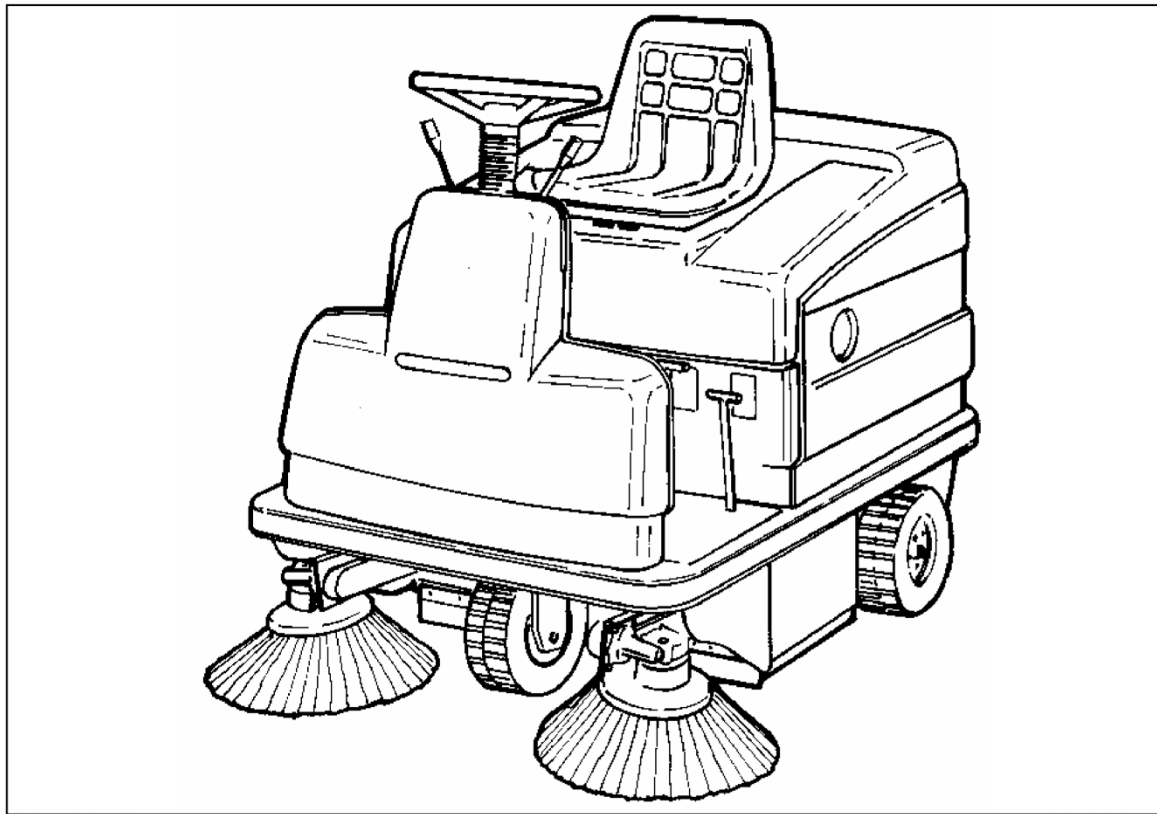


Minuteman[®] ***PowerBoss***[®]

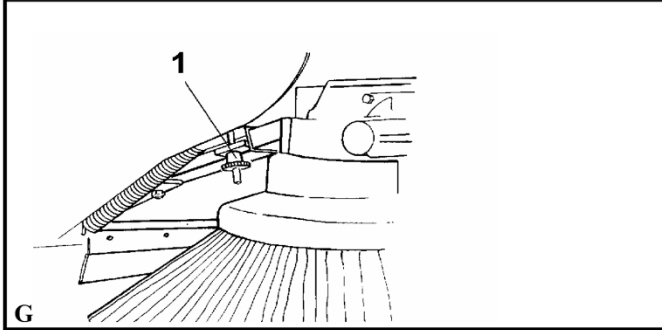
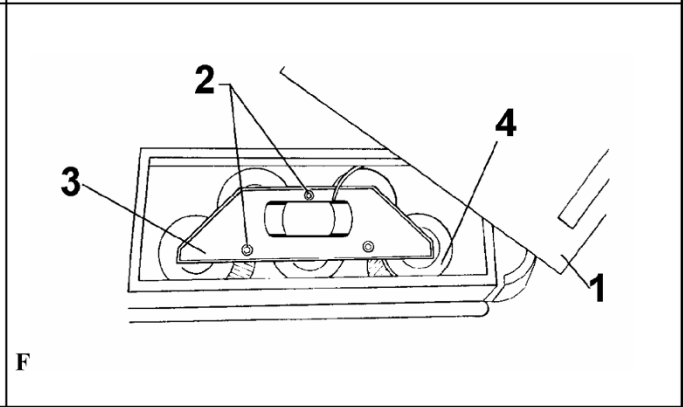
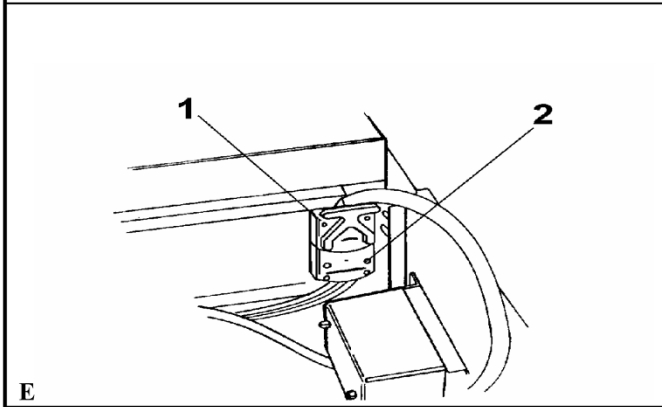
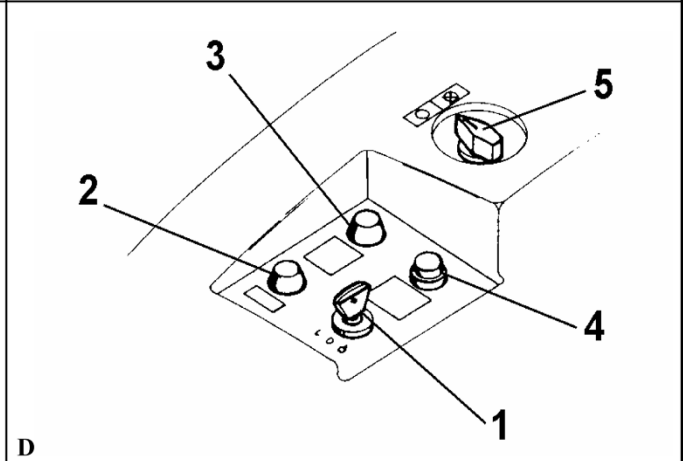
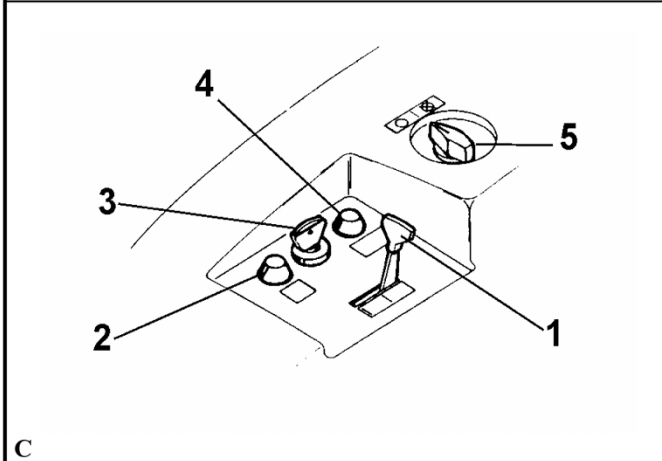
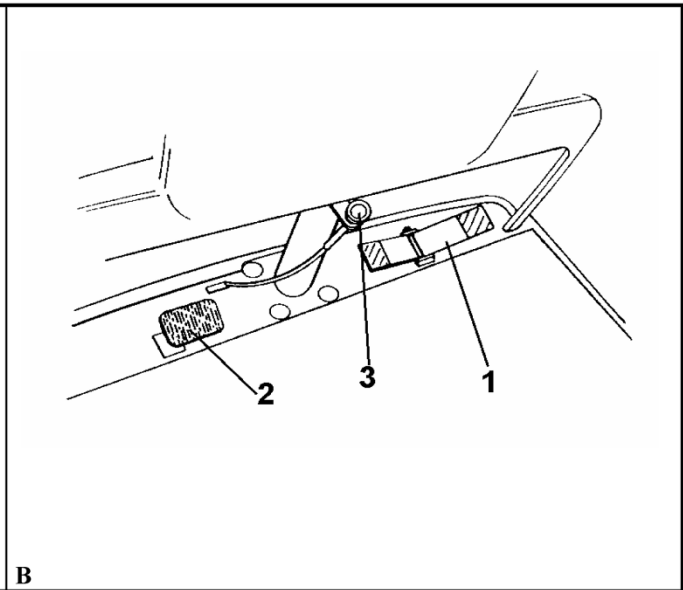
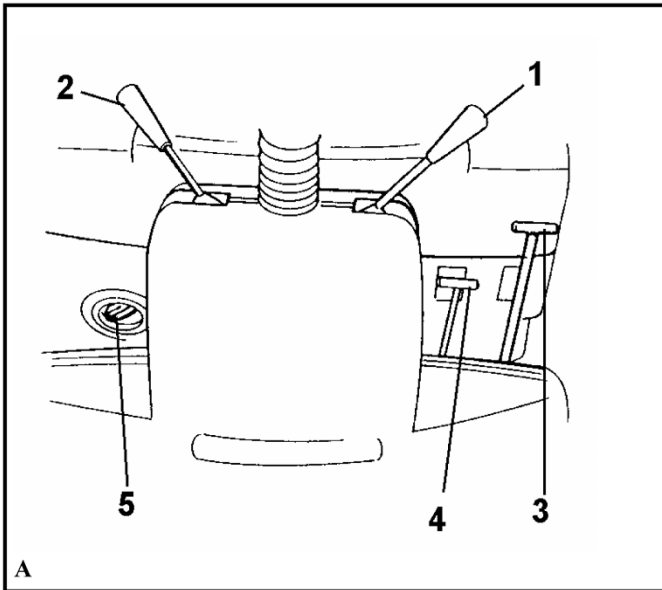
PROWLER

MANUALE ISTRUZIONI
INSTRUCTION MANUAL
BEDIENUNGSANLEITUNG
MODE D' EMPLOI
MODO DE EMPLEO
MODEL RS50



Minuteman PowerBoss[®]

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INTRODUCTION

"MINUTEMAN-POWERBOSS" , leaders in the production of sweeping machines, are pleased to welcome you as an owner of the "RS/50" sweeper machine. We are sure that its use will give you great satisfaction. We are also sure that while working with the RS/50 you will have the opportunity to check the quality, solidness, and many applications for its use. The "RS/50" sweeper machine is suitable for the cleaning of little and large surfaces, for private, industrial and public use. In this handbook are described and shown various operations of installation, control and maintenance, necessary to keep your RS/50 in perfect working order. These are normal maintenance operations, which any operator can carry out with means normally available. In the case of work requiring special use or a check of the internal parts, You should contact your nearest MINUTEMAN-POWERBOSS service point.

BEFORE USING THE MACHINE, CAREFULLY READ THIS MANUAL AND KEEP IT WITHIN EASY REACH FOR FURTHER CONSULTATION.

The observance of the instructions given in this manual, and a cautious operator, are the best guarantee against accidents which may occur while working with the machine. The sweeping machines produced by MINUTEMAN-POWERBOSS are designed according to the latest safety requirements, but they must be used following these instructions.

GENERAL NOTE

Our company aims towards a constant perfecting of its machines and reserves the right to carry out modifications and improvements whenever necessary without being to carry out the same operations on previously sold machines .

WARNING AND RECOMMENDATIONS

Important points for the safety of all the people interested in the use of this sweeper "RS/50".

- THIS SWEEPER MUST BE EMPLOYED FOR INDOOR APPLICATIONS ONLY .
- THE SWEEPER HAS BEEN DESIGNED FOR THE CLEANING OF DRY FLOORS.
- DO NOT WORK IN THE PRESENCE OF TOXIC POWDERS.
- DO NOT WORK IN ENVIRONMENTS WHICH MAY BE UNDER RISK OF EXPLOSION.
- DO NOT COLLECT MATERIAL AND ALL THAT MAY LEAD TO FIRE (FOR EXAMPLE LIGHTED CIGARETTES)
- NEVER ALLOW ANYONE TO ENTER THE SWEEPER'S OPERATING AREA.
- NEVER LEAVE THE SWEEPER WITH THE ENGINE RUNNING; TURN THE ENGINE OFF AND TAKE THE KEY AWAY.
- NEVER OPEN THE PROTECTIVE COVERS WHEN THE SWEEPER IS RUNNING.
- MAINTENANCE OPERATIONS SHOULD ONLY BE CARRIED OUT WITH THE ENGINE TURNED OFF.
- ONLY OPERATE THE SWEEPER FROM THE DRIVING SEAT.
- DO NOT ATTEMPT TO WORK ON SLOPES WHOSE GRADIENTS ARE EXCEED THE VALUE SHOWN ON THE TABLE.
- DO NOT USE THE MACHINE FOR THE CLEANING OF OBJECTS.
- THE MAIN BRUSH MUST NOT SWEEP UP WIRES, ROPES, OR ANY OTHER LONG MATERIAL THAT MAY GET TANGLED WITH IT.
- DO NOT CARRY OUT ANY MODIFICATION TO THE MACHINE WITHOUT OUR PREVIOUS AUTHORISATION.

The sweeper has not been approved for use on the public highway. P.S. MINUTEMAN-POWERBOSS Declines all responsibility for any damage to person and/or property caused by a failure to observe the above rules or resulting from the inappropriate or incorrect use of the sweeper.

The sweeping machines manufactured by MINUTEMAN-POWERBOSS follow the CE directory and show the label:



DESCRIPTION OF PICTURES

PIC.1 COMMON CONTROLS

- 1.LEFT SIDE BRUSH CONTROL LEVER.
- 2.RIGHT SIDE BRUSH CONTROL LEVER.
- 3.MAIN BRUSH LEVER.
- 4.FLAP LEVER.
- 5.HYDRAULIC TRANSMISSION RELEASE KNOB.

PIC.2 COMMON CONTROLS

- 1.SWEEPER FORWARD/REVERSE SPEED CONTROL PEDAL.
- 2.BRAKE PEDAL.
- 3.PARKING BRAKE PEDAL.

PIC.3 RS/50 G BRIGGS & STRATTON CONTROLS

- 1.ACCELERATOR LEVER.
- 2.HORN PUSH BUTTON.
- 3.KEYSWITCH.
- 4.CHOKE.
- 5.FILTER-SHAKER PUSH-BUTTON.
- 6.VACUUM CUT-OFF KNOB.

PIC.4 RS/50 G HONDA CONTROLS

- 1.ACCELERATOR LEVER.
- 2.HORN PUSH BUTTON.
- 3.KEYSWITCH.
- 4.CHOKE.
- 5.FILTER-SHAKER PUSH-BUTTON.
- 6.VACUUM CUT-OFF KNOB.

PIC.5 RS/50 E CONTROLS

- 1.KEYSWITCH.
- 2.HORN PUSH-BUTTON.
- 3.FILTER-SHAKER PUSH-BUTTON.
- 4.LOW BATTERY CHARGE WARNING LIGHT.
- 5.VACUUM CUT-OFF KNOB.

PIC.6 BATTERY CONNECTORS

- 1.MOTOR CONNECTOR.
- 2.FIXED CONNECTOR.

PIC.7 REPLACING THE FILTERS

- 1.FILTERS COVER.
- 2.LOCKING NUTS.
- 3.FILTERS HOLDER/COVER.
- 4.FILTERS.

PIC.8 SIDE BRUSH ADJUSTMENT

- 1.SIDE BRUSH ADJUSTING SCREW.

RS/50 G BRIGGS & STRATTON MODEL

WARNING! For the maintenance and the correct use of the engine carefully read the original manual supplied by "BRIGGS & STRATTON" and strictly follow the instructions in it

STARTING THE ENGINE.

Nb: before starting the machine, make sure that main brush and side brushes are raised from the ground.

⇒Move the accelerator (n°1 PIC.3) 1/3 of the way towards the "MAX" position.

⇒Pull up the choke (n°4 PIC.3).

⇒Slightly turn the key (n°3 PIC.3) clockwise.

Do not use the electric start for more than 5 seconds each time. If the engine does not run, release the key and wait for at least 10 seconds before trying again.

⇒Let the engine run for at least a few seconds before letting the choke back in.

⇒Move the accelerator to maximum.

NB: The suction fan and hydraulic transmission unit are not engaged when the accelerator is on the minimum position.

THE SWEEPER IS READY FOR WORKING.

STOPPING THE ENGINE

⇒Move the accelerator to minimum position (n°1 PIC.3).

⇒Turn key (n°3 PIC.3) to "0" position.

CLEANING THE FILTERS.

Effective operation of the sweeper depends on the state of the filters which must be kept clean.

If the area to be cleaned is particularly dusty, filters must be shaken more often, at least every 5 minutes.

The cleaning of filters can be carried out in 2 ways:

ENGINE OFF

- ⇒Turn the starting key (n°3 PIC.3) to position 1.
- ⇒Press the filter shaker button (n°5 PIC.3) for 5 -10 seconds.
- ⇒Repeat this operation a few times.

ENGINE ON

- ⇒Move the accelerator lever (n°1 PIC.3) to position MIN.
- ⇒Turn off the vacuum fan (n°6 PIC.3).
- ⇒Press the filter shaker (n°5 PIC.3) for 5-10 seconds.
- ⇒Repeat this operation a few times.

VACUUM CUT-OFF

When passing over wet floors it is necessary to cut off the vacuum-fan in order to protect the filters (move the lever n°6 pic.3 to position off).

RS/50 G HONDA MODEL

WARNING! For the maintenance and the correct use of the engine carefully read the original manual supplied by "HONDA" and strictly follow the instruction in it given .

STARTING THE ENGINE.

Nb: before starting the machine, make sure that the main brush and the side brushes are raised from the ground.

- ⇒Move the accelerator (n°1 PIC.4) 1/3 of the way towards the "MAX" position.
- ⇒Pull up the choke (n°4 PIC.4).
- ⇒Slightly turn the key (n°3 PIC.4) clockwise.

Do not use the electric start for more than 5 seconds each time. If the engine does not run, release the key and wait for at least 10 seconds before trying again.

- ⇒Let the engine run for at least a few seconds before letting the choke back in.
- ⇒Move the accelerator to maximum.

THE SWEEPER IS READY FOR WORKING.

STOPPING THE ENGINE.

- ⇒Move the accelerator to minimum position (n°1 PIC.4).
- ⇒Turn key (n°3 PIC.4) to position "0".

CLEANING THE FILTERS.

Effective operation of the sweeper depends on the state of the filters which must be kept clean.

If the area to be cleaned is particularly dusty, filters must be shaken more often, at least every 5 minutes.

The cleaning of filters can be carried out in 2 ways:

ENGINE OFF

- ⇒Turn the starting key (n°3 PIC.4) to position 1.
- ⇒Press the filter shaker button (n°5 PIC.4) for 5 | 10 seconds.
- ⇒Repeat this operation a few times.

ENGINE ON

- ⇒Move the accelerator (n°1 PIC.4) to position MIN.
- ⇒Turn off the vacuum fan (n°6 PIC.4).
- ⇒Press the filter-shaker button (n°5,fig.4) for 5 | 10 seconds.
- ⇒Repeat this operation a few times.

VACUUM CUT-OFF.

When passing over wet floors it is necessary to cut off vacuum fan in order to protect the filters (move the knob n°6 pic.4 to position off).

RS/50E

STARTING THE MAIN MOTOR

N.b. Before starting the machine, make sure that main brush and side brushes are raised from the ground.

- ⇒Turn the key (n°1 PIC.5) to "1" position.

STOPPING THE MOTOR

- ⇒Turn the key (n°1 PIC.5) to "0" position.

CLEANING THE FILTERS

Effective operation of the sweeper depends on the state of the filters which must be kept clean.

If the area to be cleaned is particularly dusty, filters must be shaken more often, at least every 5 minutes.

CLEANING OF FILTERS:

- ⇒Key (n°1 PIC.5) to position 0.
- ⇒Press the key (n°1 PIC.5) and turn it anticlockwise.
- ⇒Press the filter shaker (n°3 PIC.5) button for 5 | 10 seconds.
- ⇒Repeat this operation a few times.

VACUUM CUT- OFF

When passing over wet floors it is necessary to cut off vacuum fan in order to protect the filters (move the knob n°5 pic.5 to position off).

BATTERY CHARGE INDICATOR (n° 4 fig.5).

⇒It monitors the level of charge of the battery . While the green led is on , you can sweep . When the yellow led gets on , you must take care to go to have the battery charged. When the red led gets on , you must immediately switch off the machine , because the battery , if further discharged , can get irreversibly damaged its structure .



HOW TO CHARGE BATTERIES

- ⇒Turn off the machine.
- ⇒Disconnect the plug (n°1 pic.6) and connect the battery charger's plug.
- ⇒For a detailed use of the battery charger please consult the operation manual supplied with it.
- ⇒Charge the batteries to a level not above 1/20th of their capacity.
- ⇒Check level of electrolyte and top it up , if necessary , with distilled water.
- ⇒When the batteries are charged, connect again the connector (n°1pic.6) to the connector (n°2 pic.6).
- ⇒For more detailed instructions on how to charge the batteries also consult the operation manual supplied by the batteries manufacturer.

WARNING !

- ⇒Batteries must be charged in ventilated places.
- ⇒The gas generated during charging operations may produce explosions when in presence of flames or sparks.
- ⇒The battery acid must not come in contact with eyes, skin, clothes, painted or zinc coated surfaces.
- ⇒Should this happen, wash off the acid with water.
- ⇒Do not lean metallic objects over the batteries.
- ⇒Remove all caps from the various battery cells before charging the battery.
- ⇒Do not top up with sulphuric acid.

DANGER AND OBLIGATIONS SYMBOLS.

	DANGER SYMBOL. WARNING: very hot surfaces
	OBLIGATION SYMBOL. WARNING : Use adequate acoustic protection. In a number of working environments , sweepers might generate an acoustic danger which can be eliminated with adequate acoustic protection .

EMERGENCY CASES.

STRICTLY OBSERVE THE FOLLOWING INSTRUCTIONS :

- ⇒In the event of fire, use only powder fire extinguishers.
- ⇒In the event of unusual failures (engines or motor overheating, etc.) turn off immediately the machine.

HOW TO USE THE MACHINE

SWEEPER FORWARD/REVERSE SPEED CONTROL

- ⇒To move forward press the right-hand side of the pedal (n°1 PIC.2).
 - ⇒To reverse press the left-hand side of the pedal(n°1 PIC.2).
- The maximum forward and reverse speed has been pre-set. You are advised not to tamper with these settings.

RELEASING THE HYDRAULIC TRANSMISSION

- ⇒To move the sweeper manually, simply lift the lever (n°5 PIC.1) clockwise.
- ⇒Always move the sweeper very slowly when moving it manually.

SIDE BRUSH CONTROL

- ⇒Pull up the lever (n°1-2 PIC.1) to raise the brush.
- ⇒Push down the lever (n°1-2 PIC.1) to lower the brush.

MAIN BRUSH

- ⇒The main brush can be raised and lowered by mean of a lever (n°3 PIC.1).

FLAP LEVER

- ⇒If pieces of paper or other bulky objects are obstructing the front dust seal (FLAP) you can release it by raising and lowering the flap several times, moving the flap lever (n°4 PIC.1) up and down.

SERVICE BRAKE.

⇒The service brake is activated by releasing the forward/reverse speed control pedal.

EMERGENCY BRAKE.

⇒To stop the machine press the brake pedal (n°2 PIC.2).

PARKING BRAKE.

⇒Press the brake pedal (n°2 PIC.2).

⇒Pull the lever (n°3 PIC.2) and then release all.

⇒To disconnect the parking brake slightly press the pedal (n°2 PIC.2) and push the lever (n°3 PIC.2) back to its original position.

SAFETY DEVICES AND PARTS.

WARNING ! The safety parts and devices must not be tampered with. They can be removed only when executing maintenance operations.

HOOD. The hood is a mobile part connected to the machine frame by mean of hinges. It prevents access to moving parts. It is also an acoustic and thermic insulator. The machine can not be operated when the hood is raised.

HOOD SUPPORTING ROD. The hood supporting rod is a mechanical safety device. When executing maintenance operations, fix the rod to the hood to prevent it from falling.

TOTAL STOP KEY SWITCH. The total stop key switch is an electric safety device. It cuts off all electric parts while the hood is open. To re-activate the machine, close the hood and insert the key into the switch.

PERIODIC MAINTENANCE.

CHECK	OPERATOR	AUTHORISED SERVICE CENTRE
Brush state.	EVERY 10 HRS.	*
Filters state.	EVERY 10 HRS.	*
Brake adjustment	EVERY 100 HRS	*
Belt tension.	*	EVERY 200 HRS
Side brush adjustment.	EVERY 50 HRS.	*
Hydraulic oil.	EVERY 50 HRS.	*
REPLACE		
Filters.	EVERY 300 HRS	*
Flaps	*	EVERY 300 HRS
Brushes	*	WHEN WORN OUT

IMPORTANT RULES TO BE FOLLOWED WHEN SERVICING THE MACHINES.

□ Before servicing the machine, disconnect the machine from its power source:

⇒RS/50 G: Disconnect the spark plug and the starting battery clamp.

⇒RS/50 E: Disconnect the connector (n°1 pic.6).

REPLACING THE FILTERS

⇒Shake the filters (n°4 PIC.7) thoroughly.

⇒Remove the nuts and washers (n°2 PIC.7).

⇒Remove the filters holder/cover (n°3 PIC.7).

⇒Change the filters (n°4 PIC.7), making sure the seals are in the correct position, and the filter collar is correctly fitted inside the hole in the sweeper frame.

⇒Put the filters holder/cover back on and tighten it down, checking that the filters are located in their seating.

⇒Replace all the components removed, then tighten all screws.

ADJUSTING THE SIDE BRUSH

⇒Adjust the screw (n°1 PIC.8).

HYDRAULIC TRANSMISSION OIL

⇒Check the oil tank level every 50 hours of operation.

⇒When topping up or when replacement of oil is necessary, you must ask for advise from your nearest authorised service centre.

VIBRATIONS

⇒The level of vibrations to which the operator is subjected is below the maximum level allowed by the CE DIRECTORY for industrial machinery (CEE 89/392).

TROUBLESHOOTING GUIDE

RS/50 G

PROBLEM	CAUSE	SOLUTION
Battery flat.	1.Battery short-circuited. 2.Generator not charging.	1.Have it replaced. 2.Have it checked.
The engine won't start although the starter motor operates correctly.	3.Accelerator down. 4.Choke down. 5.Spark plug dirty. 6.Engine oil level very low.	3.Pull up to 1/3. 4.Pull up to maximum. 5.Replace it. 6.Top up with oil.
The engine smokes and is nosier than usual.	7.Carburettor out of adjustment. 8.Exhaust pipe broken.	7.Get the carburettor setting adjusted. 8.Have it replaced.
The engine wont start and the motor doesn't work.	9.Battery flat or faulty. 10.Starter motor faulty. 11.Contactor faulty. 12.Keyswitch faulty.	9.Recharge or have it replaced. 10.Have it replaced. 11.Have it replaced. 12.Have it replaced.

RS/50 E

Shaker doesn't work.	1.Vibrator motor faulty. 2.Fuse blown. 3.ON/OFF push-button faulty.	1.Have it replaced. 2.Have it replaced. 3.Have it replaced.
Battery won't charge.	4.Motors overloaded because of extraneous fragments causing friction between moving parts. 5.Electrolyte density too low.	4.Remove foreign or change seized bearings 5.Recharge the battery, have it replaced if necessary.
Everything stays off when the key is inserted.	6.Battery flat or faulty. 7.Fuse blown.	6.Recharge or replaced it. 7.Have it replaced.

BOTH VERSIONS

Dust inside the engine bonnet.	1.Filters broken or worn out. 2.Seals not fitted under filters.	1.Replace it 2.Fit the seals.
The main brush doesn't clean uniformly and leaves material on the floor.	3.Brush raised. 4.Brush worn out. 5.Not enough pressure on floor. 6.Material has accumulated around brush.	3.Lower it. 4.Adjust the lever or have it replaced. 5.Increasing the spring load. 6.Have it replaced.
The main brush doesn't turn.	7.Belt broken 8. Belt loose.	7.Have it replaced. 8.Check belt tensioner.
No suction when moving.	9.Suction off. 10.Filters clogged.	9.Switch it on. 10.Shaker or replace them.
Material and dust comes out of the front.	11.Flap seal worn or broken. 12.Flap stuck.	11.Have it replaced. 12.Have it replaced.

WARNING!

Any other type of service operation or test, with the exception of those shown in the engine's manual or the battery's manual, must be carried out by authorised personnel only.

WASTE MATERIAL.

FOR THE DUMPING OF WASTE MATERIAL SUCH AS OIL, PLASTIC PARTS, BATTERIES, PACKING BOXES, PLEASE CONTACT THOSE FACILITIES AUTHORISED FOR THE DUMPING OF SPECIAL WASTE.

NOISE LEVEL

⇒ The level of noise has been measured to the level of the operator's ear and while the machine is working .

□ MODEL RS/50 G " BRIGGS & STRATTON " .

⇒The maximum value read is 86 dB.

□ MODEL RS/50 G " HONDA " .

⇒The maximum value read is 86 dB.

□ MODEL RS/50 E.

⇒The maximum value read is 78 dB.

