



MAGNUM SB
“BRIGGS & STRATTON”

***BASIC OPERATION, MAINTENANCE &
TROUBLESHOOTING MANUAL***



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INTRODUCTION

“EUREKA S.r.l.”, leader manufacturer of sweeping machines, is pleased to welcome you as an owner of the “MAGNUM BS” sweeper. We are sure that its use will give you great satisfaction and that while working with the MAGNUM BS you will have the opportunity to appreciate its quality, robustness, and versatility. The MAGNUM BS” is suitable for the cleaning of medium to large areas, for private, industrial and public use. In this handbook are described and shown various operations of installation, control and maintenance, necessary to keep your MAGNUM BS in perfect working condition. These are normal maintenance operations, which any operator can carry out with tools normally available. For additional maintenance operations you should contact your nearest EUREKA 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 careful operator, are the best guarantee against accidents which may occur while working with the machine. The sweeping machines produced by EUREKA are designed according to the latest safety requirements, but they must be used following these instructions.

GENERAL NOTE

All information contained in this manual is current at the time of printing. However, due to constant updates and improvements, we reserve the right to make changes at any time without notice

WARNING AND RECOMMENDATIONS

IMPORTANT POINTS FOR THE SAFETY OF ALL THE PEOPLE INTERESTED IN THE USE OF THIS SWEEPER “MAGNUM BS”.

- 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 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 IS NOT OMOLOGATED FOR USE ON PUBLIC STREETS.

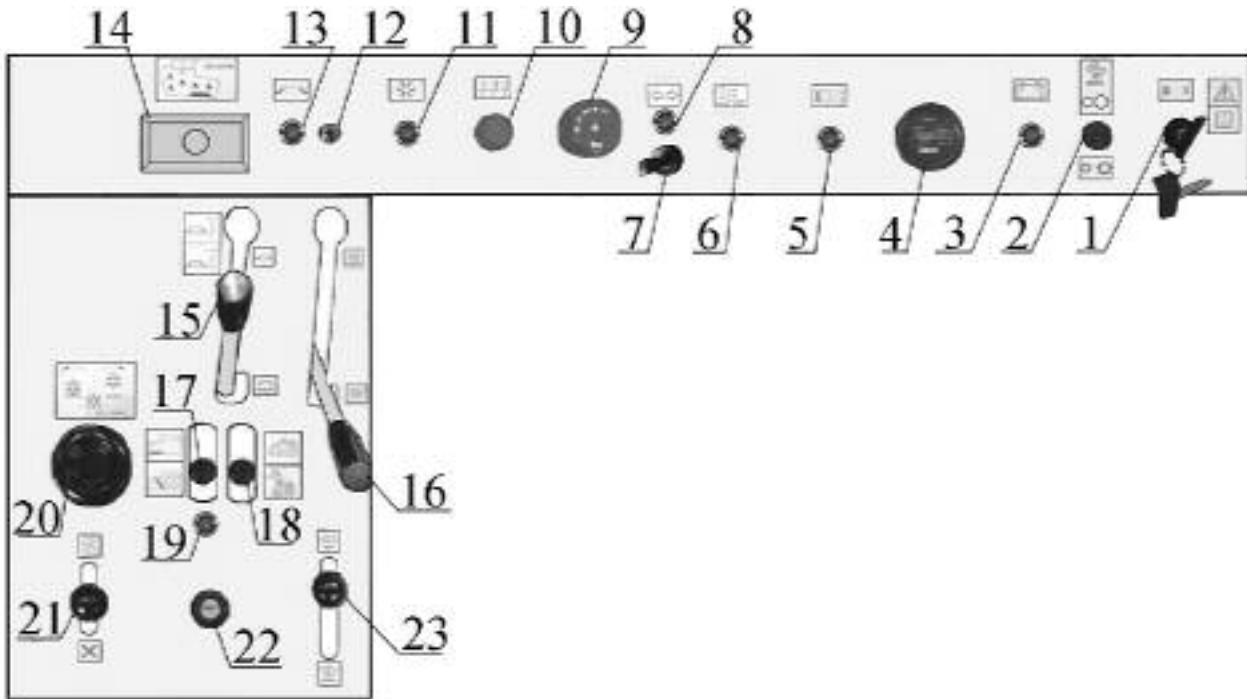
N.B. EUREKA S.R.L. DECLINES ALL RESPONSIBILITIES FOR ANY DAMAGE TO PERSONS AND/OR PROPERTIES CAUSED BY FAILING TO OBSERVE THE ABOVE WARNINGS OR AS A CONSEQUENCE TO THE INAPPROPRIATE OR INCORRECT USE OF THE SWEEPER.

The sweeping machines manufactured by EUREKA follow the CE directory and show the label :



MAGNUM "BRIGGS & STRATTON" – MAJOR COMPONENTS

THE DASHBOARD



PIC. A

1. KEY SWITCH
2. ELECTRO-MAGNETIC CLUTCH SWITCH
3. ALTERNATOR WARNING LIGHT
4. HOUR METER
5. AUXILIARY ALTERNATOR WARNING LIGHT
6. HYDRAULIC OIL TEMPERATURE WARNING LIGHT
7. BLINKERS SWITCH (OPTIONAL)
8. BLINKERS INDICATOR LIGHT (OPTIONAL)
9. HEADLIGHTS & HORN SWITCH
10. FILTER-SHAKER BUTTON
11. MAIN BRUSH WARNING LIGHT
12. SIDE BRUSH MOTOR FUSE
13. SIDE BRUSH WARNING LIGHT
14. HOPPER FIRE DETECTOR WARNING LIGHT (OPTIONAL)
15. SIDE BRUSH LEVER
16. MAIN BRUSH LEVER
17. HOPPER DOOR CLOSE-OPEN LEVER
18. HOPPER UP-DOWN LEVER
19. CLOSED HOPPER DOOR WARNING LIGHT
20. MAIN BRUSH ADJUSTING KNOB
21. VACUUM CUT-OFF LEVER
22. CHOKE KNOB
23. THROTTLE CONTROL



BASIC OPERATING CONTROLS

- ⇒ **ALTERNATOR WARNING LIGHT** : When engine is running the light (n° 3 pic. A) should be off.
- ⇒ **HOURLY METER**: Indicates the total running hours of the machine (n° 4 pic. A).
- ⇒ **AUXILIARY ALTERNATOR WARNING LIGHT**: The warning light, when the engine is on and the Electro-magnetic clutch is engaged, should be off. (n°5 pic. A).
- ⇒ **HYDRAULIC OIL TEMPERATURE WARNING LIGHT**: If the temperature of the hydraulic oil in the tank exceeds 83° - 88°C the warning light will show. (n° 6 pic. A). **IMPORTANT!** You must stop the machine.
- ⇒ **HEADLIGHTS & HORN SWITCH**
 - By turning the knob (n° 9 pic. A) clockwise, the headlights will switch-on.
 - To use the horn, press down the knob.
- ⇒ **FILTER-SHAKER FUNCTION**: The working efficiency of the Magnum is greatly influenced by the state of cleanliness of the filters; we therefore recommend to shake them frequently, especially if the area to be cleaned is particularly dusty. Filters can be shaken in 2 ways:
 - **WHEN ENGINE IS OFF**:
 - Turn the key (n° 1 fig. A) to position 1.
 - Press the filter-shaker button (n° 10 fig. A) for 5÷10 seconds.
 - Repeat this operation a few times.
 - **WHEN ENGINE IS ON**:
 - Move the throttle control(n° 23 fig. A) to position MIN.
 - Turn of the vacuum fan (n° 21 fig. A).
 - Press the filter-shaker button (n° 10 fig. A) for 5÷10 seconds.
 - Repeat this operation a few times.
- ⇒ **SAFETY FUSE FOR SIDE BRUSH MOTOR**: It stops the side brush to prevent damages to the motor.

RE-SET OPERATIONS:

 - After the brush stops, wait a few minutes, then:
 - Press the fuse rubber cap n° 12 fig. A.
 - The side brush should rotate.
 - **NOTE!** If the side brush stops again, please check if there is anything tangled in it. Then, clean it and repeat above aoperations.
- ⇒ **FIRE DETECTOR WARNING LIGHT (optional)** : It flashes (n° 14 fig. A) and activates an acoustic signal when temperature in the hopper exceeds 60°C.
 - **NOTE!** When this situation occurs, close immediately the vacuum (n° 21 Fig. A) and the rubbish box (n° 17 Fig. A). Then move immediately the sweeper away from dangerous areas. Open the inspection door of the hopper and in case of fire extinguish it by mean of a **DRY FIRE EXTINGUISHER**
- ⇒ **DUMP DOOR WARNING LIGHT**: Warning light will show when the dump door is closed.(n°19 fig. A).
- ⇒ **MAIN BRUSH PRESSURE ADJUSTMENT KNOB**:
 - TO INCREASE PRESSURE: turn the knob (n° 20 fig. A) counter-clockwise.
 - TO DECREASE PRESSURE: turn the knob (n° 20 fig. A) clockwise.
- ⇒ **VACUUM CUT-OFF**: The vacuum-fan should be turned off (n°21 fig. A) when sweeping on wet areas, in order to protect the filters. It should be also turned off when shaking the filters.

DANGER AND OBLIGATION 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 .

USE AND MAINTENANCE OF THE SWEEPER

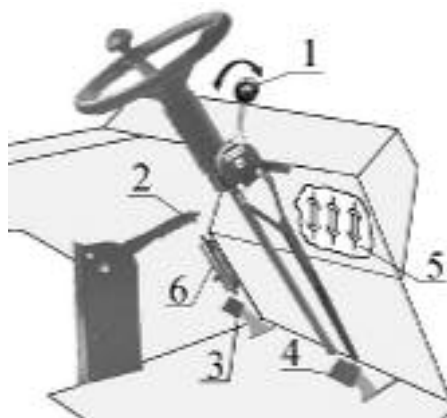
Eureka sweepers should never be operated unless the operator is trained and authorised to operate the equipment and the sweepers are free of malfunctions. Malfunctioning equipment should be removed from service.

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 contained .

STARTING THE ENGINE “LOAD-FREE”	<ul style="list-style-type: none"> ⇒ Before starting the machine, make sure that main brush and side brushes are raised from the ground. ⇒ The Electro-magnetic clutch must be disengaged (n°2 fig. A) NOTE! If the Electro-magnetic clutch is engaged, the starting motor will not work. ⇒ Pull the choke (n°22 pic. A) (only if engine is cold). ⇒ Slightly pull the throttle control (n°23 pic. A) towards the position of maximum power. ⇒ Turn the starting key (n°1 pic. A) clockwise beyond position “1” . NOTE! 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 run the engine for a few seconds, then: ⇒ Close the choke control. ⇒ Pull the throttle control to MAX (n° 23 pic. A.)
TURNING OFF THE ENGINE	<ul style="list-style-type: none"> ⇒ Disengage the Electro-magnetic clutch (n° 2 pic. A) ⇒ Move the throttle control (n° 23 pic. A) to position MIN. ⇒ Turn the starting key (n° 1 pic. A) to position 0.
CONNECTING THE CINEMATIC FOR THE DRIVE AND OTHER FUNCTIONS	<ul style="list-style-type: none"> ⇒ The operator must be sat down on the sweeper’s seat. NOTE! The seat is equipped with a micro-switch which cuts-off the main drive as well as some other features if the operator is not sat down. However, the engine will not be turned off ⇒ Start the engine and pull the throttle control to MAX (n° 23 pic. A.) ⇒ Connect the Electro-magnetic clutch by clicking up the switch (n° 2 pic. A.) <p style="text-align: center;">THE SWEEPER IS READY FOR USE</p>

PIC. B

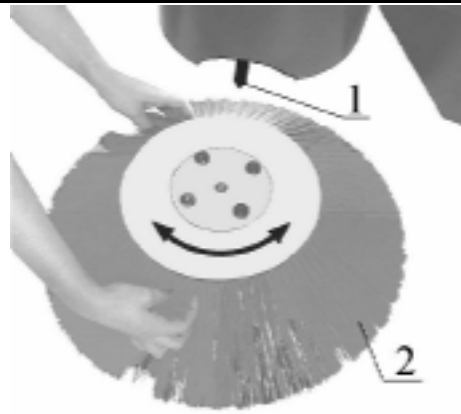
1. FWD\REV SPEED LEVER
2. PARKING BRAKE
3. EMERGENCY BRAKE
4. ACCELERATOR PEDAL
5. FUSES
6. HYDRAULIC DAMPER



MOVING THE MACHINE	<ul style="list-style-type: none"> ⇒ FORWARD: pull-up the lever n°1 pic. B then press the accelerator pedal (n° 4 pic. B) ⇒ REVERSE: pull-down the lever n° 1 pic. B then press the accelerator pedal (n° 4 pic. B.) NOTE! Stop the machine before changing speed direction.
PARKING BRAKE	<ul style="list-style-type: none"> ⇒ To engage it, push down the button then pull-up the lever (n° 2 pic. B.)
SERVICE BRAKE	<ul style="list-style-type: none"> ⇒ The service brake is engaged each time the accelerator pedal is released (n° 4 pic. B.)
EMERGENCY BRAKE	<ul style="list-style-type: none"> ⇒ To stop the machine in case of emergency, press the pedal n°3 pic. B.
REPLACING THE FUSES (N° 5 PIC. B)	<ul style="list-style-type: none"> ⇒ Remove the clamps from the battery. ⇒ Remove the metal protection. ⇒ Replace the fuse. ⇒ Re-assembly the unit. <p style="text-align: center;">NOTE! DON'T CHANGE THE AMPS. VALUE OF THE FUSE.</p>

PIC. C

1. SIDE BRUSH DRIVE SHAFT
2. SIDE BRUSH

**SIDE BRUSH CONTROL**

- ⇒ The side brush can be raised or lowered by mean of the lever n°15 pic. A.
- NOTE!** The side brush will rotate when:
 1. The hopper is down and the lip is open;
 2. The main brush lever (n°16 pic. A) and side brush lever (n°15 pic. A), are lowered.

ADJUSTING THE SIDE BRUSH

- ⇒ INCREASE PRESSURE: turn the handle of lever (n°15 pic. A) counter-clockwise.
- ⇒ DECREASE PRESSURE: turn the handle of lever (n°15 pic. A) clockwise.

REMOVING THE SIDE BRUSH

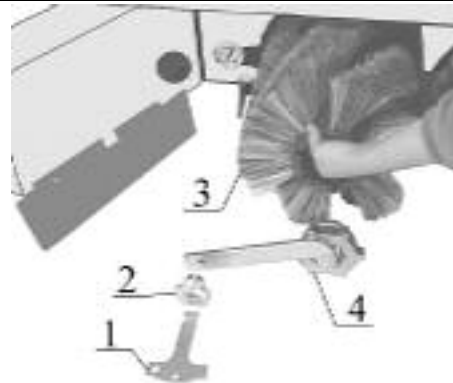
- ⇒ Raise the brush (lever n°15 pic. A)
- ⇒ Hold the brush with both hands and turn it counter-clockwise (pic. C.)

RE-INSTALLING THE SIDE BRUSH

- ⇒ Match the side brush hub in the drive shaft (n° 1 pic. C)
- ⇒ Push it up and turn it slowly clockwise to match the seats.
- ⇒ Now turn it until completely connected.

PIC. D

1. MULTI-PURPOSE KEY
2. METAL RING
3. MAIN BRUSH
4. SUPPORT (RIGHT)

**MAIN BRUSH**

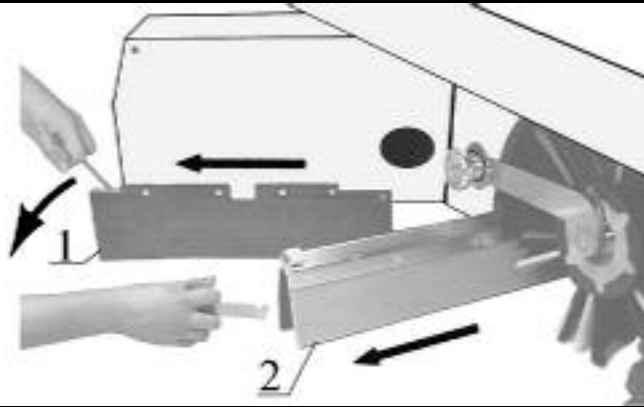
- ⇒ The main brush can be raised or lowered by mean of lever n° 16 pic. A.
- NOTE!** The main brush will rotate only when:
 1. The hopper is down and the lip is open;
 2. The main brush lever (n° 16 pic. A) is lowered.

REPLACING THE MAIN BRUSH

- ⇒ The engine must be turned off.
- ⇒ The hopper must be lowered: lever n°18 pic. A.
- ⇒ Hopper lip must be open: lever n°17 pic. A.
- ⇒ Main brush lever n°16 pic. A. must be lowered
- ⇒ Turn the starting key to position 1 (n°1 pic. A.)
- ⇒ Turn the adjustment knob completely (n°20 pic. A) clockwise, then counter-clockwise 3 turns.
- ⇒ Open the rear panel (n° 7 pic. G) and take the multi-purpose key (n°1 pic. G.)
- ⇒ Open the bottom metal right panel.
- ⇒ Remove the metal ring n°2 pic. D.
- ⇒ Remove the support n°4 pic. D, and the brush n° 3 pic. D.
- ⇒ Replace the brush, then re-assembly the unit making sure to set the brush lever and the starting key at their original position.
- ⇒ Adjust the clean path (max 50 – 60 mm) of the brush by turning the knob (n° 20 pic. A)

PIC. E

1. RIGHT SIDE RUBBER FLAP
2. REAR RUBBER FLAP



**REPLACING THE RUBBER FLAPS
(RIGHT AND REAR)**

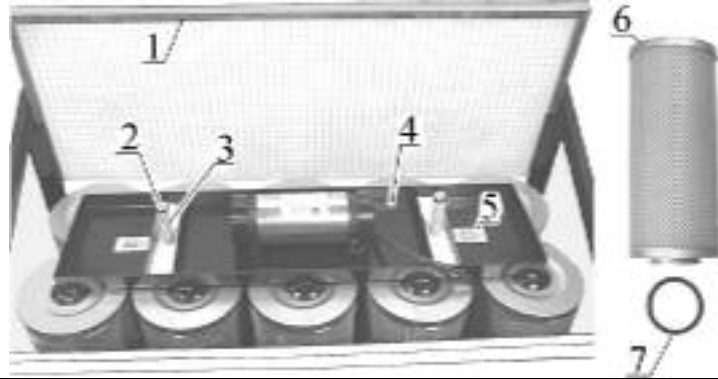
- ⇒ Open the rear panel (n° 7 pic. G)
- ⇒ Take the multi-purpose key (n°1 pic. G.)
- ⇒ Open the bottom metal right panel
- ⇒ Hook the key to the flaps then pull as indicated in pic. E.
- ⇒ Replace the flaps.
- ⇒ Insert the new flaps in the correct brackets.

**REPLACING THE RUBBER FLAPS
(LEFT SIDE)**

- ⇒ Open the rear panel (n° 7 pic. G)
- ⇒ Take the multi-purpose key (n°1 pic. G.)
- ⇒ Open the bottom metal left panel
- ⇒ Remove the 2 metal locking rings.
- ⇒ Replace the flap, then re-assembly the unit.

PIC. F

1. PANEL FILTER
2. LOCK NUTS
3. SPRINGS
4. LOCK PLATE
5. LABEL
6. FILTER
7. FILTERS GASKET

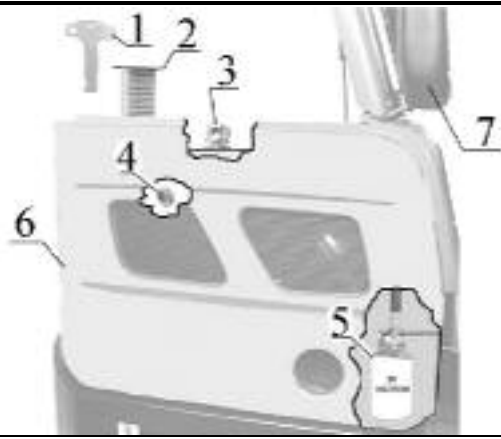


REPLACING THE FILTERS

- ⇒ Shake the filters throughout
- ⇒ Open the front hood
- ⇒ Remove the lock nuts (n° 2 pic. F) and the springs (n°3 pic. F).
- ⇒ Remove the lock plate (n° 4 pic. F).
- ⇒ Replace the filters (n° 6 pic. F).
- ⇒ Make sure both filters and gaskets (n°7 pic.F) are fitted properly in their seats.
- ⇒ Re-assembly the unit by locking the nuts, then press the springs as indicated on label (N° 5 PIC. F).

PIC. G

- 1. MULTI-PURPOSE KEY
- 2. AIR EXHAUST FILTER
- 3. PLUG - HYDRAULIC OIL TANK
- 4. HYDRAULIC OIL LEVEL GAUGE
- 5. HYDRAULIC OIL FILTER
- 6. RIGHT PANEL



CHECKING THE HYDRAULIC OIL LEVEL

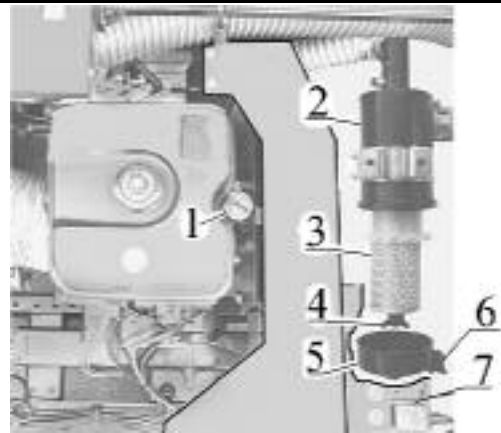
- ⇒ Check periodically (every 100 hours) the oil level (n°4 pic. G).
- ⇒ If level is low, add oil (plug n° 3 pic. G) up to the middle of indicator (n° 4 pic. G).
- ⇒ In case of leaks, consult a service centre.

REPLACING THE HYDRAULIC OIL FILTER

- ⇒ Remove the right panel n°6 pic. G.
- ⇒ Replace the filter (n°5 pic. G).

PIC. H

- 1. ENGINE OIL LEVEL
- 2. PRIMARY AIR FILTER
- 3. CARTRIDGE FILTER
- 4. BOLT
- 5. FILTER LID
- 6. DUST OUTLET VALVE
- 7. STARTING BATTERY



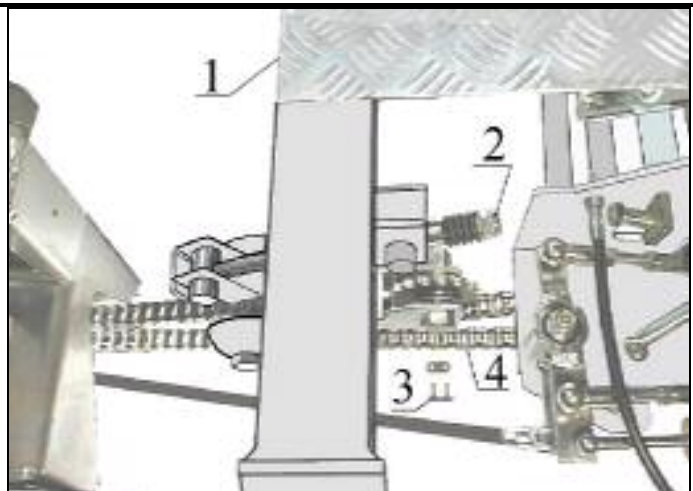
REPLACING THE PRIMARY AIR FILTER

- ⇒ Remove the filter lid (n° 5 pic. H).
- ⇒ Unlock the bolt (n° 4 pic. H).
- ⇒ Remove the cartridge (n° 3 pic. H) and replace it .
- ⇒ Re-assembly the unit making sure the dust outlet valve (n° 6 pic. H) faces the floor.

PIC. I

TOWING THE MACHINE

- ⇒ Remove the foot panel n° 1 pic. I.
- ⇒ Release the bolt n° 2 pic. I.
- ⇒ Remove the chain joint n° 3 pic. I.
- ⇒ Remove the chain n° 4 pic. I.
- ⇒ Re-assemble the foot panel n°1 pic. I.
- ⇒ Tow the machine without exceeding speed of 3 – 4 Km/h.



MOVING THE MACHINE WHEN ENGINE IS OFF

- ⇒ Push the sweeper only for a short distance (about 3 m), or until it stops. Wait 1 min then repeat

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

WASTE MATERIAL.

For the dumping of waste material such as oil, plastic part, batteries, packing boxes, please contact those facilities authorised for the dumping of special waste.

VIBRATIONS

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

NOISE LEVEL

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

- ⇒ The maximum value read is XXXXX dB.

PLANNED MAINTENANCE CHART

INTRODUCTION

Regular maintenance on your sweeper results in better cleaning, faster cleaning, and a prolonged service life for the equipments and components. This section contains the following information to help you give your sweeper the maintenance attention it requires.

WARNING: never attempt to perform any service on the equipment or components until the machine is OFF, the parking brake is LOCKED, the wheels are CHOCKED, the battery clamps are DISCONNECTED (n°7 pic. H).

WARNING: The safety parts and devices must not be tampered with. They can be removed only when executing maintenance operations and by Authorised Service Centres (ASC).

FREQUENCY (IN HOURS)								SERVICE
DAILY	50	100	200	300	500	1000	2000	
	X							<ul style="list-style-type: none"> • ENGINE ⇒ Check Engine primary air filter ⇒ REPLACE primary air filter <i>For additional maintenance requirements, refer to the engine manual furnished with the machine.</i>
				X				
	X							<ul style="list-style-type: none"> • ELECTRICAL SYSTEM ⇒ Check electrolyte level in starting battery and fill as needed
		X						<ul style="list-style-type: none"> • HYDRAULIC SYSTEM ⇒ Check hydraulic fluid level and fill as needed ⇒ REPLACE hydraulic fluid ⇒ REPLACE filter (1st time) ⇒ REPLACE filter
							ACS	
		ACS			ACS			
X								<ul style="list-style-type: none"> • SWEEPING COMPONENTS ⇒ Inspect main and side brooms for wear and remove strings\debris from bristles and drive assembly ⇒ Perform main broom adjustment test and adjust as needed ⇒ Inspect main broom door seals\flaps for wear ⇒ REPLACE flaps as needed ⇒ ACS to REPLACE seals as needed ⇒ REPLACE main and side brooms as needed
X	X							
	X							<ul style="list-style-type: none"> • FILTERS ⇒ Check and clean cartridge filers ⇒ REPLACE cartridge filters as needed ⇒ Check and clean main panel filter ⇒ Check and clean panel filter on air exhaust ⇒ REPLACE main panel filter as needed ⇒ REPLACE panel filter on air exhaust as needed
X	X							
X	X							<ul style="list-style-type: none"> • HOPPER ⇒ Check hopper flaps for wear or damage and replace as needed ⇒ Check hopper door rubber seals for wear or damage and replace as needed
			ACS					<ul style="list-style-type: none"> • LUBRICATED COMPONENTS ⇒ Check and if needed lubricate <i>steering shaft</i> and <i>links</i> ⇒ Check and if needed lubricate <i>gearbox</i> unit ⇒ Check and if needed lubricate <i>main brush floating shaft</i> ⇒ Lubricate the transmission chain by the appropriate lubricating
	X		ACS					<ul style="list-style-type: none"> • MISCELLANEOUS ⇒ Check belts tension and adjust as needed ⇒ Check chains tension and adjust as needed
	X		ACS					
						ACS		<ul style="list-style-type: none"> ⇒ REPLACE belts ⇒ REPLACE chains
			ACS					<ul style="list-style-type: none"> ⇒ Check inlet\outlet vacuum hoses
			ACS	ACS				<ul style="list-style-type: none"> ⇒ REPLACE inlet\outlet vacuum hoses ⇒ Check all brakes for proper functioning and adjust as needed

TROUBLE-SHOOTING GUIDE

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 Service Centres only.

PROBLEM	CAUSE	SOLUTION
The engine won't start and the starting motor does not work	1. Flat or worn out battery 2. Starting motor is broken 3. Ignition switch broken 4. Electro-magnetic switch broken 5. Electro-magnetic clutch is connected	1. Re-charge or replace the battery 2. Replace it 3. Replace it 4. Replace it 5. Disconnect it
The engine won't start even if the starting motor works	6. Low throttle 7. Low choke 8. Fuel filter clogged 9. Spark plugs old or dirty 10. Low engine oil level	6. Increase throttle 7. Pull the choke 8. Clean or replace it 9. Clean it or replace it 10. Top it up
The engine is on, but the sweeper does not move.	11. Chain is broken 12. Electro-magnetic clutch is disengaged 13. Clutch is broken 14. Belts are broken 15. Hydrostatic drive is broken	11. Replace it 12. Engage it 13. Replace it 14. Replace belts 15. Replace it
The engine is very noisy and smoky	16. Faulty carburettor 17. Exhaust is broken	16. Adjust it 17. Replace it
Dust in the bonnet	18. Broken or old filters. 19. Filter gaskets have not been mounted	18. Replace the filters 19. Mount the gaskets
Uneven sweeping action by main brush	20. Worn main brush 21. Brush is raised from floor 22. Some material may be tangled with brush 23. Low brush pressure to floor	20. Replace the brush . 21. Lower it 22. Clean main brush 23. Increase pressure
Dust and debris leak out from container	24. Rubber flaps are worn or broken	24. Replace them
Warning lights don't show	25. Flat battery . 26. Fuse blown-off	25. Re-charge or replace the battery 26. Replace it
Flat battery	27. Battery in short-circuit 28. The alternators don't work	27. Replace battery . 28. Check them
No vacuum power	29. Vacuum fan is off 30. Filters are clogged 31. Fan belt is broken 32. Side panels in main brush compartment are open	29. Turn it on 30. Clean or replace filters 31. Replace belt 32. Close them
Filter shaker does not work	33. Blown fuse 34. Faulty filtershaker 35. Faulty filter-shaker button	33. Replace it 34. Check and repair\replace it 35. Check and repair\replace it
Main brush does not work	36. Belt is broken 37. Belt is loose 38. Electro-magnetic clutch is off 39. Electro-magnetic clutch is broken 40. Microswitches: Main brush m.s.; Hopper door m.s.; Hopper lift m.s.: any of above features are off or broken	36. Replace it 37. Check belt tensioner or replace it 38. Turn it on 39. Replace it 40. Turn it on or replace it
Side brush does not work	41. Belt is broken 42. Reduction motor is burnt or faulty 43. Safety fuse is still engaged 44. Main brush is off 45. Microswitch is faulty	41. Replace it 42. Check and repair\replace it 43. Disengage it 44. Turn it on 45. Check and repair\replace it

PROBLEM	CAUSE	SOLUTION
Hopper will not raise	46. Hopper load is too heavy 47. Pump is faulty 48. Hydraulic distributor is faulty 49. Lift cylinder is faulty 50. Hydraulic flow limit valve is faulty	46. Dump more frequently 47. Check and repair\replace pump 48. Check and repair\replace it 49. Replace the seals 50. Check and repair\replace it
Hopper can not be lowered	51. Safety bar is installed on lift cylinder 52. Hydraulic distributor is faulty 53. Hydraulic flow limit valve is faulty 54. Lift cylinder is blocked	51. Remove it 52. Check and repair\replace it 53. Check and repair\replace it 54. Check and repair\replace it
Hopper door will not close	55. Hopper is over-filled 56. Piston is blocked 57. Hydraulic distributor is faulty 58. Check and repair\replace it	55. Dump more frequently 56. Check and repair\replace it 57. Replace it 58. Check and repair\replace it
Hopper door will not open	59. Debris may obstacle the door 60. Piston is blocked 61. Hydraulic distributor is faulty 62. Check and repair\replace it	59. Remove all debris 60. Check and repair\replace it 61. Check and repair\replace it 62. Check and repair\replace it

THE OPTIONAL POLYESTER BAG FILTER

The **optional** polyester bag filter is particularly recommended in presence of very fine dust and applications such as cement plants, chalk plants, talcum powder plants and other similar products.

To achieve best performances, shake the filter often (every 15 – 20 minutes) or at least prior to dump the dirt.

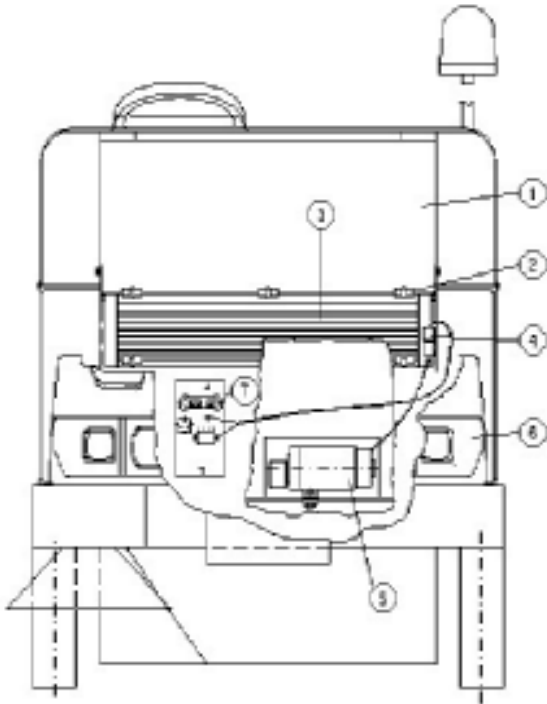
NOTE: the dirt container must be lowered to the floor when shaking the filter.

Every 100 hours, shake the filter throughout and clean it with compressed air **without** removing it from its support.



TECHNICAL SPECIFICATIONS

COMPOSITION	POLYESTER FIBRE
WEIGHT (g/m²)	400
THICKNESS	mm 1,25
DENSITY (g/cm³)	0,32
AIR PERMEABILITY	DIN 53887 lt/dm ² x min. 180
FILTERING AREA (m²)	6
FILTERING CLASS	S Max penetration value = 1% Dusts with values of max. occupational exposure > 0,1 mg/m ³



EXPLODED VIEW

1. FILTER COMPARTMENT HOOD
2. LOCKING BOLTS
3. POLYESTER FILTER
4. CONNECTOR
5. 12V FILTER-SHAKER (36V ON "EB" VERSION)
6. FRONT ABS PANEL
7. 40 Amps. FUSE (30 A. ON "EB" VERSION)

REMOVING THE FILTER:

- A. REMOVE THE HOOD n° 1
- B. REMOVE THE BOLTS n° 2
- C. REMOVE THE POLYESTER FILTER n° 3
- D. DISCONNECT THE CONNECTOR n° 4

REPLACING THE FUSE

- A. OPEN THE FILTER COVER n°1
- B. REMOVE THE FRONT ABS PANEL n° 6
- C. REPLACE THE FUSE n° 7

NOTE: DO NOT CHANGE THE Amps. VALUE OF THE FUSE



MAGNUM BS (LIMITED) PRODUCT WARRANTY

Eureka srl warrants that the Magnum BS will be free from defects in material and workmanship for a period of 12 months from date of installation. Written notice of any claimed defect must be given to Eureka srl or its Authorised Sales/Service Representative within the warranty period and within thirty (30) days after such defect is discovered. Liability under this warranty is limited to either replacing or repairing, at Eureka or its Authorised Sales/Service Representative election, any part or parts deemed defective after examination.

This warranty does not extend to labor charges, handling charges or transport charges.

This warranty does not extend to the Magnum BS, or its parts, that have been subject to misuse, accident or improper handling, installation, maintenance or application, nor does it extend to the Magnum BS and/or parts which have been repaired or altered outside Eureka's plant or the facility of Eureka's Authorised Sales/Service Representative.

This warranty does not apply to routine wearable parts of the Magnum BS such as brushes, flaps, filters, seals, plugs, hoses, fuses or similar items. Moreover, this warranty does not extend to the Magnum BS or any of its parts already repaired or replaced under this warranty.

Only replacement parts supplied by Eureka or Eureka's Authorised Sales/Service Representative are warranted for 30 days after installation.

The warranty for engines shall be limited to the warranty extended by the engine's manufacturer.

IMPORTANT!

Warranty claims will be evaluated only if the following Installation Form will be sent by fax or by mail, filled in all its parts, to Eureka's headquarter within thirty (30) days after the machine's installation.

EUREKA S.r.l.

Via dell'Industria 32, 35013 CITTADELLA (PD) ITALY

Tel. ++39 - 049- 9481800

Fax. ++39 -049 - 9481899

INTERNET: www.eurekasweepers.com E-MAIL: info@eurekasweepers.com

INSTALLATION FORM – MAGNUM BS

Warranty claims will be evaluated only if a copy of the following Installation Form will be sent by fax or by mail, filled in all its parts, to Eureka's headquarter within thirty (30) days after the machine's installation. Please retain the original copy within the manual.

USER'S INFORMATION	
COMPANY NAME	
ADDRESS	
TEL	
FAX	
INTERNET ADDRESS	
E-MAIL	
BUSINESS ACTIVITY	

APPLICATION INFORMATION	
TYPE OF AREA TO CLEAN	
APPROX. SIZE OF AREA (sq.mt)	

MACHINE INFORMATION	
SERIAL NUMBER	
MACHINE SOLD BY	
MACHINE INSTALLED ON DATE	

GENERAL INFORMATION	
1. THE DATE OF DELIVERY HAS BEEN RESPECTED ?	
2. HAVE YOU BEEN SHOWN HOW TO USE THE MACHINE?	
3. HAVE YOU CHECKED THE PERFECT FUNCTIONING OF THE MACHINE PRIOR TO ITS FIRST USE?	
4. DID YOU READ THE OPERATION MANUAL PRIOR TO USE THE MACHINE?	
5. HAVE YOU BEEN OFFERED A PREVENTIVE "MAINTENANCE CONTRACT" ?	
6. DID YOU ACCEPT IT?	

DATE	
SIGNED BY:	
POSITION:	

Eureka srl
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 Fax ++39 - 049 - 9481899