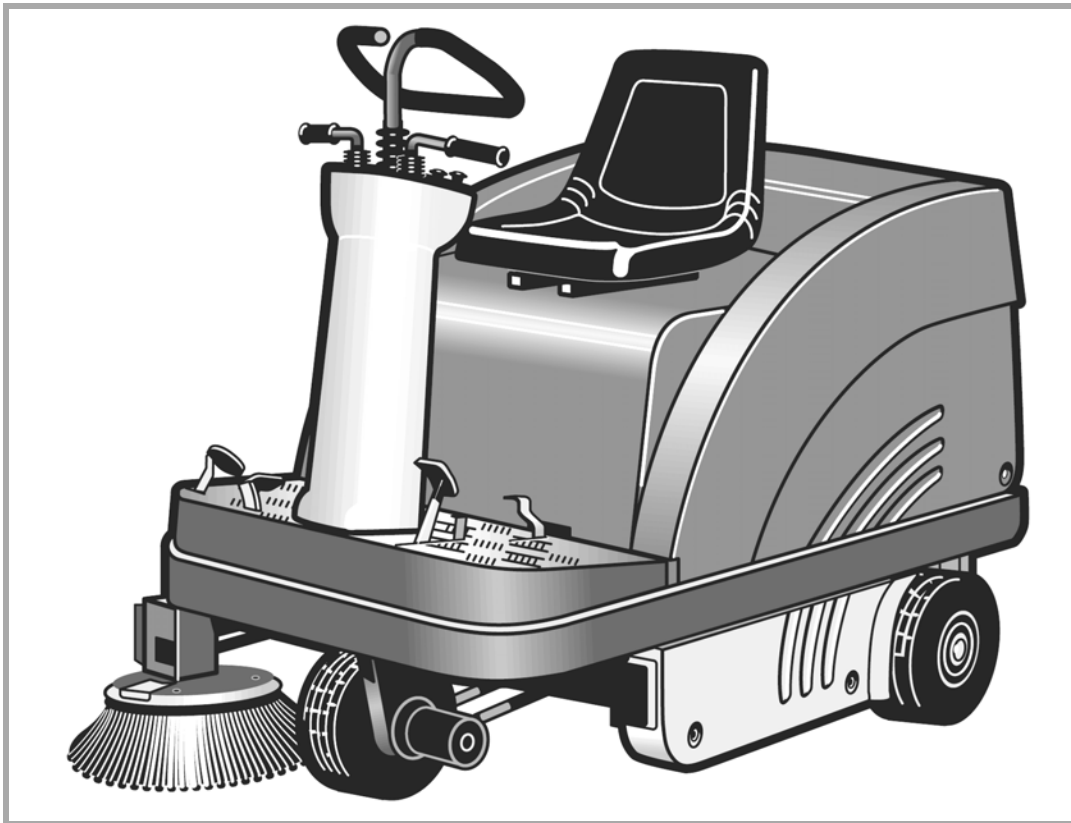


Kleen Sweep 40R/47R

Model: HM40B, HM47B, HM40BQP, HM47BQP, HM40QP, HM50QP

Instruction Manual



Minuteman[®]

Introduction

Dear customer,

It is our desire that the good characteristics of the Kleen Sweep 40R/47R should justify the confidence you demonstrated by making this purchase. We did our best to supply you with an efficient and dependable machine. Before first operation of your Kleen Sweep 40R/47R, read these instructions carefully. The manual provides valuable information about service and maintenance. The symbol



as used in this manual identifies items relevant to safety. Please make sure to forward all safety instructions to other operators.

Observe the safety information listed in chapter 1.



Before first operation of the machine, read these instructions and safety information carefully and comply with them.

Please be advised explicitly that we cannot accept any legal issues out of the contents of this manual.

If repair work has to be performed make sure that only genuine spare parts are used; only genuine spare parts may guarantee a dependable machine and ill make sure that your rights under current warranty are not affected.

We reserve the right for technical improvement.

Valid as of: January 2005

Proper Use

Proper Use

The Kleen Sweep 40R/47R has been exclusively designed for collecting dry and moist matter from floor surfaces in e.g. factories, storage buildings, parking ground and pedestrian areas. Using the machine beyond this scope of application will be deemed improper use; The manufacturer cannot be held liable for consequential damages. The term of proper use also includes operation, maintenance and repair work to be performed in compliance with the manufacturer's specifications. The Kleen Sweep 40R/47R may be used, serviced and repaired by personnel only that are familiar with the machine and aware of possible hazards involved. Accident Prevention Regulation, Road Traffic Regulations, and aspects of safety and working medicine will have to be complied with. If modifications to the machine are made in absence of the manufacturer's prior consent, the latter cannot be held

liable for damage resulting from such unauthorized modification.



The machine has not been designed for collecting dusts which are detrimental to health or explosive dusts.

Notes on warranty

The terms of the sales contract apply. Damages are not subject to warranty if they are due to non-compliance with the maintenance and service provisions. The maintenance work has to be performed by an authorized service center. The following is excluded from warranty: Natural wear and tear after overload and damages caused by inexperienced handling and unauthorized modification of the machine. Moreover, any claim for warranty cannot be accepted if damages at the machine are caused by fitting parts or accessories without prior and

explicit consent or by non-compliance with the maintenance instructions.

Inspection

Carefully unpack and inspect your Kleen Sweep 40R/47R for shipping damage. Follow unpacking instructions on shipping pallet. Each unit has been tested and thoroughly inspected before shipment. Any damage is the responsibility of the delivery carrier who should be notified immediately.

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1 Safety Information

1.1 General Safety Information

Apart from the instructions contained in this manual, the general safety instructions and accident prevention regulations, as imposed by law will have to be complied with. Do not put the Manual aside without reading it even if you used similar sweepers before. Take the time to read them now and save time later. It will be of essence to make yourself familiar with all accessories and controls, as well as their functions, before you start working. Take time to read now and save time later.

Machines with known defects must not be used.

Prior to operation make yourself familiar with all systems and controls and "where they arrive". Avoid the mess of having to read this book while trying to run the machine.

Using the machine in areas with explosion hazard, on public roads and places is prohibited.

The operator has to use the machine

within its design limits.

Shut the motors down before transporting the machine.



Keep clear of hazard zone!

Before commencing work, the operator has to make sure that the Kleen Sweep 40R/47R and its accessories are in proper and safe condition.

Warning and instruction labels attached to the machine contain important information about safe operation. Illegible or lost labels have to be replaced.



Make sure that all covers are fitted before starting to sweep.



When sweeping in closed rooms, provide for sufficient ventilation.

Safety Information

1.2 Safety and Warning Symbols

All paragraphs in this manual referring to your personal safety, the safety of your machine and the environment protection are attributed one of the following warning symbols:

1.2.1 Generally Applicable Symbols




Symbol	Hazardous for	Description
DANGER 	persons and goods	dangerous situation caused by misuse inaccurate adherence of instructions or prescribed work routine
CAUTION 	the machine	important information on handling the machine in order to maintain operability
Ecological hazard 	the environment	due to use of substances representing an inherent danger to health of environment

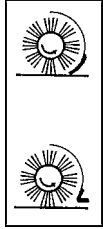
Table 1 Versions of used safety and warning symbols

Safety Information

1.3 Labels at the Machine

The following safety and information signs are legibly attached to the machine. Missing or illegible stickers have to be replaced.

Folding apron (1)



Parking brake(2)

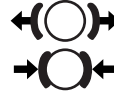


Nameplate, front and rear(3)

Read and observe operator's Manual (5)



Brake (6)



Sound power level (7)
86dB (A) Kleen Sweep 40R/47R

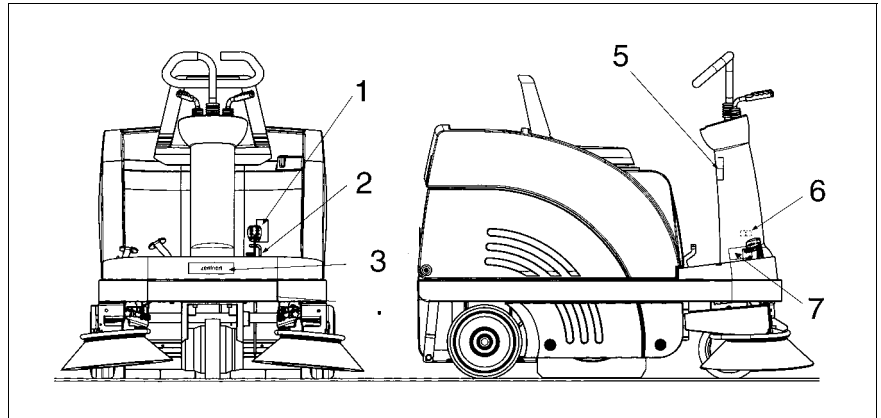


Fig. 1 Safety and information signs

Safety Information

1.3.1 Kleen Sweep 40R/47R Signs

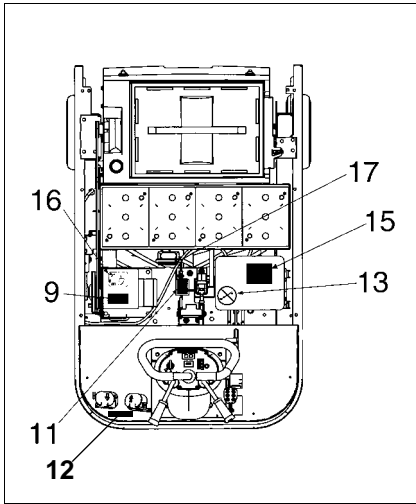
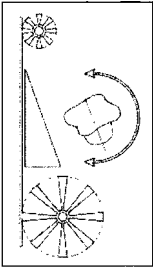


Fig. 2 Safety and information signs

Rotating parts (9)



Cylinder broom wearing take-up (11)

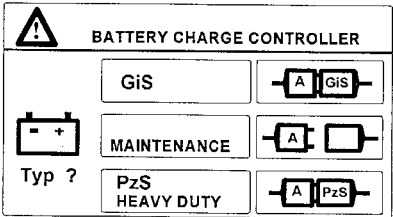


Nameplate (12)

24 V sticker (17)



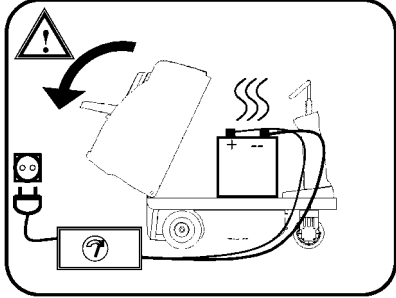
LDS battery setting (15)



Safety Information

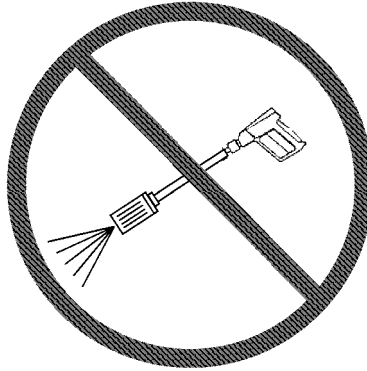
Kleen Sweep 40R/47R Signs Continued

Battery charging (16)



Keep seat hood opened during complete battery charging procedure.

High-pressure cleaner (13)



Do not clean with high-pressure cleaner or vapour jet.

This machine operates on 24 Volt DC.
Batteries:
PN 956740 4 x 6V 275 AH
Charger:
PN 957731 24VDC, 20 Amp 120VAC

1.4 Operation/Safety Information

Vacuum sweepers may be run by qualified personnel only; such personnel will have to have evidenced their qualification for running the machine to the owner or his authorized representative; operators explicitly will have to be instructed by the owner or his authorized representative to use the machine.



The machine may be used for cleaning such surfaces approved by the owner or this authorized representative for operation of vacuum sweepers.



Before starting the engine, switch off all drives.

Transporting persons on the machine is prohibited. Ride-on machine types are to be started with the driver being sea-

ted.

Never leave the machine unattended before the motors are off and the machine is protected against unintended movements.

To prevent the machine from unauthorized use, pull the control key to block all drives.

Shut down the motors before transport of the machine. During driving the operator has to take account of local conditions and when working he has to watch out for other persons, especially children.



Shut down the engine before opening the hood or fairings.



This machine must not be used as dust-evacuating machine with dust filter insert (separator) to collect dusts which are hazardous to health.



Compared to four-wheeled vehicles, driving stability of three-wheeled vehicles is reduced. We thus recommend:

- **do not negotiate curves at high speed.**
- **do not turn at slopes but on level ground only.**
- **ride up- or downhill straight.**



Warning and instruction labels attached to the machine contain important information about safe operation.



Provide for sufficient ventilation when sweeping indoors.



Proceed to filter shaking only after having closed the dirt hopper.



Do not open the hood with the engine running.

1.5 Cleaning Information

The specific safety instructions for handling drive batteries apply. Before proceeding to cleaning of the machine, pull the ignition key.

The machine is splash-proof (IPX3).



Do not clean the Kleen Sweep 40R/47R with high-pressure cleaner or vapour jet.



Proceed to cleaning of the dirt hopper in regular intervals to preclude formation of bacterial deposits.

1.6 Maintenance Instructions

A good approach to prevention of accidents is proper maintenance of the machine.

Before proceeding to repair or maintenance work remove the ignition key.

Use appropriate tools for maintenance, service, setting etc.

As far as aspects of safety are concerned, spare parts will have to be at least of the same quality as the genuine spare parts.



Before changing wheels protect the machine against rolling by placing blocks. Proceed to wheel changing when the machine is on level and solid ground.



When handling lubricating agents, the applicable regulations for protection of the environment and prevention of fire have to be complied with. Provide for disposal of used oil and grease in accordance with the provisions imposed by law.



Do not repair the pneumatic tires mounted to the machine yourself. Dismount the wheel and take it to repair by professionals.



Collect cleaning agents, oil, fuel oil, grease etc. and provide for adequate disposal. Wipe away spilled substances.



Switch off the motors before maintaining the machine or replacing parts of it.



Use of other than the cylinder brooms and side brushes approved by the manufacturer is not acceptable (see technical data) since use of other cylinder brooms and side brushes may affect your safety.



Check hydraulic lines and hoses for damages and leakage in regular intervals; replace defective hoses and lines immediately!

Safety Information



Before commencing any work on the electrical system disconnect the battery plug of the Kleen Sweep 40R/47R.



Do not place metal objects or tools onto batteries. Short-circuit and deflagration hazard.



Do not keep batteries discharged for a longer period; always recharge them as soon as possible.



Spilled (straight) battery acid must not get into the sewage system before having been neutralised. Comply with the regulations imposed by law and observe local provisions.



Do not eat, smoke or drink in rooms where batteries are charged to avoid damaging your health. After work with batteries wash your hands thoroughly. Provide for sufficient ventilation.



Top with distilled water only. Never refill battery acid in battery cells of perfect condition.



Battery acid is highly caustic (keep clear of children).



Open the hood before charging batteries; generation of explosive gas!

When checking the battery acid level, wear safety glasses. If acid splashes get into the eyes rinse with clear water for 15 minutes and contact a doctor immediately.



Keep batteries dry and clean and clear of soiling such as e.g. metallic dust to avoid leakage current.

Wear appropriate pro-

2 Description

2.1 Functional Description

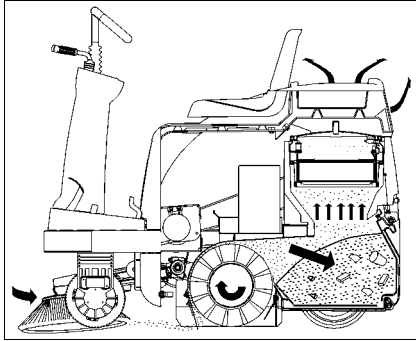


Fig. 3 Principle of Kleen Sweep 40R/47R

The side brushes are used to collect dirt at borders and to enlarge the working width as well as to increase the area performance at large spaces. The cylinder broom transports the debris into the dirt hopper. The suction fan vacuums the fine dirt which is separated by a filter system. The air returned into the environment is clean.



This sweeper operates dust-free.

2.2 Cylinder Broom

The cylinder broom is equipped with six rows of bristles arranged in V-shape.

The cylinder broom width amounts to 27.56 in. (700 mm) and its diameter 13,58 in. (345 mm).

2.3 Side Brush

The standard version, the side brush is located at the front right. The operator lifts and lowers it by hand lever.

The side brush is to have a light inclination.

The pivoting area of the side brush arm is limited by stop screws.

The side brush is driven by V-belt.

For special application, fitting of a second side brush at the left is possible.

Description

2.4 Filter System / Dust Evacuation

The filter system is located in the filter case above the dirt hopper. The suction filter transports the fine dust raised by the cylinder broom to the plate filter and separated there. The fine dusts sets at the outsides of the filter blades.



In case of heavy dusting, check and clean the plate filter at regular intervals.

2.5 Shaking System

Due to normal working vibration the set dust partly falls off into the dirt hopper.

To ensure working in a dust-free environment, however, actuate the shaking system regularly.

2.6 Steering

Steering is controlled from steering wheel to front wheel via fork head.

2.7 Wheels

Front wheel : Solid tires

Rear wheels: Solid tires

2.8 Brake

The Kleen Sweep 40R/47R is equipped with a service brake.

This brake has been constructed as shoe brake and equally serves as parking brake.

It is located at the rear wheels and is actuated via cables.

A special adjustment screw is situated at the right-hand rear wheel.



Works at the braking system have to be executed by qualified persons in a qualified workshop only.

2.9 Traction Drive Assembly

The Kleen Sweep 40R/47R is equipped with an electric drive assembly with continuous regulation.

3 Battery Systems



Before commencing any work on the electrical system disconnect battery plug of the Kleen Sweep 40R/47R. Do not use open flames when handling batteries and especially when checking the battery acid level. Provide for sufficient ventilation in rooms where batteries are charged. Spilled (straight) battery acid must not get into the sewage system before having been neutralised. Comply with the regulations imposed by law and observe local provisions.

3.1 Low Discharge Signal Sender

PzS/PzB: Connection 6-7 closed = low-maintenance wet battery (956740)

GiS: Connection 6-7 bridged with 7.5kΩ = low-maintenance wet battery

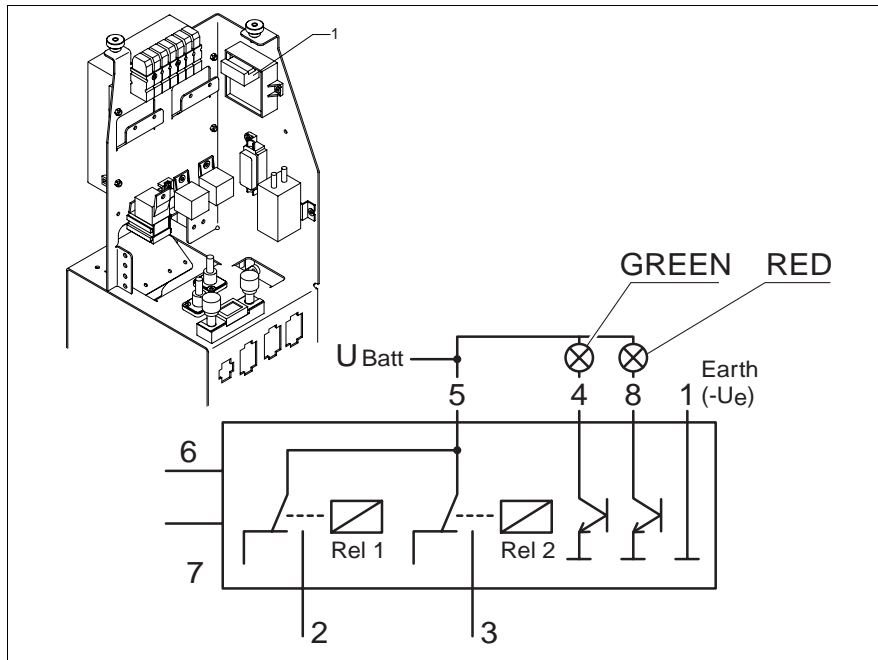


Fig. 4 Low discharge signal sender (LDS)

4 First Operation

Before delivery, the machine has been extensively tested and submitted to a functional check.

Only qualified personnel of your local contract dealer are allowed to proceed to first operation. After shipping of the machine, we advise your contract dealer. He will contact you to make a date for briefing lessons.



Since batteries and charger units are matched, we recommend using batteries and chargers as prescribed by Minuteman. We grant full warranty only for these devices.

4.1 First Operation of Batteries

In order to attain an optimum of performance and service life of the battery, proceed to an initial charging following the filling.

The operating instructions enclosed to each charger unit describe in detail operation and function of the chargers.



Do not use the Kleen Sweep 40R/47R at ambient temperatures of more than 104°F (40°C). Do not start the machine at temperatures of 32°F (0°C) or less.

4.2 Insert Batteries

- Turn engine off and remove key.
- Secure machine by engaging the parking brake.
- Fold back seat hood.
- Insert batteries according to draft into the battery tray:

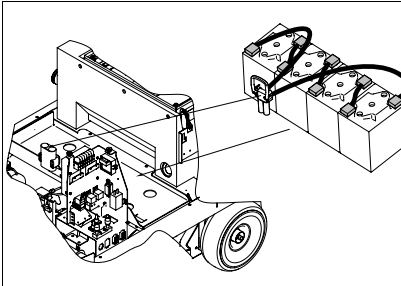


Fig. 5 Insert batteries-A

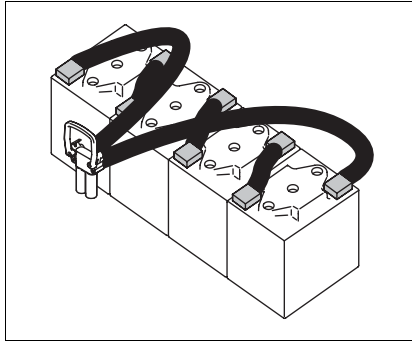


Fig. 6 Insert batteries-B

- Connect batteries and cable set according to terminal diagram.
- Battery type at the low discharge signal sender (see 3.1)
- Connect charging plug of the battery connection cable and cable of the charger unit and proceed to initial charging.
- After charging of the batteries, connect charger plug and device plug for electrical connection.
Now the Kleen Sweep 40R/47R is operable.

5 Operation

5.1 Kleen Sweep 40R/47R Controls

1. Actuator for folding apron
2. Service brake/parking brake lock
3. Service brake/parking brake pedal
4. Drive pedal, reverse
5. Drive pedal, forward
6. Control panel
7. Seat adjustment

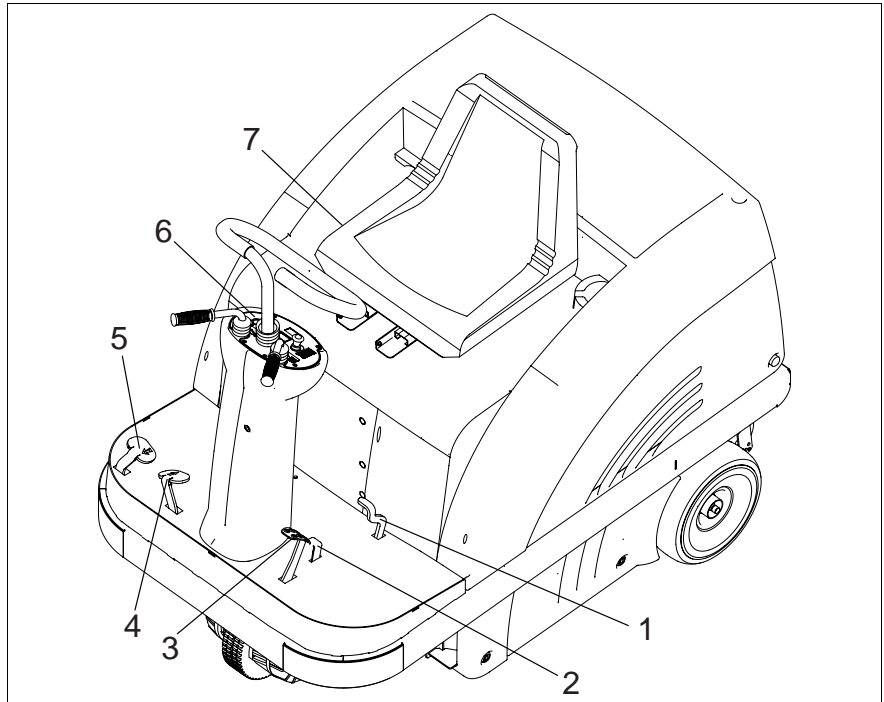


Fig. 7 Controls

- 1 Actuator for folding apron**
to open and close the folding apron for collecting coarse dirt.
- 2 Service brake/parking brake lock**
to lock the service brake. If locked, the service brake works as parking brake. Release the lock by depressing the brake pedal (3).
- 3 Service brake/parking brake pedal**
to actuate the service brake at the rear wheels. Before leaving the machine unattended, engage the service brake and lock.
- 4 Drive pedal, reverse**
to change direction to reverse ride and with continuous regulation of velocity at the same time. If the driver lets the pedal go it returns to initial position and the machine slows down to standstill.
- 5 Drive pedal, forward**
to change direction to forward ride and with continuous regulation of velocity at the same time. If the driver lets the pedal go it returns to initial position and the machine slows down to standstill.
- 6 Control panel**
Refer to chapter "Control panel".
- 7 Seat adjustment**
to adjust the seat position to drivers of different height.

5.2 Kleen Sweep 40R/47R Control Panel

1. Suction fan/shaking system knob
2. Cylinder broom lever
3. Side brush lever
4. Key switch
5. Hourmeter
6. Battery charge status

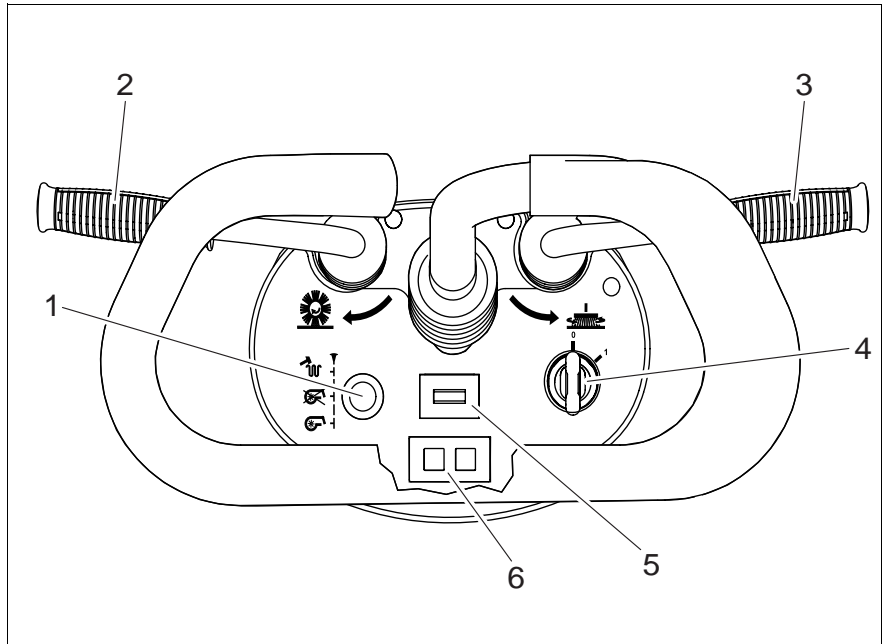
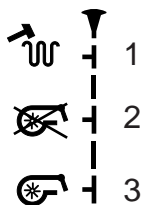


Fig. 8 Kleen Sweep 40R/47R control panel



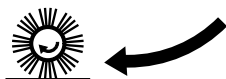
1 Suction fan/shaking system knob

Knob position (from top to bottom position):

- 1 Shaking system ON (hold knob).
- 2 Deactivated vacuuming function (flap has to be opened before sweeping wet surfaces and collecting wet dirt).
- 3 Activated vacuuming function (flap has to be closed before sweeping dry surfaces or collecting dry dirt).

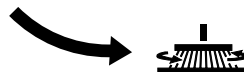


Turn off main broom before jolting. Filter cleaning is improved by interrupting the jolting procedure several times. Turn off the combustion engine of the Kleen Sweep 40R/47R.



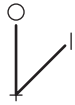
2 Cylinder broom lever

- to lift and lower as well as to switch on and off the cylinder broom and the side brush.
- Lower cylinder broom as well as switch on cylinder broom and side brush = push lever.
 - Lift cylinder broom as well as switch off cylinder broom and side brush = pull lever.



3 Side brush lever

- to lift and lower the side brush.
- Lower side brush = push lever.
 - Lift side brush = pull lever.



4 Key switch

to switch the electric system on and off, to secure the machine against unauthorised use as well as to acknowledge released seat contact switch.



For safety reasons, the Kleen Sweep 40R/47R is equipped with a seat contact switch. Starting the engine is possible only when the driver is seated. If the seat contact opens while the electro-motor runs, the key switch of the Kleen Sweep 40R/47R has to be turned off and on again.



To protect the electro-motors, do not start the Kleen Sweep 40R/47R at ambient temperatures of 32°F (0°C) and less.



5 Hourmeter

to indicate the operating hours. The counter works with the driver being seated and if ignition is switched on.



6 Battery charge status

to indicate the status of battery charge.

Green case:
battery charged, Kleen Sweep 40R/47R is operable

Red case:

- flashing red light: ride the machine to recharging at 50% driving speed. After this delay has elapsed, the rush motor is stopped.
- permanent red light: discharging status of the machine attained; riding is still possible at reduced speed only, but no operation.

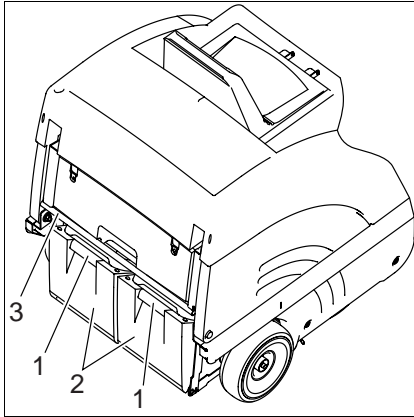


Fig. 9 Emptying dirt hopper

- 1. Recessed grip in dirt hopper
- 2. Dirt hopper
- 3. Bow to lift/lower dirt hoppers

5.3 Empty Dirt Hoppers



Lift cylinder broom before removal of the dirt hoppers.

- Fold bow (Fig. 9/3) up and the dirt hoppers (Fig. 9/2) are lowered.
- Use the recessed grip (Fig. 9/1) of one of the hoppers to lift it lightly and extract it.
- Take the hopper at its bow-type handle to disposal and empty.
- Empty second dirt hopper as described above.
- Re-insert dirt hopper (Fig. 9/2) and fold down the bow (Fig. 9/3).



Clean dirt hoppers at regular intervals.

5.4 Working With the Kleen Sweep 40R/47R

The driver is requested to carefully read this operator's manual. All controls are marked with easy-to-understand symbols that ease familiarization. First driving attempts should be limited to clear areas until you are familiar with all controls and their functions.



Please comply with the following safety provisions:

When working with the Kleen Sweep 40R/47R all safety measures generally applicable for handling vehicles and fuels have to be observed. No passenger transport admitted with the Kleen Sweep 40R/47R. Warning and instruction labels attached to the machine contain important information about safe operation



5.4.1 Switch Electro-Motor On and Off



and guarantee your personal safety. Before commencing work, the operator has to make sure that the machine and its accessories are in proper and safe condition and comply with the provision for safety at work. Do not operate the Kleen Sweep 40R/47R without protective devices.

When leaving the machine unattended, remove ignition key to avoid unauthorized use.

For safety reasons, the Kleen Sweep 40R/47R is equipped with a seat contact switch. Starting the engine is possible only when the driver is

seated. If the seat contact opens while the electro-motor runs, the key switch of the Kleen Sweep 40R/47R has to be turned off and on again.

- Set all levers and switches to neutral.
- Engage parking brake.
- Turn key switch to "I".



Make sure that the drive pedal is in neutral position.

5.4.2 Sweep

- Lower cylinder broom.
- Release parking brake.
- Slowly depress drive pedal until desired speed has been attained.
- Regularly actuate shaking device to clean filter.
- Check contents of the dirt hopper and empty if required.



Initially, the vacuuming function is inactive. Open the flap when sweeping wet surfaces and collecting wet dirt.

5.4.3 Stop and Park

- Release drive pedal (returns automatically into its neutral position and the machine slows down to near standstill) and actuate service brake.
- Actuate parking brake.
- Lift main and side brush.
- Turn key switch to "O".



Remove the key before leaving the machine unattended.

6 Technical Data

Kleen Sweep 40R/47R			
Dimensions and weights			
Length with side brush	in. (mm)		59.8 (1520)
Width with 1 side brush	in. (mm)		44.1 (1120)
Height above steering wheel	in. (mm)		52.8 (1340)
Empty weight – serviceable	lb (kg)		992 (450)
			(acc. to battery type)
Empty weight – without batteries	lb (kg)		705 (320)
Driving and sweeping performance			
Forward speed	mph (km/h)		3.7 (6,0)
Reverse speed	mph (km/h)		2.5 (4,0)
Sweeping speed (recommended: 2,5 mph (4,0 km/h))	mph (km/h)		3.7 (6,0)
Sweeping track without side brushes	in. (mm)		27.6 (700)
- with 1 side brush	in. (mm)		38.2 (970)
- with 2 side brushes	in. (mm)		48.8 (1240)
Theoretical sweeping perf. without side brushes	sq. ft./ h (m ² /h)		45 210 (4200)
- with 1 side brush	sq. ft./ h (m ² /h)		62 430 (5800)
- with 2 side brushes	sq. ft./ h (m ² /h)		80 190 (7450)
Gradability, max. (for 1 min.)	%		12

Technical Data

Kleen Sweep 40R/47R			
Filter system Filtering surface Plate filter	sq. ft. (m ²) piece		30.14 (2.8) 1
Cylinder broom Length Diameter Wearing limit (approx.) Speed Sweeping track Quantity of bristle rows Serial bristling	in. (mm) in. (mm) in. (mm) rpm in. (mm)		27.6 (700) 13.6 (345) 11.4 (290) 530 ± 20 2.0 + 0.2 (50 + 5) 6 v-shape PES
Ground clearance of sealing strips at broom compartment Sealing strips, left right rear Sealing strip, front	in. (mm) in. (mm) in. (mm)		0.04 (1) 0.04 (1) 0.16 (4) with contact to the floor

Technical Data

Kleen Sweep 40R/47R			
Side brushes Diameter Speed Serial bristling	in. (mm) rpm		18.1 (460) 90 PES
Dirt hopper Hopper volume	cu. ft.		2x1.1 (2x30)
Drive wheels Pneumatic tires with tube: tire size Inflation pressure Solid tires Tire	in. in. (mm)		4.00 - 4 Ø 9.84 / 2,36 (Ø 250 / 60)
Electric drive Service voltage Travel drive assembly Suction fan motor / sweeping motor Total power consumption	DC / V KW KW KW		24 0.6 0.75 1.9

Technical Data

Kleen Sweep 40R/47R			9
Noise emission The sound power level according to DIN EN ISO 3744, measured under standard operating conditions and maximum volume flow amounts to	dB (A)		86
Vibrations The frequency weighted acceleration measured according to EN 1033 which have an effect upon the lower limbs (hand-arm-system) amounts under normal working conditions The frequency weighted acceleration measured according to EN 1032 which have an effect upon the lower limbs (feet and seat) amounts under normal working conditions	ft / s ² (m / s ²)		< 8.07 (< 2.5)
	ft / s ² (m / s ²)		< 1.64 (< 0.5)

7 Maintenance/Service

7.1 Maintenance Instructions

Compliance with our recommendations concerning maintenance work will give you the certitude of having an effective and dependable machine at your disposal.

It is better to take precautions than repairing damages – and it saves money!



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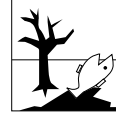
Please contact your local distributor if you cannot do the maintenance works as prescribed in the maintenance schedule in-house. He will have these works done for you and has qualified personnel at disposal.

In case of questions or orders for spare parts, please always have your machine's chassis and engine's serial on hand. You will find the serial on the data plate which is located on the chassis at the left of the air cleaner.



When cleaning or servicing the machine, or replacing parts, have the engine stopped, the key removed and the service brake (parking brake) engaged.

**Kleen Sweep 40R/47R:
disconnect battery plug.**



Wipe away spilled oil and fuel and provide for adequate disposal of these substance.

Use appropriate tools for servicing, maintenance and adjusting work only. Spare parts at least will have to be of the same quality as genuine parts are. Do not remove or install tires or repair a rim. Take the wheel and rim to a service centre where qualified personnel and the required specific tools are available.

Before commencing any work on the electrical system disconnect the negative lead of the battery or disconnect the battery plug.

7.2 Mount/Dismount Cylinder Broom

The cylinder broom is accessible from the left side of the machine and is to be dismantled as follows:

- Lower cylinder broom
- Remove ignition key and protect by engaging parking brake
- Open lateral flap
- Remove cover

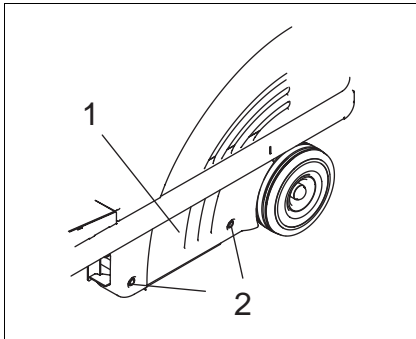


Fig. 10 Remove cover

- Open locks (Fig. 10/2) by enclosed square spanner (counter-clockwise)
- Remove cover (Fig. 10/1)

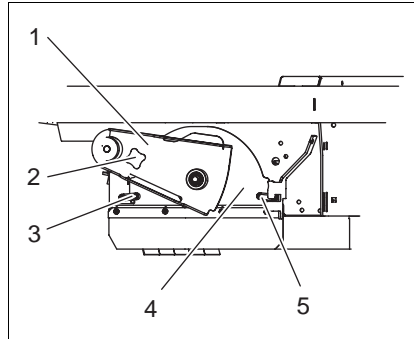


Fig. 11 Dismount Cylinder broom

- Loosen star knob (Fig. 11/2) and remove
 - Remove cylinder broom seating (Fig. 11/1)
 - Turn handle (Fig. 11/3 + 5) upwards and unlock
 - Remove plate with sealing strip (Fig. 11/4)
 - Remove cylinder broom by pulling.
- For mounting the cylinder broom proceed in inverse order.

7.3 Adjust Sweeping Track

An adjustment device allows adaptation to the different sweeping conditions.

The cylinder broom is to adjust according to normal use and with regard to a low degree of wearing as described in the following.

Check the broom adjustment on level ground as described in the following:



Before checking:

- Mark level surface for broom adjustment check by chalk.

- Lower cylinder broom and let it run dry.
- Lift cylinder broom and forward the Kleen Sweep 40R/47R a bit.
- With the correct broom adjustment the parallel sweeping marks have to appear on the floor (sweeping track).

The sweeping track width is to be 1.97 in. (50 mm) with the Kleen Sweep 40R/47R.

The sweeping track width can be adjusted by the star knob (Fig. 12/1) as follows:

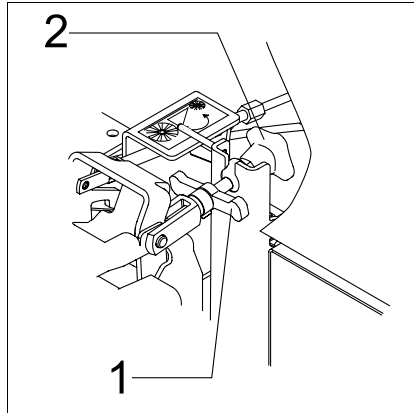


Fig. 12 Broom adjustment

- Open seat hood
- Loosen handle (Fig. 12/1)
- Turns star knob (Fig. 12/2)
- Fix handle (Fig. 12/1)
- to the left = wider sweeping track
- to the right = smaller sweeping track



With one turn of the knob, the track widens or broadens by approx.



**0.37 in. (10 mm).
When exceeding the sweeping track width, the engine protection may be activated.**

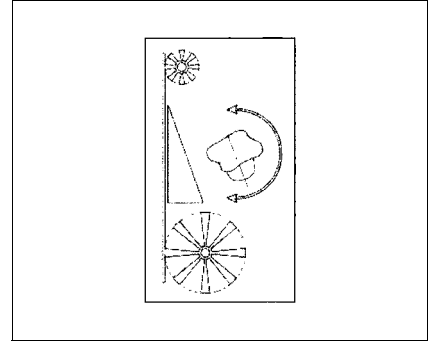


Fig. 13 Sweeping track adjustment

7.4 Sealing Strips for Broom Compartment

In order to assure good function of the sweeper, a perfect condition of the sealing strips is required, especially in order to attain the prescribed vacuum in the broom compartment, a clean sweeping result and the less possible wear of the sealing strips (check the sealing strips of the broom compartment for wearing and damages in regular intervals).

Replace defective sealing strips.

The ground clearance of the lateral and of the rear sealing strips is adjustable (oblong holes in the sealing strips).

Ground clearance =

sides: approx. 0.04 in. (1mm)

rear: approx. 0.16 in. (4mm).

Proceed to adjustment at the Kleen Sweep 40R/47R with the battery set being mounted

Height of the front sealing strip (at folding apron) cannot be adjusted. Being dragged, it has contact with the floor.

7.4.1 Folding Apron Adjustment

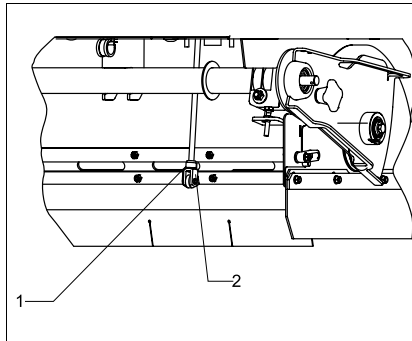


Fig. 14 Adjust folding apron

- Turn engine off and remove key
- disconnect battery plug
- Remove cover (as described in the paragraph "Mount/Dismount Cylinder Broom").
- Remove bolt (Fig. 14/2).
- Modify adjustment by turning the fork head (Fig. 14/1).

Modify adjustment such that the cylinder broom does not retract the sealing strip of the folding apron during operation.

7.5 Replace Side brush

The side brush is located at the front right of the machine (standard version). Use the lever (Fig. 10/2) to lift and lower the side brush. The side brush is to be lightly inclined in forward and in outward direction. The pivoting area of the side brush arm is limited by stop screws. The side brush is driven by a V-belt. Fitting of a second side brush for specific appliances is possible.

Proceed as follows for dismounting of the side brush:

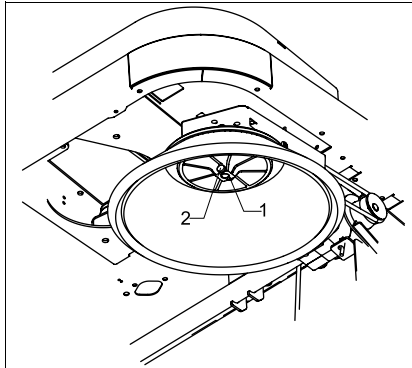


Fig. 15 Replace side brush

- Turn engine off and remove key.
- Secure machine by engaging parking brake
- disconnect battery plug
- Remove right-hand cover (as described in the paragraph "Dismount/ Mount Cylinder Broom").
- Side brush lifted
- Loosen hexagonal nut (Fig. 15/1) und remove together with washer
- Remove bolt (Fig. 15/2)
- Remove side brush

Proceed in inverse order for mounting of the side brush.

7.6 Dismount Plate Filter

Proceed as follows for dismounting of the plate filter:

- Open seat hood.
- Remove cover.
- Loosen fillister head screws (Fig. 16/2) and remove.
- Fold back frame with electro-motor (Fig. 16/3).
- Hook frame at indicated position (Fig. 16/4).
- Remove plate filter (Fig. 16/5).

For mounting of plate filter proceed in inverse order.

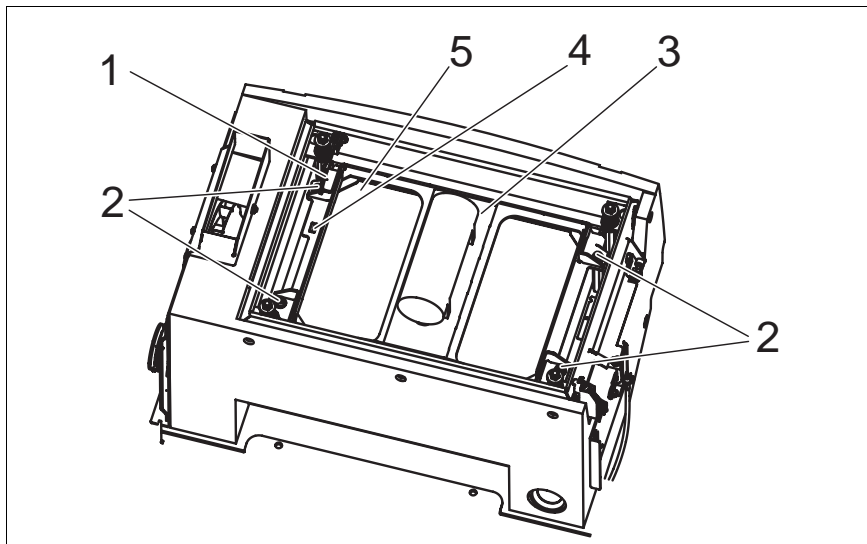


Fig. 16 Plate filter

1. Detent hook
2. Fillister head screws
3. Frame with electro-motor
4. Opening holding the detent hook
5. Plate filter

7.7 Basic Cleaning of Plate Filter

Hold the plate filter (Fig. 17/1) in vertical position and let it fall down from a height of 3 ft. (1 m) to the even floor as represented in Fig. 19.



The soiled side of the filter has to point to the bottom.

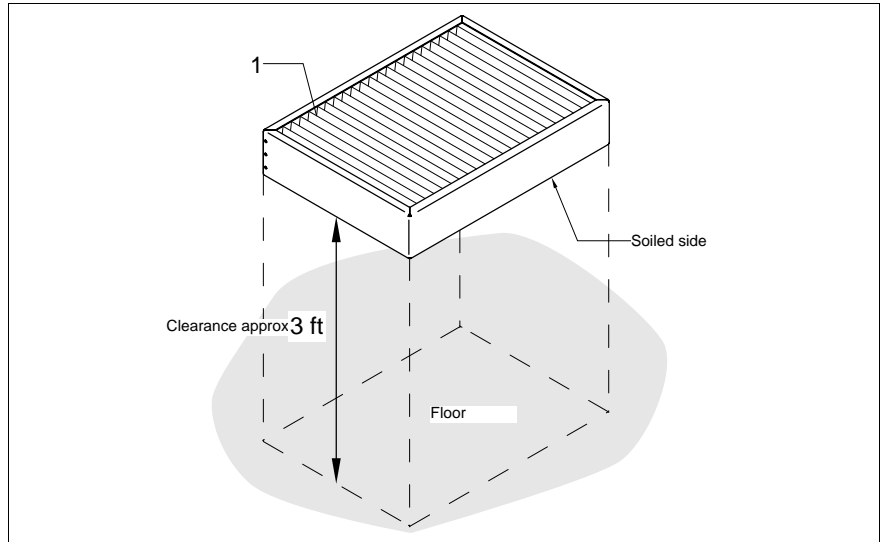


Fig. 17 Basic cleaning of plate filter

7.8 Electrical System

Circuit-breakers and fuses

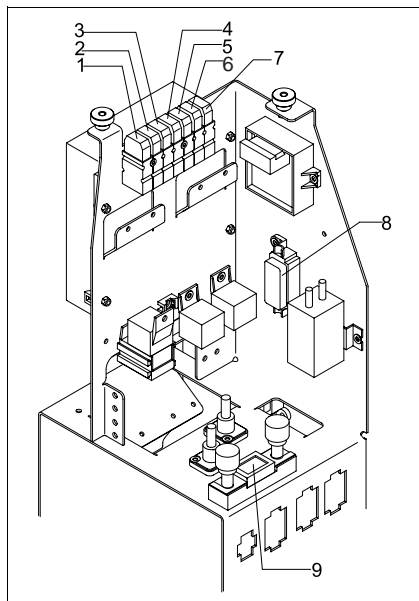


Fig. 18 Fuses

- 1. F2 Pre-fuse (20A)
- 2. F3 Travel drive assembly control

- 3. F4 Shaking function control voltage (10A)
- 4. F5 not assigned
- 5. F6 LDS indication (5A)
- 6. F7 LDS (5A)
- 7. F11 Shaking motor (30A)
- 8. F12 Brush motor (60A)
- 9. F1 Drive control power module (63A)



Before leaving the machine unattended, engage the parking brake and remove key.

7.9 Brake

It is located in the rear wheels and is actuated via cables.

A special adjustment screw is situated at the right-hand rear wheel.

7.10 V-belt drive

- 1. Tension roller
- 2. Suction fan V-belt (20Hz)
- 3. V-belt pulley
- 4. V-belt for brushes (130 Hz)
- 5. Side brush V-belt
- 6. Pulley
- 7. Cylinder broom V-belt
- 8. Tensioning roller follower
- 9. Pulley
- 10. Tension spring
- 11. Hexagonal nut
- 12. Hexagon socket screw
- 13. Screws

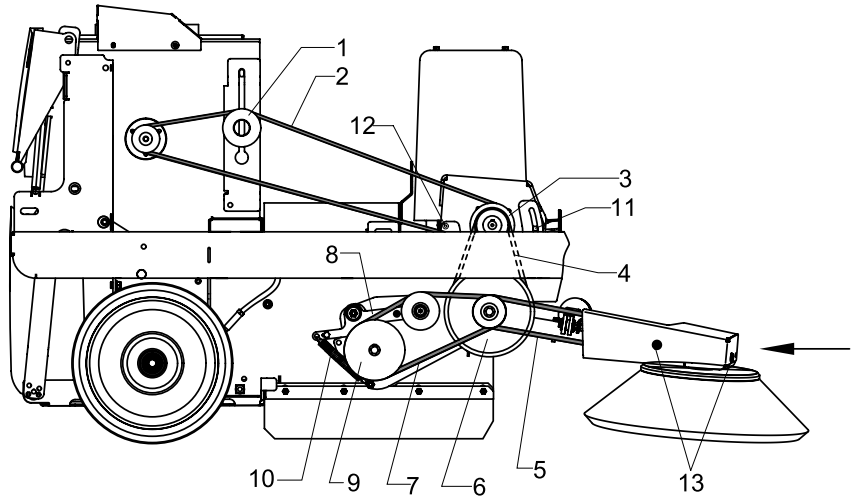
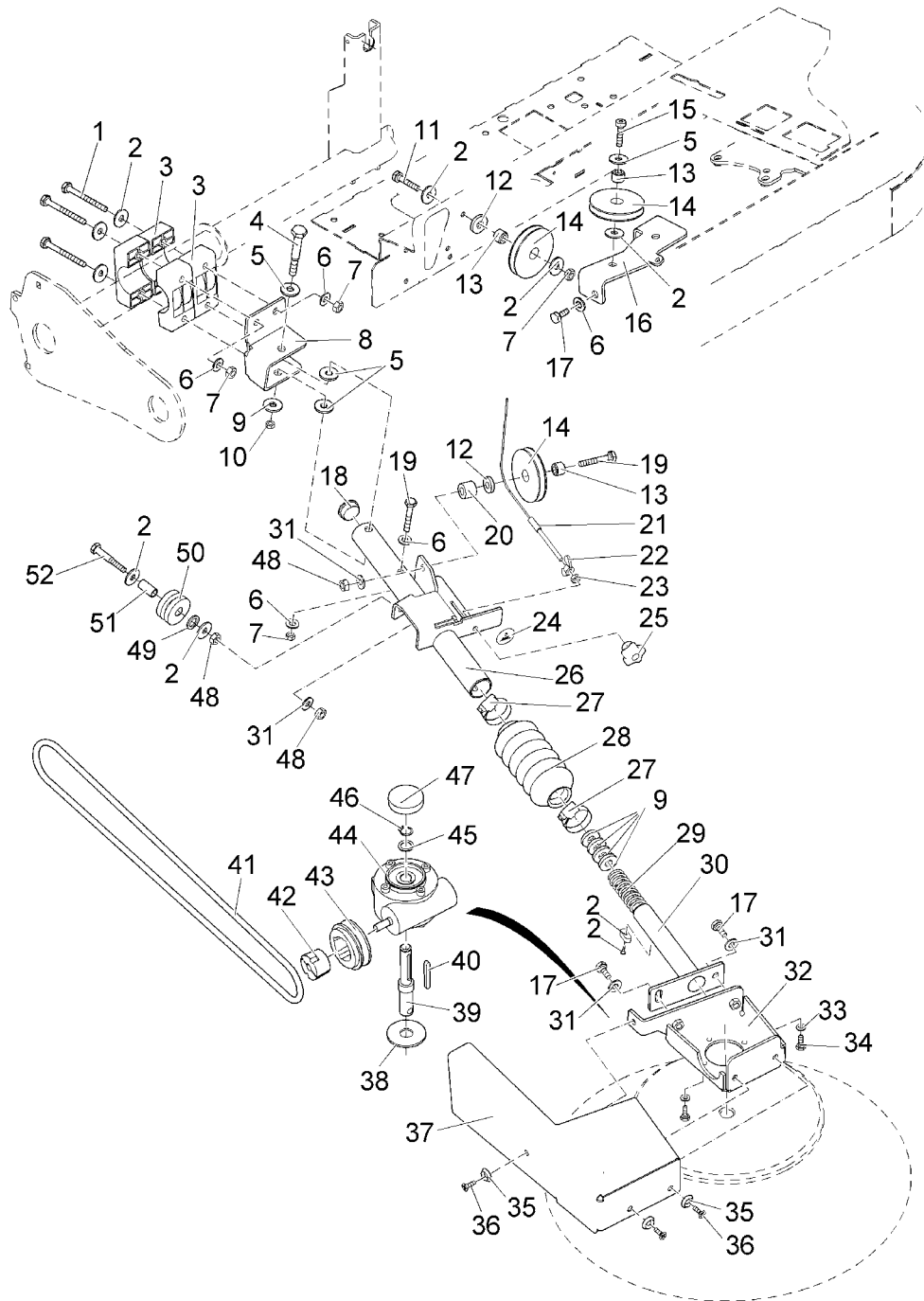
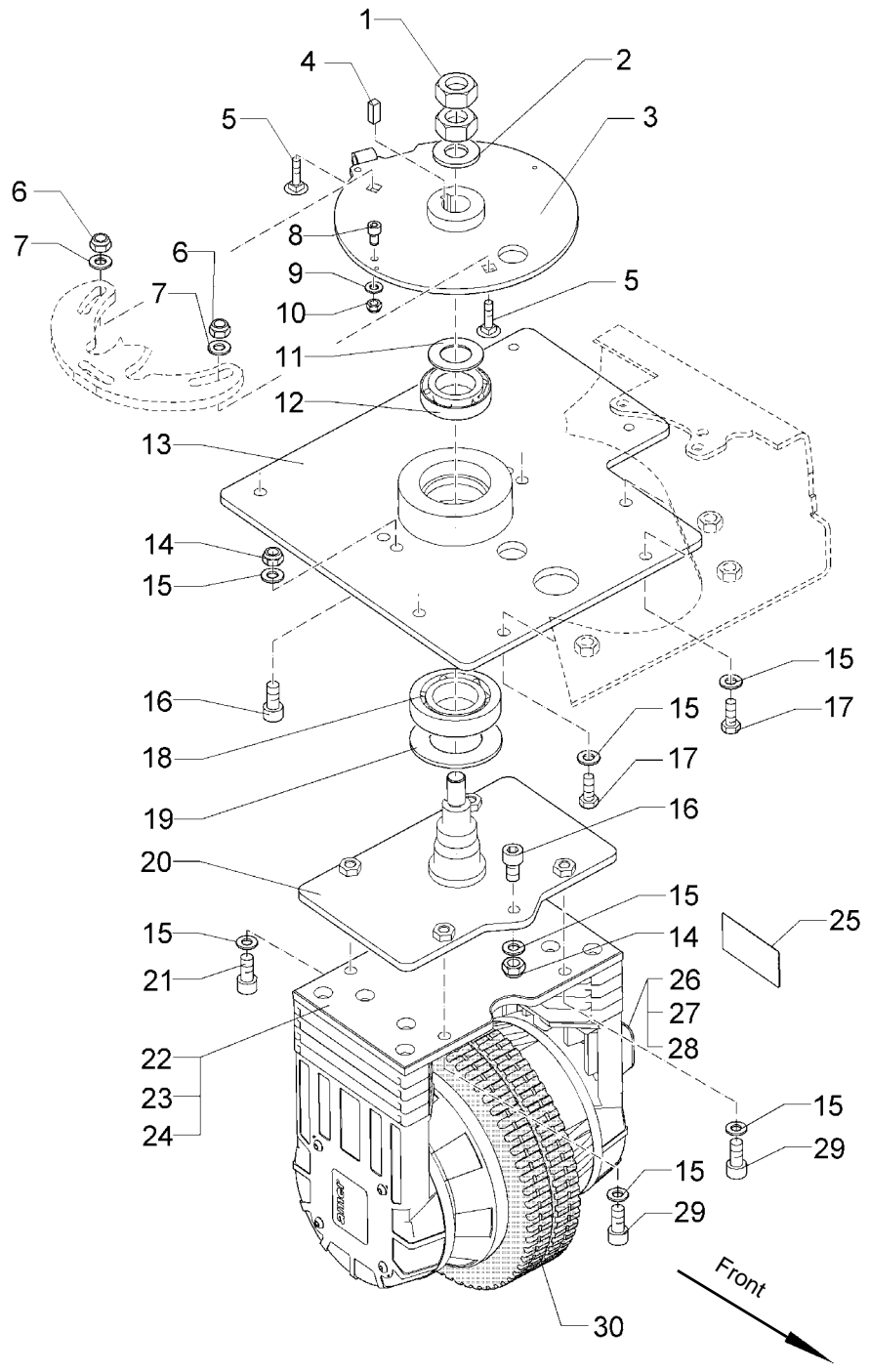


Fig. 19 V-belt drive

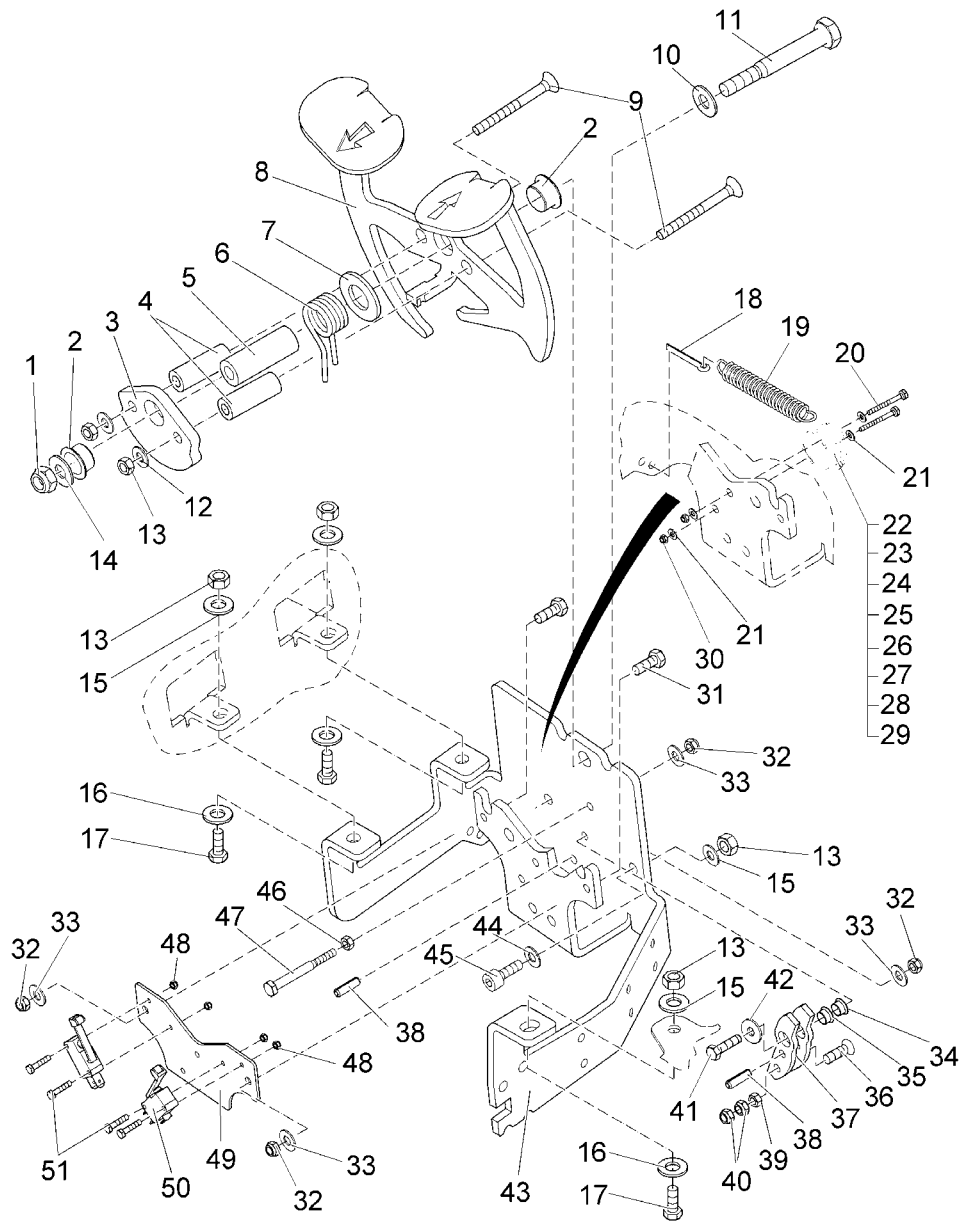
8 Spare part list



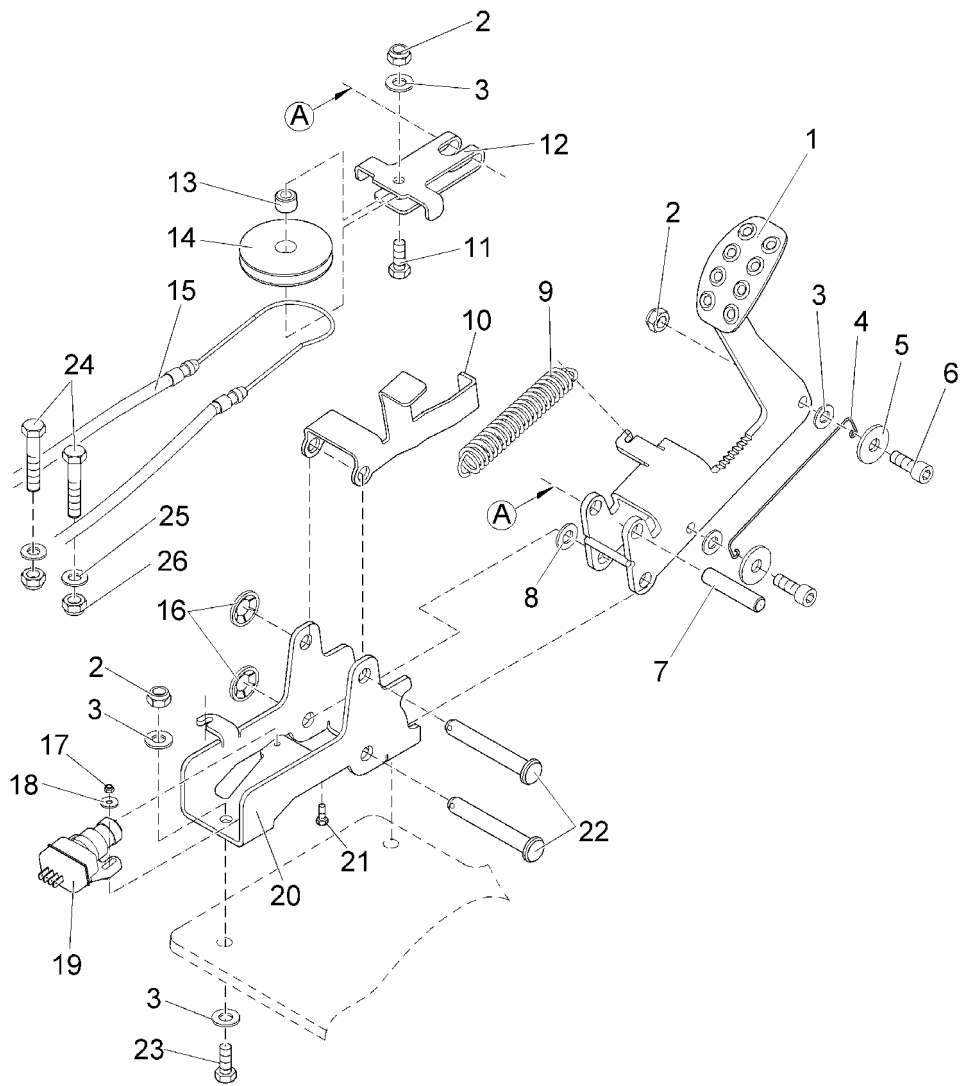
Side brush			
Item	PN	Qty.	
1	00557600	4	Hex. bolt
2	00042900	10	Washer
3	01130610	4	Bearing
4	00041810	1	Hex. bolt
5	00046520	3	Washer
6	00053750	8	Washer
7	00051510	6	Hex. nut
8	01130620	1	Holder
9	00855380	5	Washer
10	00132880	1	Hex. nut
11	00054690	1	Hex. bolt
12	00695300	2	Washer
13	00974400	3	Bushing
14	00521270	3	Sheave
15	00537390	1	Cylinder screw
16	01130630	1	Holder
17	00553690	4	Hex. bolt
18	00152850	1	Plug
19	00041600	2	Hex. bolt
20	00029170	1	Spacer sleeve
21	01130640	1	Rope
22	00054020	1	Wing nut
23	00053330	1	Hex. nut
24	01130650	1	Decal
25	00853730	1	Hand wheel
26	01130660	1	Side brush holder
27	01071480	2	Hose clamp
28	01130670	1	Bellows
29	00701250	1	Pressure spring
30	01130680	1	Holder
31	00740090	4	Detent washer
32	01130690	1	Holder
33	00740280	4	Detent washer
34	00104500	4	Hex. bolt
35	00157690	3	Hollow disc
36	00154680	3	Countersunk screw
37	01131400	1	Cover
38	00954200	1	Washer
39	01130700	1	Shaft
40	00072940	1	Adjusting spring
41	01130710	1	Belt
42	01130720	1	Bush
43	01130730	1	Belt pulley
44	01130740	1	Gear
45	00020610	1	Back-up disc
46	00022440	1	Retaining ring
47	01131530	1	Cap
48	00053350	3	Hex. nut
49	00156720	1	Washer
50	00740930	1	Guide roller
51	00855240	1	Bushing
52	00138180	1	Hex. bolt



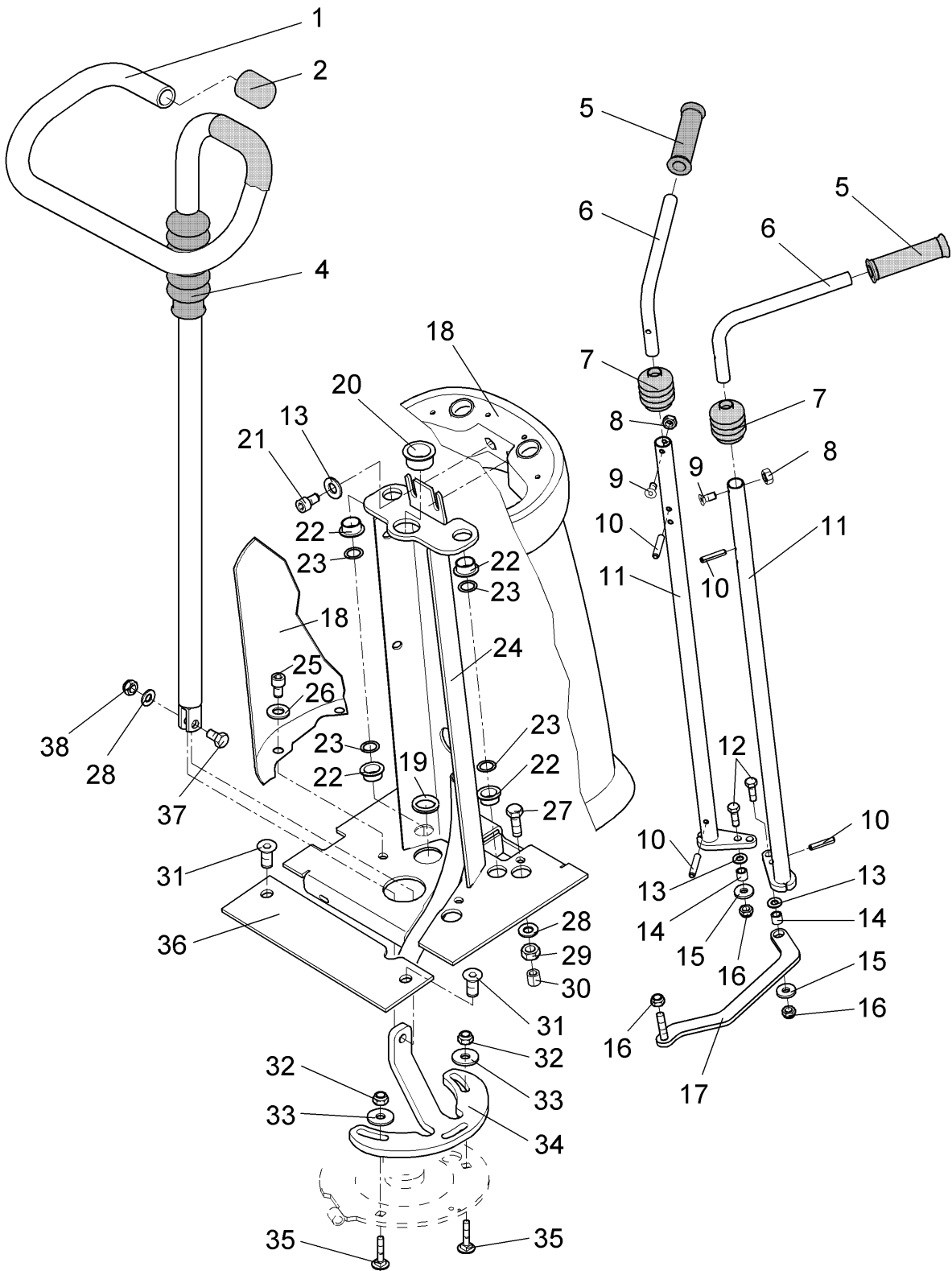
Front wheel drive			
Item	PN	Qty.	
1	00137290	2	Hex. nut
2	00053790	1	Washer
3	01130010	1	Guidance disk
4	00747530	1	Adjusting spring
5	01130020	2	Cup head square neck bolt
6	00051500	2	Hex. nut
7	00046520	2	Washer
8	00136910	1	Socket head cap screw
9	00053730	1	Washer
10	00051520	1	Hex. nut
11	01130030	1	Nilos ring
12	00048410	1	Tapered roller bearing
13	03002980	1	Front wheel bearing plate
14	00053360	3	Hex. nut
15	00870090	13	Detent washer
16	00135030	3	Socket head cap screw
17	00053310	6	Hex. bolt
18	00137930	1	Taper roller bearing
19	00746270	1	Nilos ring
20	03002990	1	Wheel carrier
21	00053650	2	Socket head cap screw
22	01130040	1	Wheel hub drive
23	01073950	4	Plug
24	01073960	4	Carbon brush
25	03003000	1	Decal
26	01131690	2	Carbon brush
27	01131680	2	Holder for carbon brush
28	01131700	1	Plug
29	00125430	2	Socket head cap screw
30	01073970	1	Wheel



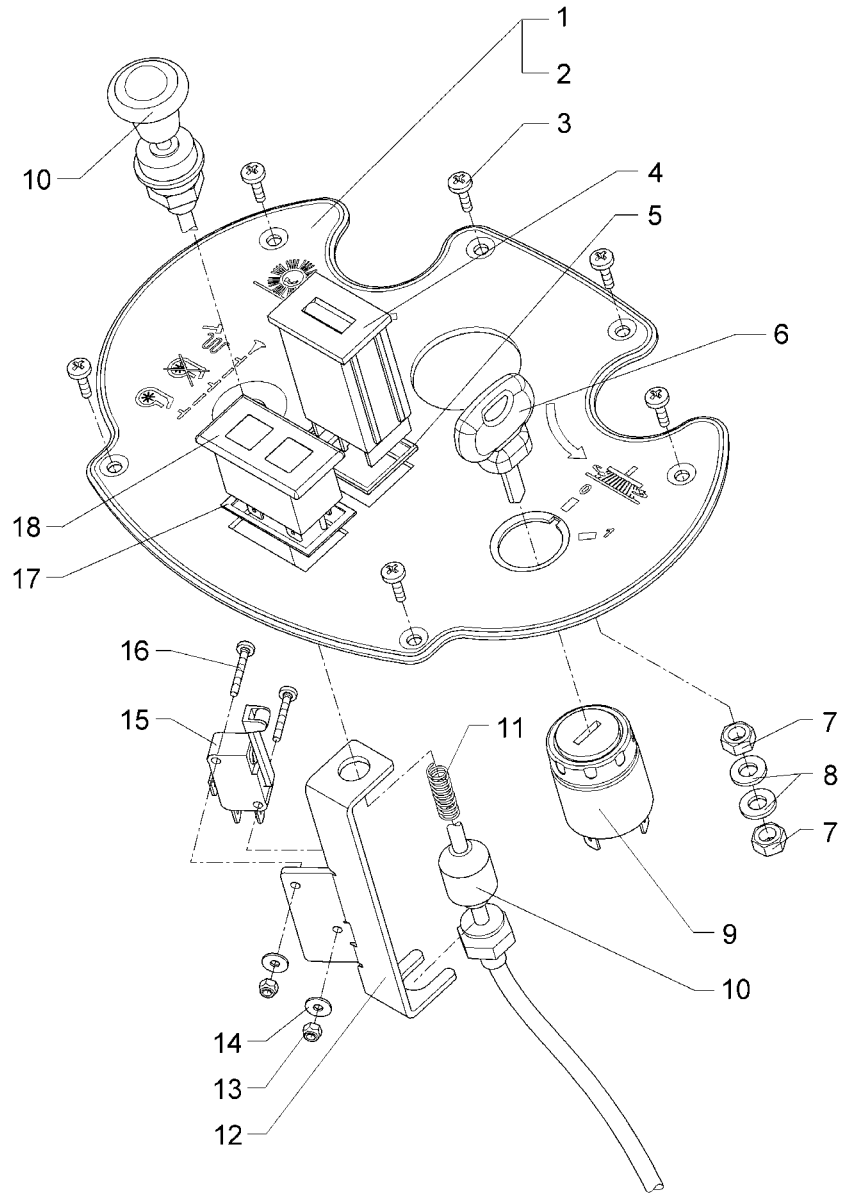
Accelerator			
Item	PN	Qty.	
1	00051490	1	Hex.nut
2	01130490	2	Bush
3	01130500	1	Plate
4	01130510	2	Bush
5	01130520	1	Bush
6	01130530	1	Spring
7	00154550	1	Washer
8	01130540	1	Accelerator
9	01130550	2	Countersunk screw
10	00875950	1	Detent washer
11	00105390	1	Hex.bolt
12	00740090	2	Detent washer
13	00053350	7	Hex.nut
14	00053770	1	Washer
15	00740310	5	Detent washer
16	00053750	3	Washer
17	00077110	3	Hex.bolt
18	00054890	1	Cotter pin
19	01130560	1	Pull spring
20	01130570	2	Hex.bolt
21	00874720	4	Washer
22	00975500	1	Turn angle transmitter
23	01073530	1	Transparency
24	01006210	6	Pin contact
25	01006190	6	Gasket
26	03003250	1	Pin housing
27	00559670	4	Flat connector sleeve
28	00083640	4	Socket housing
29	03003260	1	Line
30	00133830	2	Hex.nut
31	00053020	2	Hex.bolt
32	00051520	4	Hex.nut
33	00053730	1	Washer
34	01130580	1	Bush
35	01130590	1	Bush
36	01073650	1	Countersunk screw
37	01130600	2	Plate
38	00046440	1	Tightening sleeve
39	00053320	1	Hex.nut
40	00051340	2	Hex.nut
41	00053040	1	Hex.bolt
42	00135120	1	Washer
43	03003270	1	Angle
44	00924700	2	Washer
45	00045540	2	Socket head cap screw
46	00053330	1	Hex.nut
47	00737680	1	Hex.bolt
48	00022200	4	Hex.nut
49	03003280	1	Plate
50	00975510	2	Micro switch
51	00022180	4	Hex.bolt



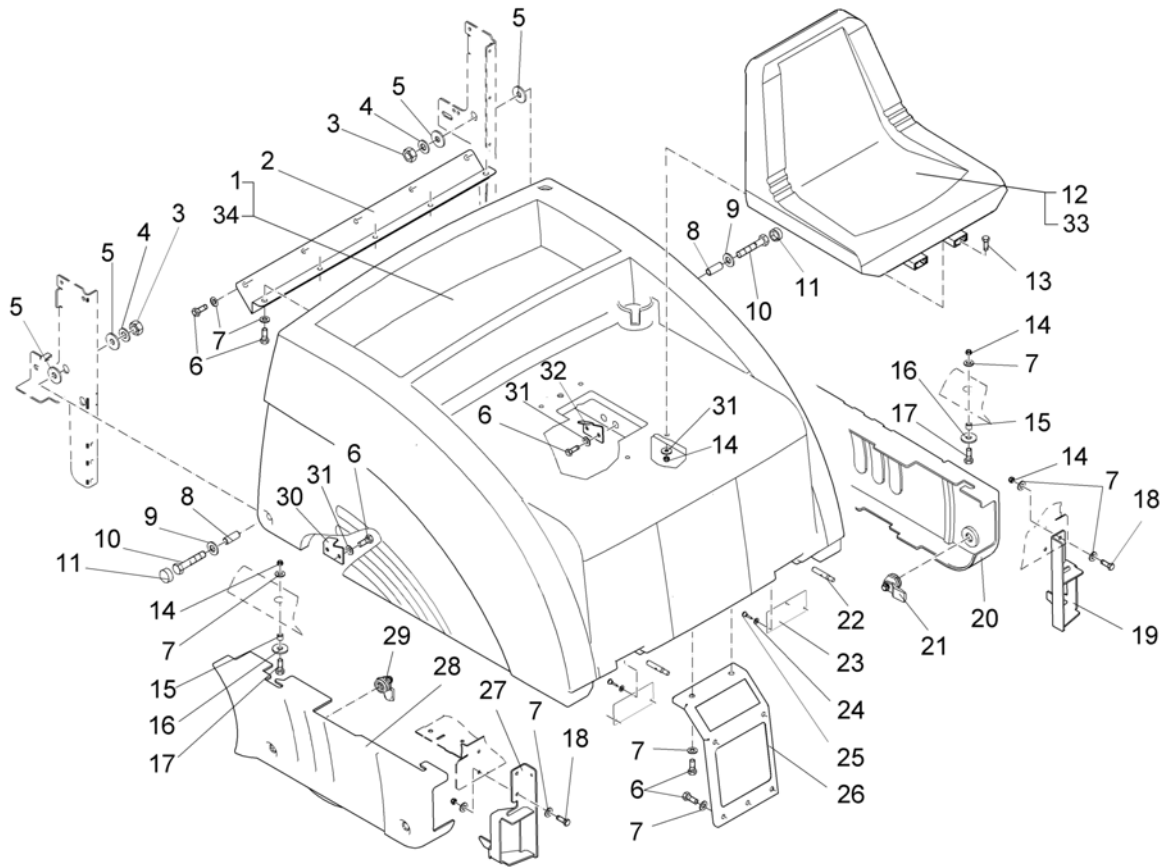
Pedal brake			
Item	PN	Qty.	
1	01130320	1	Pedale brake
2	00051510	5	Hex.nut
3	00053750	7	Washer
4	00854270	1	Bow
5	00042900	2	Washer
6	00124290	1	Socket head cap screw
7	01130330	1	Bolt
8	00555130	1	Packing ring
9	01055930	1	Pull spring
10	01130340	1	Barrier lever
11	00053110	1	Hex.bolt
12	03003170	1	Bow
13	00974400	1	Bushing
14	00521270	1	Pulley
15	01130350	1	Brake bowden cable
16	00706180	2	Retaining washer
17	00133830	2	Hex.nut
18	00557150	2	Washer
19	00927610	1	Switch
20	03003180	1	Bracket
21	00108490	2	Hex.bolt
22	00879630	2	Bolt
23	00053100	2	Hex.bolt
24	00074500	2	Hex.bolt
25	00740090	2	Detent washer
26	00053350	2	Hex.nut



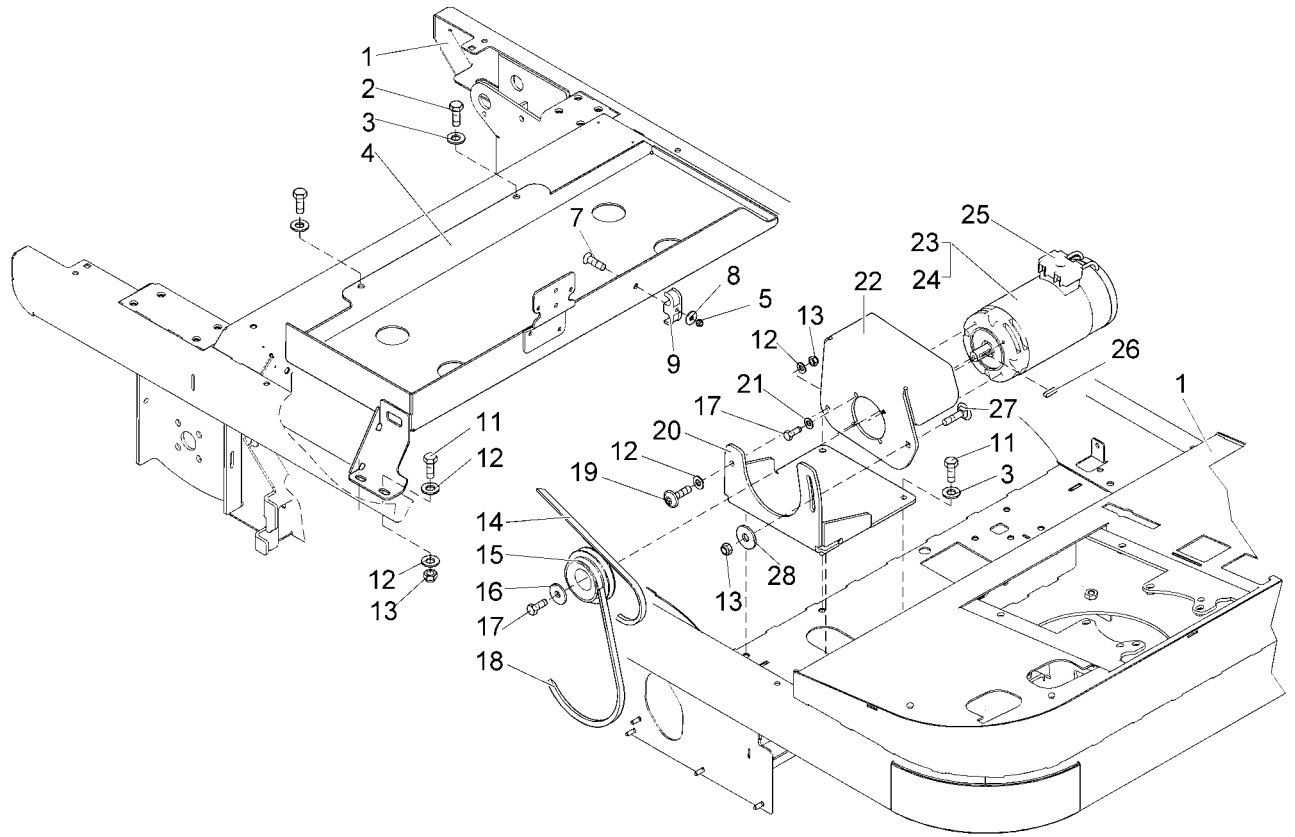
Steering			
Item	PN	Qty.	
1	01130360	1	Steering bar
2	01130370	1	Protective cap
4	01130390	1	Bellows
5	01130400	2	Handle
6	01130410	2	Arc
7	01130420	2	Bellows
8	00051520	3	Hex. nut
9	01093180	2	Countersunk screw
10	00044160	4	Tightening pin
11	01130430	2	Lever
12	00054690	2	Hex. bolt
13	00053750	4	Washer
14	00733400	2	Spacer bushing
15	00695300	2	Washer
16	00051510	3	Hex. nut
17	01130440	1	Supporting plate
18	01130450	1	Steering column
19	00521100	1	Grommet
20	01130460	1	Slide bearing bush
21	00154410	2	Cylinder head stud
22	01130470	4	Slide bearing bush
23	00046430	4	Adjusting shim
24	03003230	1	Carrier
25	00045540	4	Socket head cap screw
26	00740090	4	Detent washer
27	00053160	2	Hex. bolt
28	00053760	2	Washer
29	00132880	2	Hex. nut
30	01090960	2	Stop buffer
31	00535840	2	Countersunk screw
32	00051500	2	Hex. nut
33	00046520	2	Washer
34	01130480	1	Hold plate
35	01130020	2	Saucer head screw
36	03003240	1	Plate
37	00123690	1	Hex. bolt
38	00132880	1	Hex. nut



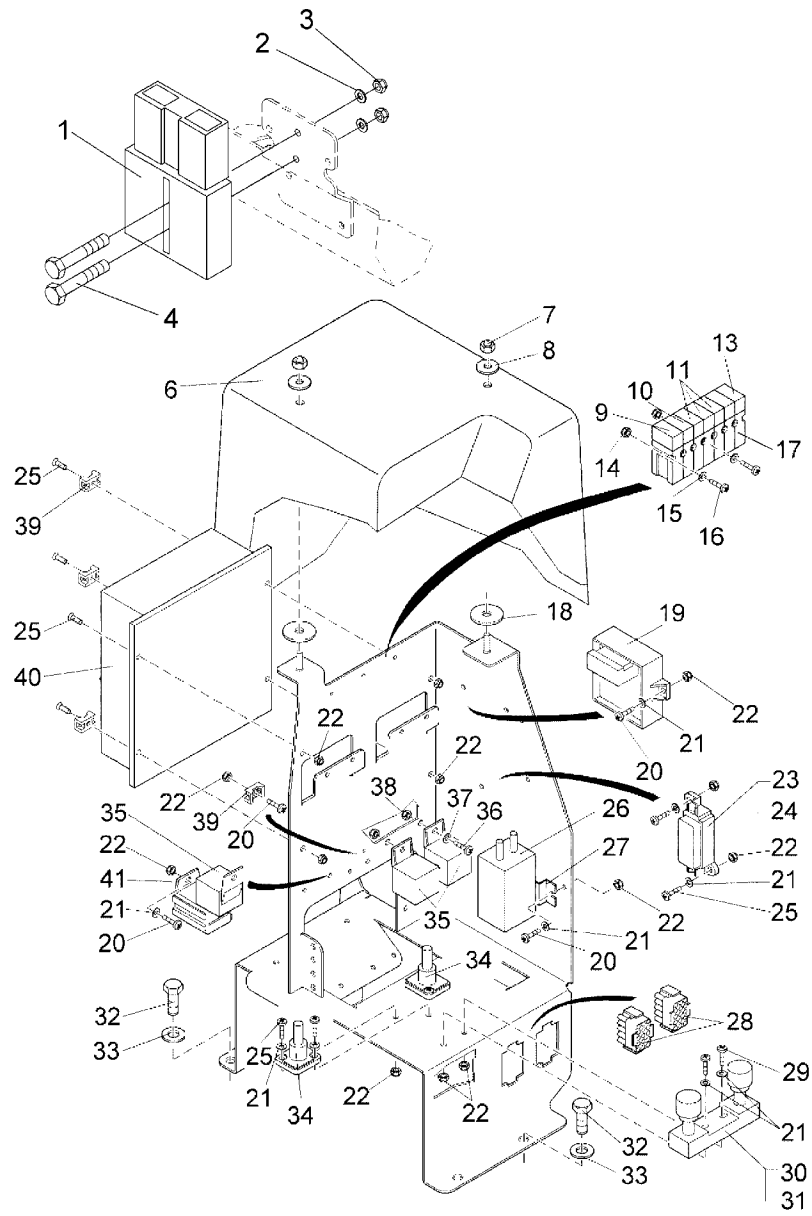
Control panel			
Item	PN	Qty.	
1	00131610	1	Control panel, tin plate
2	01131620	1	Control panel, foil
3	00052620	5	Filister head screw
4	01131640	1	Hour meter
5	01092720	1	Gasket
6	00745890	1	Key
7	00053330	2	Hex. nut
8	00053730	2	Washer
9	00021710	1	Key switch
10	01131520	1	Actuating cable
11	00902200	1	Compression spring
12	03003450	1	Holder
13	00022200	2	Hex. nut
14	00747400	2	Washer
15	00975510	1	Micro switch
16	00955220	2	Screw
17	01131640	1	Gasket
18	01131650	1	Control light



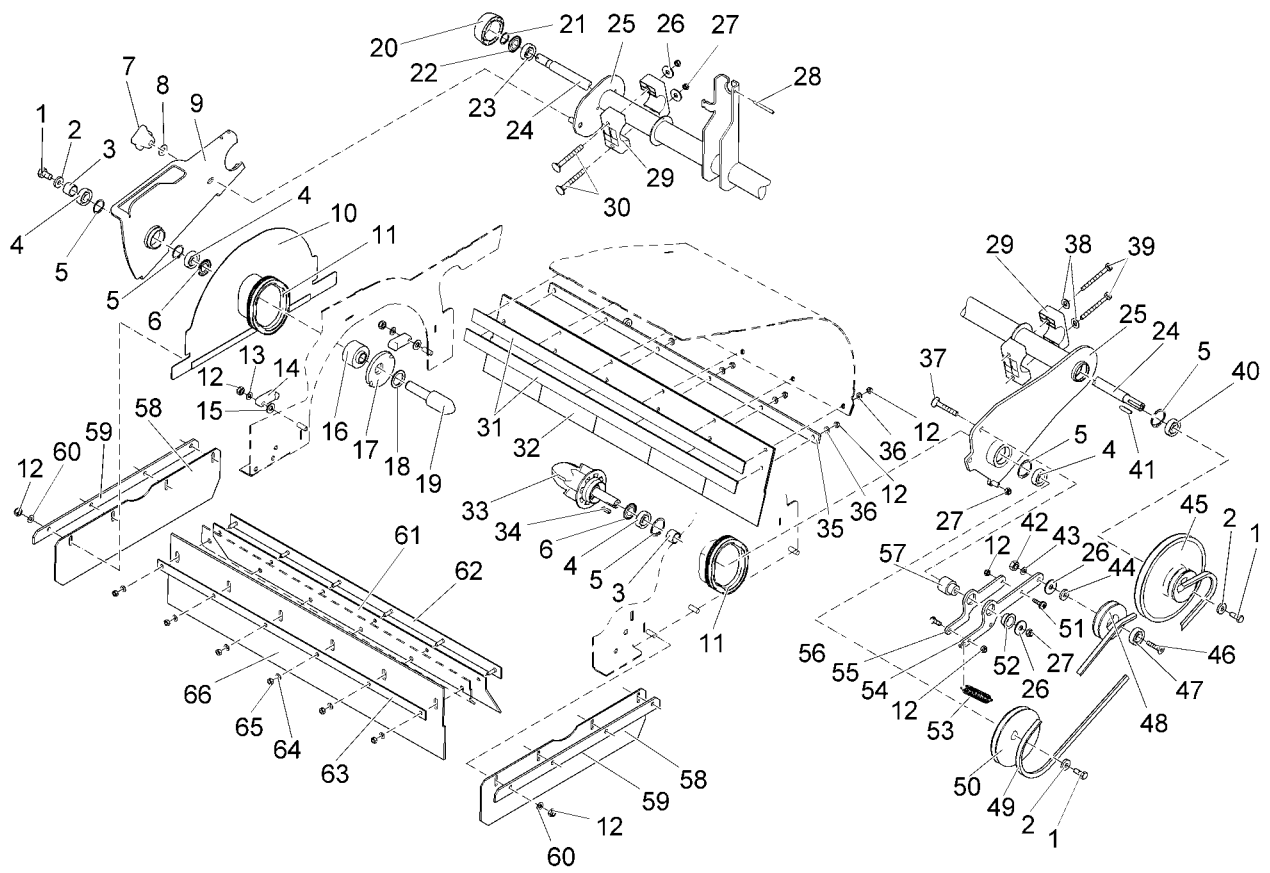
Covering - Seat			
Item	PN	Qty.	
1	01075610	1	Covering
2	03003290	1	Carrier seat
3	00053370	2	Hex. nut
4	00875950	2	Detent washer
5	00132610	4	Washer
6	00536320	17	Hex. bolt
7	00053750	24	Washer
8	01130230	2	Bush
9	00127290	2	Washer
10	00693010	2	Hex. bolt
11	01031540	2	Protective cap
12	01130240	1	Seat
13	00133700	4	Hex. bolt
14	00051510	12	Hex. nut
15	00733400	4	Spacer bushing
16	00042900	4	Washer
17	00053110	4	Hex. bolt
18	00053090	4	Hex. bolt
19	03003140	1	Holder, l.h.
20	01130250	1	Covering, l.h.
21	00121730	2	Casement fastener
22	00853700	2	Bolt
23	03003110	2	Plate
24	00053710	6	Washer
25	00961490	13	Screw
26	03003300	1	Holder seat
27	03003150	1	Holder, r.h.
28	01130260	1	Covering, r.h.
29	01130270	2	Casement fastener
30	01130280	1	Holder, r.h.
31	00740310	8	Detent washer
32	01130290	1	Holder, l.h.
33	01134330	1	Seat contact switch
34	01134810	1	Insulation mat



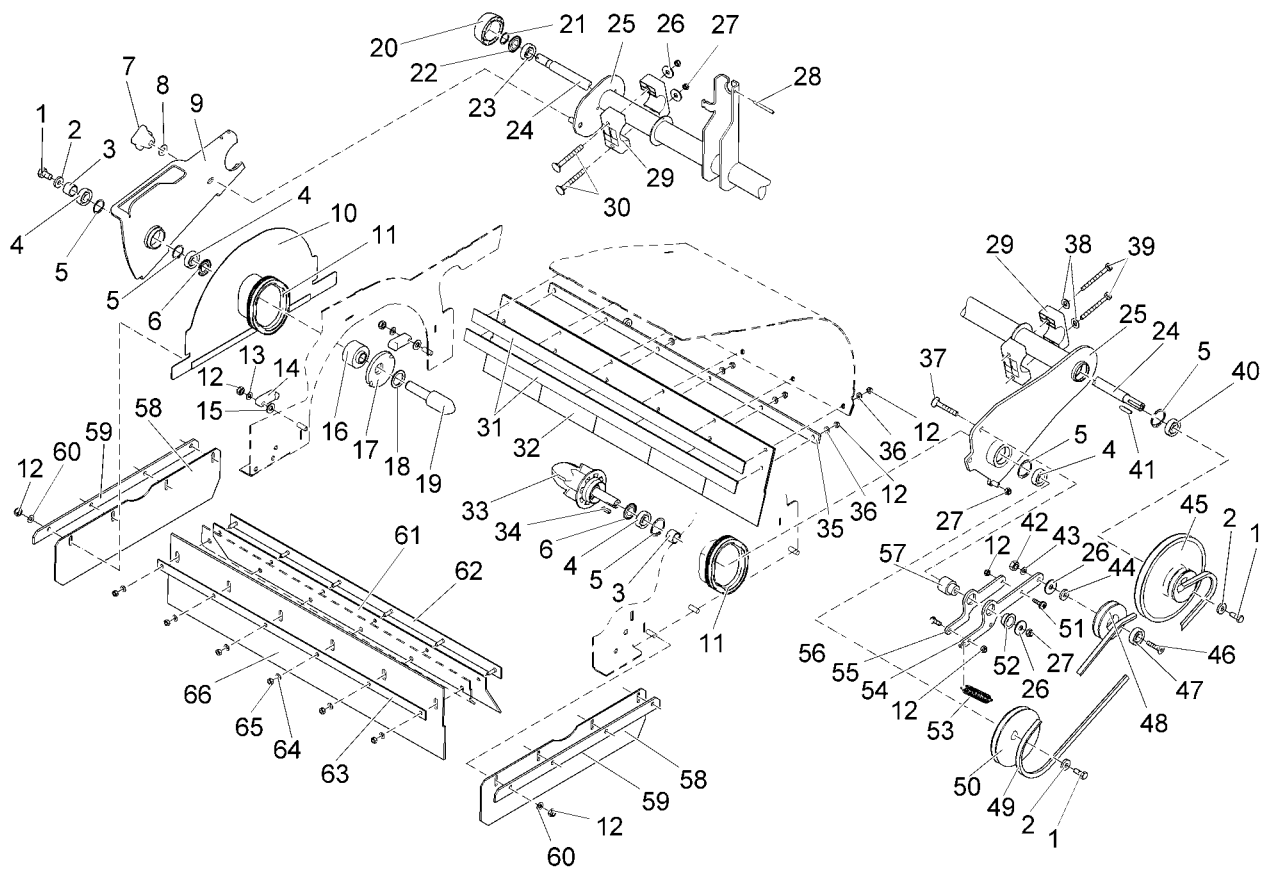
Motor - Chassis			
Item	PN	Qty.	
1	03003360	1	Chassis
2	00053080	2	Hex.bolt
3	00740090	6	Detent washer
4	03003370	1	Battery console
5	00051520	3	Hex.nut
6	00053730	2	Washer
7	00126010	1	Countersunk screw
8	00135120	1	Washer
9	00748300	1	Cable clamb
10	00053050	2	Hex.bolt
11	00053090	6	Hex.bolt
12	00053750	6	Washer
13	00051510	4	Hex.nut
14	01131280	1	Drive belt
15	01131290	1	Drive belt pulley
16	00874340	1	Washer
17	00053010	5	Hex.bolt
18	01131300	1	Drive belt
19	01092910	1	Filister head screw
20	03003380	1	Console
21	00730940	4	Detent washer
22	03003390	1	Holder
23	01131310	1	Motor
24	01131670	1	Carbon brush
25	01131660	1	Thermal relay
26	00054260	1	Adjusting spring
27	00864520	1	Cup square bolt
28	00042900	1	Washer



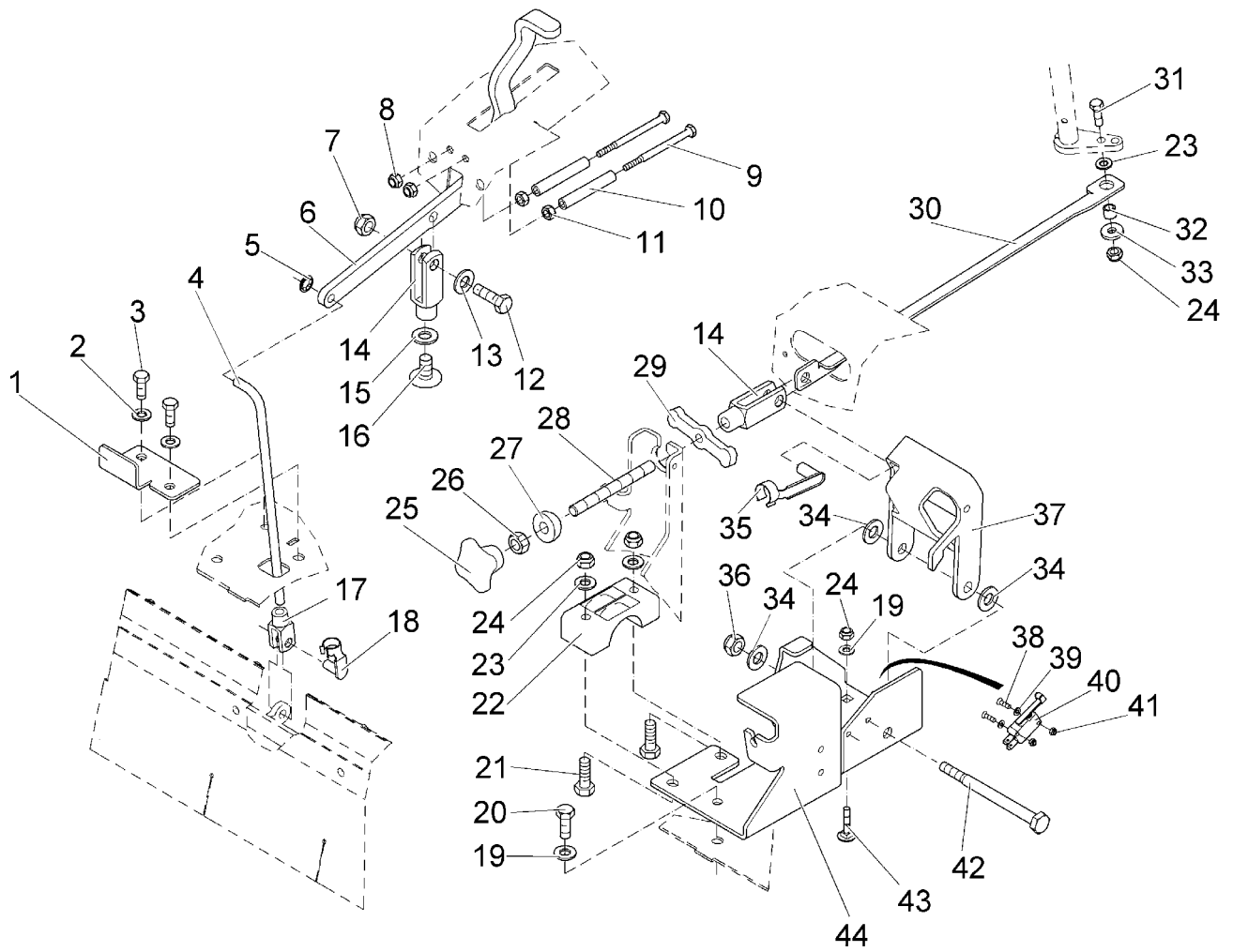
Electrical equipment			
Item	PN	Qty.	
1	01075720	1	Device plug
2	00053730	2	Washer
3	00051520	2	Hex.nut
4	00053050	1	Hex.bolt
6	01131430	1	Dust cover
7	00053330	2	Hex.nut
8	00135120	2	Washer
9	00500360	1	Fuse link
10	00733630	1	Fuse link
11	00906120	3	Fuse link
13	00152060	1	Fuse link
14	00022200	2	Hex.nut
15	00553740	2	Washer
16	00101580	2	Fillister head screw
17	00733650	7	Fuse holder
18	00106050	2	Rubber washer
19	00957270	1	Signal transmitter for low-level discharge
20	00052620	6	Fillister head screw
21	00053710	6	Washer
22	00133830	6	Hex.nut
23	00903510	1	Fuse holder
24	00903550	1	Fuse motor
25	00731550	2	Fillister head screw
26	01131420	1	Solenoid
27	03003420	1	Mounting kit for solenoid
28	01019610	2	Pin housing 15-pole
29	00954570	2	Screw
30	00121440	1	Fuse holder
31	01056100	1	Fuse
32	00053080	4	Hex.bolt
33	00053750	4	Washer
34	00744670	2	Single clamp
35	00965030	3	Relay
36	00108650	2	Fillister head screw
37	00053720	2	Washer
38	00051340	2	Hex.nut
39	00780710	4	Screw base
40	01130760	1	Control system 120A
41	01018100	1	Plug-in housing



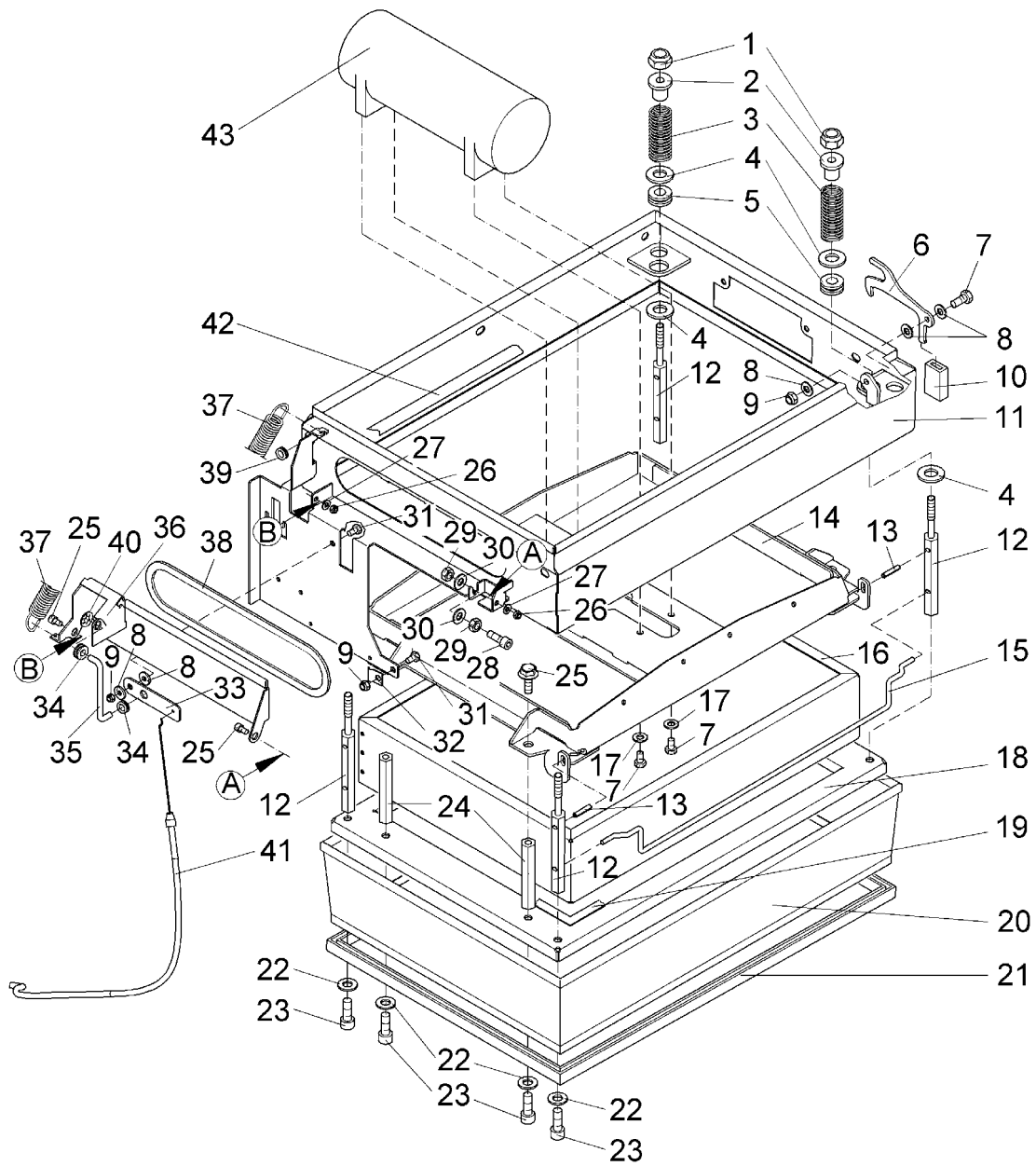
Group of main sweeper roller			
Item	PN	Qty.	
1	00053080	3	Hex.bolt
2	00695300	3	Washer
3	00509180	2	Distance sleeve
4	00106300	4	Ball bearing
5	00101660	5	Retaining ring
6	00102410	2	Nilos-ring
7	00866720	1	Star handle
8	00740290	1	Detent washer
9	01130830	1	Brush rocker, l.h.
10	01130840	1	Side shield
11	00681570	2	Edge protection
12	00051520	24	Hex.nut
13	00053840	2	Spring washer
14	00968190	2	Toggle
15	00053750	2	Washer
16	01130850	1	Gasket
17	01130860	1	Washer
18	00135560	1	Washer
19	01130870	1	Drag element
20	01130880	1	Centering bush
21	00022340	1	Retaining ring
22	00104480	1	Nilos-ring
23	00706360	1	Ball bearing
24	01130890	1	Shaft
25	03003310	1	Torque shaft
26	00042900	4	Washer
27	00051510	7	Hex.nut
28	00861020	1	Tensioning sleeve
29	01130610	4	Bearing
30	01130900	2	Cup head square neck bolt
31	01130910	2	Retaining strip
32	01130800	1	Brush apron, front
33	01130920	1	Drag element
34	00054260	1	Adjusting spring
35	01130930	1	Strip
36	00053730	12	Washer
37	01130940	1	Cup head square neck bolt
38	00740080	2	Safety washer
39	00557600	2	Hex.bolt
40	00538360	1	Ball bearing
41	00107380	1	Adjusting spring
42	00046500	1	Hex.nut
43	00740310	1	Detent washer
44	01130950	1	Bush
45	01130960	1	Belt pulley
46	00509000	1	Countersunk screw
47	00126330	1	Ball bearing
48	01130970	1	Idler
49	01130980	1	V-belt
50	01130990	1	Belt pulley



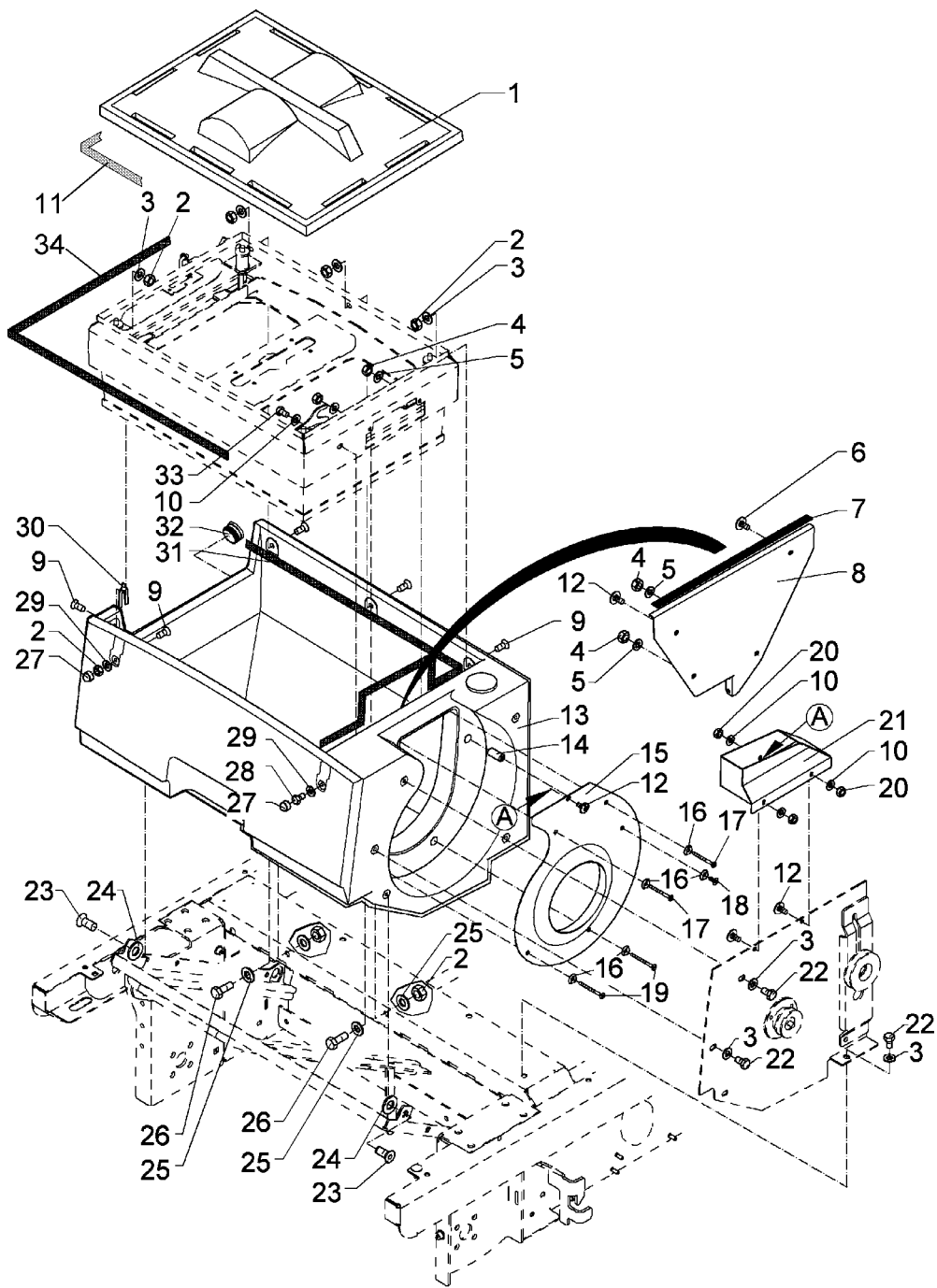
51	00053550	1	Screw
52	01130470	1	Bearing bush
53	01131000	1	Pult spring
54	01131010	1	Holder
55	01131020	1	Holder for idler
56	00053020	1	Hex.bolt
57	01131030	1	Bolt
58	01130820	2	Brush apron
59	01131050	2	Strip
60	00053730	8	Washer
61	01131040	1	Brush apron, rear
62	01130910	1	Strip
63	00243450	1	Clamping strip
64	00740280	6	Detent washer
65	00053330	8	Hex.nut
66	01130810	1	Brush apron, rear



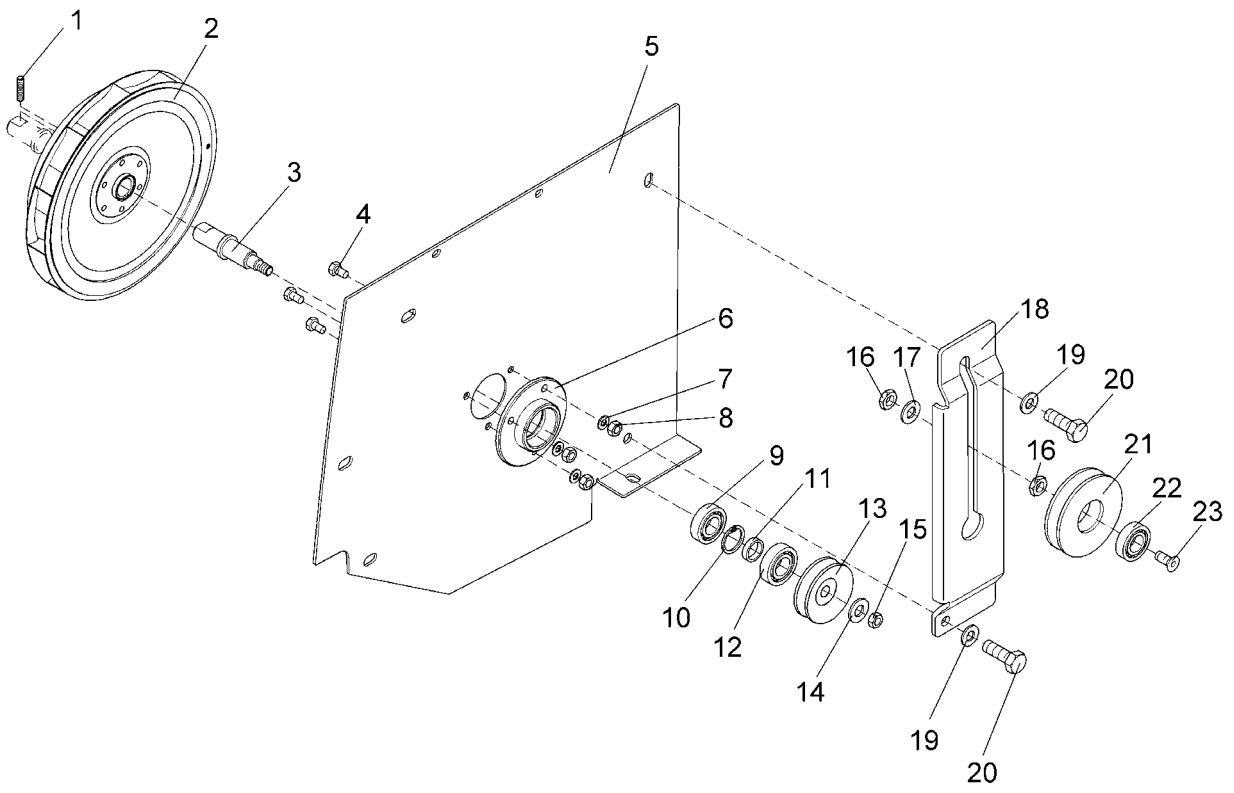
Manipulation for brush apron - Lifter for sweeping roller			
Item	PN	Qty.	
1	01131320	1	Stop angle
2	00740090	2	Detent washer
3	00053080	2	Hex. bolt
4	01131330	1	Bar
5	00854420	1	Retaining washer
6	01131340	1	Pedal bar
7	00051500	1	Hex. nut
8	00051520	2	Hex. nut
9	00526320	2	Hex.bolt
10	01064890	2	Hose
11	00053330	2	Hex. nut
12	00123690	1	Hex. bolt
13	00130290	1	Adjusting shim
14	00925430	2	Fork head
15	00740290	1	Detent washer
16	01131350	1	Filister head screw
17	00151440	1	Forked end
18	00151400	1	ES bolt
19	00740080	3	Safety washer
20	00053090	1	Hex. bolt
21	00041600	2	Hex. bolt
22	01130610	1	Bearing
23	00053750	3	Washer
24	00051510	5	Hex. nut
25	00866720	1	Star handle
26	01050160	1	Hex. nut
27	01131360	1	Tap
28	01131370	1	Spindle
29	01131380	1	Countering latch
30	01131390	1	Draw angle
31	00054690	1	Hex. bolt
32	00733400	1	Spacer bushing
33	00695300	1	Washer
34	00053760	3	Washer
35	00925420	1	ES-bolt
36	00132880	1	Hex. nut
37	03003400	1	Angle
38	00955220	2	Screw
39	00747400	2	Washer
40	00975510	1	Micro switch
41	00022200	2	Hex. nut
42	00109460	1	Hex. bolt
43	00878410	2	Cup head square neck bolt
44	03003410	1	Holder



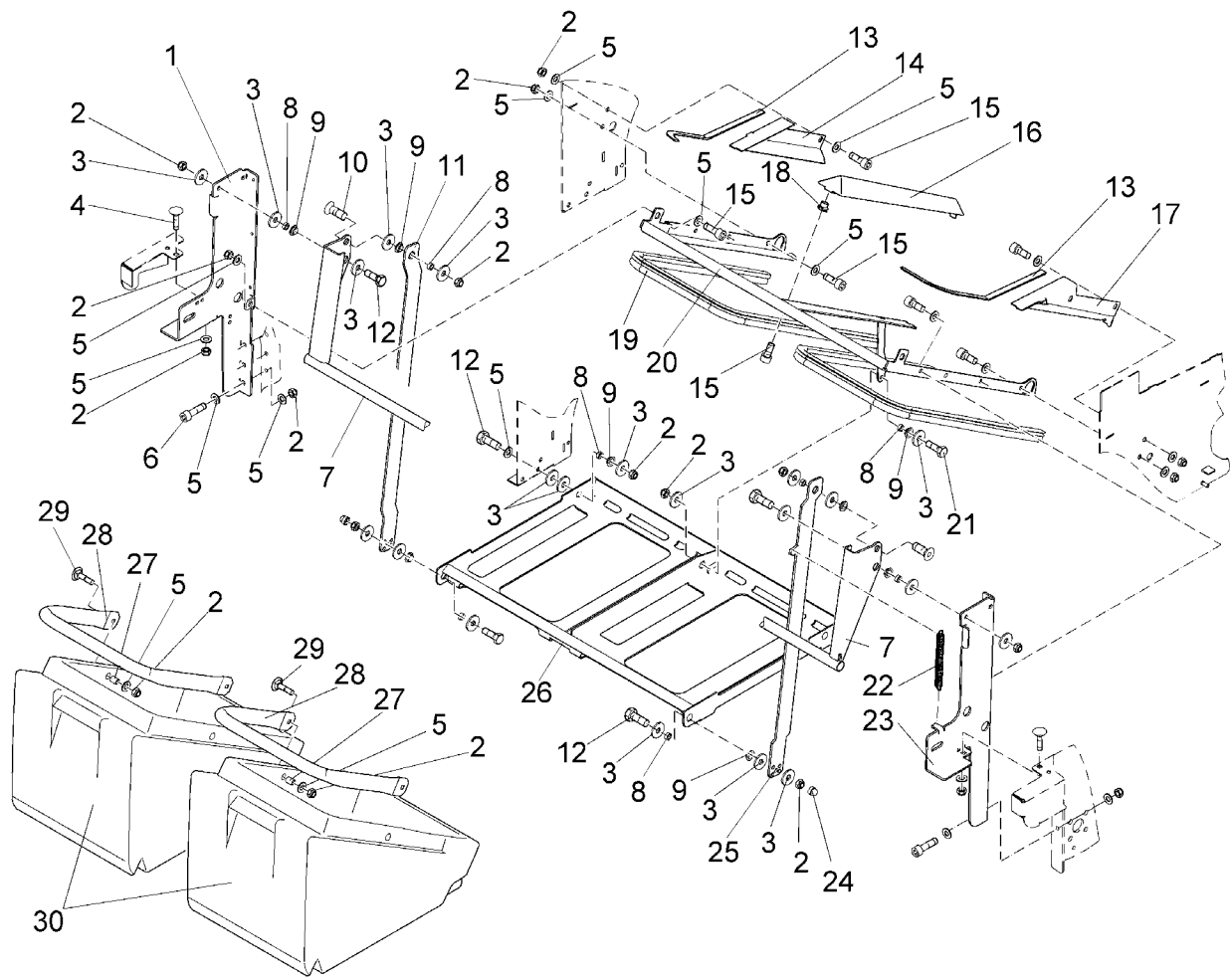
Filter installation			
Item	PN	Qty.	
1	00051510	4	Hex. nut
2	01131100	4	Bolt
3	01074080	4	Compression spring
4	00042900	8	Washer
5	00027190	4	Grommet
6	01131110	1	Lever
7	00053020	5	Hex. bolt
8	00135120	5	Washer
9	00051520	3	Hex. nut
10	00451220	1	Hose
11	01131410	1	Frame
12	01131120	4	Spacer
13	00045620	2	Tensioning sleeve
14	01131130	1	Frame
15	01131140	1	Bow
16	01130750	1	Plate filter
17	00730940	4	Detent washer
18	01131150	1	U-panel
19	00420290	1	Gasket
20	01131160	1	Annular filter
21	00161240	1	Edge protector
22	00740310	8	Detent washer
23	00045540	8	Socket head cap screw
24	01131170	4	Spacer
25	01131440	2	Socket head cap screw
26	01017660	2	Hex. nut
27	00958770	1	Washer
28	00071450	1	Hex. socket head cap screw
29	00053350	2	Hex. nut
30	00053750	1	Washer
31	00053010	2	Hex. bolt
32	00534470	1	Clamp
33	01131180	1	Holder
34	01131190	2	Grommet
35	01131200	1	Rod
36	01131210	1	Air vent
37	01130560	1	Pull spring
38	01075290	1	Gasket
39	00740360	1	Grommet
40	00023290	1	Retaining washer
41	01131520	1	Actuating cable
42	00830680	1	Hose
43	01000890	1	Shaker motor



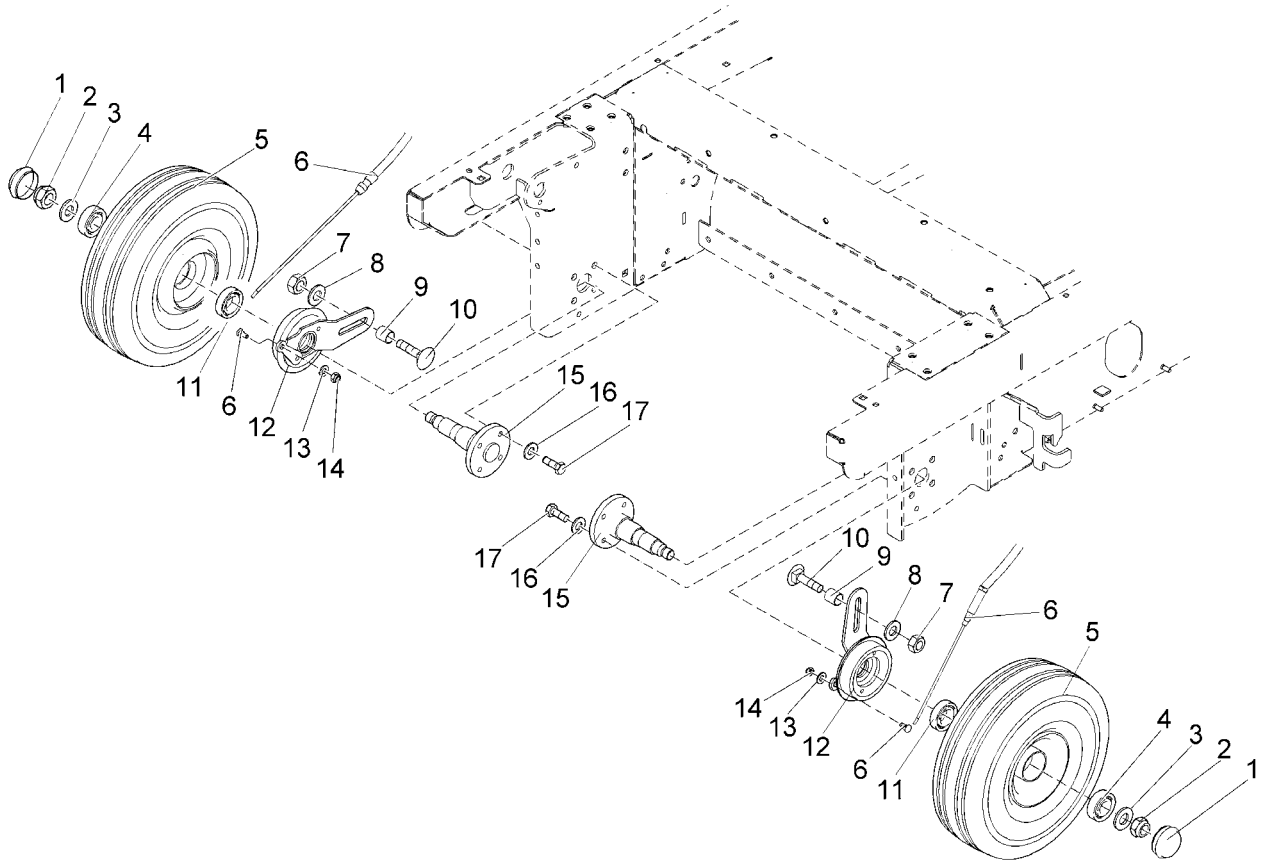
Dust extraction			
Item	PN	Qty.	
1	01131510	1	Filter cover
2	00053350	7	Hex. nut
3	00740090	7	Detent washer
4	00053330	4	Hex. nut
5	00740280	4	Detent washer
6	01092780	1	Filister head flange screw
7	00420290	1	Gasket
8	03003430	1	Covering
9	00903480	5	Countersunk screw
10	00730940	4	Detent washer
11	01131840	1	Gasket filter cover
12	01131450	4	Filister head flange screw
13	03003440	1	Housing
14	01131460	1	Threaded bushing
15	01131470	1	Nozzle
16	00157690	5	Hollow disc
17	00127360	2	Countersunk screw
18	00871440	1	Countersunk screw
19	00120130	1	Countersunk screw
20	00135790	3	Hex. nut
21	01131480	1	Air scoop
22	00864230	3	Hex. bolt
23	00059080	2	Countersunk screw
24	00070170	2	Washer
25	00042900	2	Washer
26	00133700	2	Hex. bolt
27	00131610	2	Protective cap
28	00151810	1	Hex.bolt
29	00053750	2	Washer
30	01131490	1	Sheet metall
31	00420290	1	Gasket
32	01131500	1	Plug
33	00104500	1	Hex. bolt
34	01130200	1	Gasket



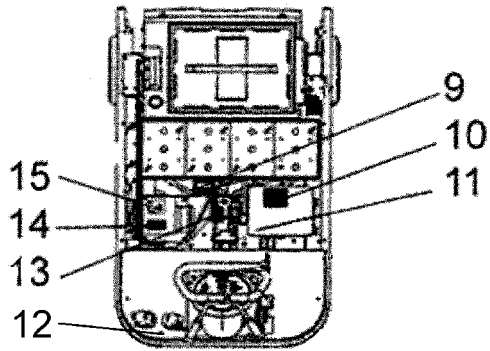
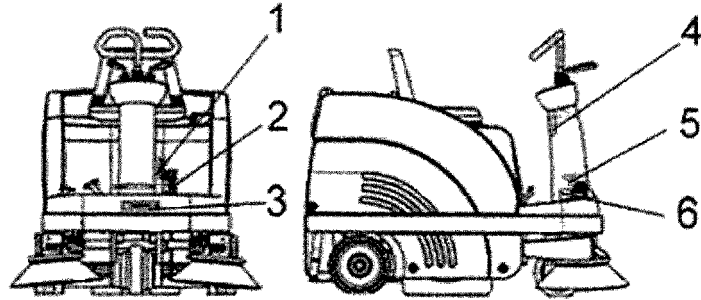
Fan bearing			
Item	PN	Qty.	
1	00506780	1	Threaded pin
2	01131220	1	Rotating fan
3	01131230	1	Shaft
4	00053010	3	Hex. bolt
5	03003350	1	Bearing plate
6	01131240	1	Bearing bush
7	00740280	3	Detent washer
8	00053330	3	Hex. nut
9	00706360	1	Cylindrical bearing
10	00126320	1	Retaining ring
11	01131250	1	Distance tube
12	00538360	1	Cylindrical bearing
13	01131260	1	Belt pulley
14	00740090	1	Detent washer
15	00022330	1	Hex. nut
16	00074710	2	Hex. nut
17	00740290	1	Detent washer
18	01131270	1	Holder
19	00740090	2	Detent washer
20	00553690	2	Hex. bolt
21	01130970	1	Idler
22	00126330	1	Cylindrical bearing
23	00021800	1	Countersunk screw



Dirt hopper - Dirt hopper lifter			
Item	PN	Qty.	
1	01130050	1	Holder, l.h.
2	00051510	10	Hex. nut
3	00042900	12	Washer
4	00878410	2	Cup square bolt
5	00053750	6	Washer
6	00103300	6	Socket head cap screw
7	01130060	1	Handle
8	01130070	9	Bush
9	01130080	9	Slide bearing bush
10	00101500	2	Countersunk screw
11	01130090	1	Holder, l.h.
12	00053100	2	Hex. bolt
13	01130200	1	Gasket
14	01130300	1	Angle, l.h.
15	00045540	4	Socket head cap screw
16	01130100	1	Plate
17	01130310	1	Angle, r.h.
18	01130110	1	Nut
19	00750430	2	Edge protector profil
20	01130120	1	Sealing plate
21	00077110	1	Hex. bolt
22	01130130	1	Pull spring
23	01130140	1	Holder, r.h.
24	00874930	2	Protective cap
25	01130150	1	Holder, r.h.
26	01130160	1	Plate
27	01130170	4	Bush
28	01130180	2	Handle
29	00078920	4	Saucer head screw
30	01130190	2	Dirt hopper



Rear wheel - Brake			
Item	PN	Qty.	
1	01131060	2	Cap
2	00135350	2	Hex. nut
3	01131070	2	Washer
4	00706370	2	Ball bearing
5	01130770	2	Rear wheel
6	01130350	2	Bowden cable for brake
7	00074710	2	Hex. nut
8	00053760	2	Washer
9	01130780	2	Bush
10	01130790	2	Cup head square neck bolt
11	00281050	2	Ball bearing
12	01131080	2	Brake
13	00053730	2	Washer
14	00051520	2	Hex. nut
15	01131090	2	Axle
16	00740290	8	Detent washer
17	00021130	8	Hex. bolt



Lable			
Item	PN	Qty.	
1	00113140	1	Lable brush apron
2	01131550	1	Lable brake
3		1	Lable, Minuteman
4	01071010	1	Lable instruction manual
5	01131560	1	Lable brake
6	01073530	1	Lable noise performance
9	00871160	1	Lable 24V
10	01055410	1	Lable battery setting
11	01131570	1	Lable high-pressure cleaner
12	01073530	1	Lable
13	01073530	1	Lable cylinder broom wearing take-up
14	01131590	1	Lable rotating parts
15	01131600	1	Lable battery charging

EC Declaration of Conformity

Minuteman[®]

declares under our sole responsibility
that the product

Kleen Sweep 40R/47R
Type: HM40B/HM47B/HM40BQP
HM47BQP/HM40QP/
HM50QP

to which this declaration relates, corre-
sponds to the relevant basic safety and
health requirements of the Directives
98/37/EEC, and to the requirements of
the relevant Directive

- 89/336/EEC.

For the relevant implementation of the
safety and health requirements mentio-
ned in the Directives, the following stan-
dard(s) and/or technical specification(s)
has (have) been respected:

EN 60335-2-72
EN 61000-6-3
EN 61000-6-2

Addison (Illinois), 30th Sept. 2004


Gregory J. Rau
President

LIMITED WARRANTY

Minuteman International, Inc. warrants to the original purchaser/user that this product is free from defects in workmanship and materials under normal use and service for a period of one year from date of purchase. In addition, Minuteman International, Inc. will, at its option, honor labor warranty claims for the first 6 months from date of sale, provided such claims are submitted through and approved by factory authorized repair stations. Minuteman International, Inc. will, at its option, repair or replace without charge, except for transportation costs, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals.

This warranty does not apply to normal wear, or to items whose life is dependent on their use and care, such as belts, cords, switches, hoses, rubber parts, electrical motor components or adjustments. Parts not manufactured by Minuteman International, Inc. such as engines, batteries, battery chargers, hydraulic pumps, and tires are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Minuteman International, Inc. for procedures in warranty claims against these manufacturers.

Special warning to purchaser -- Use of replacement filters and/or prefilters not manufactured by Minuteman International, Inc. or its designated licensees, will void all warranties expressed or implied.

A potential health hazard exists without exact original equipment replacement.

All warranted items become the sole property of Minuteman International, Inc. or its original manufacturer, whichever the case may be.

Minuteman International, Inc. disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. Minuteman International, Inc. assumes no responsibility for any special, incidental or consequential damages.

This limited warranty is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. Customers outside the U.S.A. and Canada should contact their local distributor for export warranty policies. Minuteman International, Inc. is not responsible for costs or repairs performed by persons other than those specifically authorized by Minuteman International, Inc. This warranty does not apply to damage from transportation, alterations by unauthorized persons, misuse or abuse of the equipment, use of non-compatible chemicals, or damage to property, or loss of income due to malfunctions of the product.

If a difficulty develops with this machine, you should contact the dealer from whom it was purchased.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

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