

FUNCTIONAL DESCRIPTION



Power	1,200 W
Connected power tool max load	2,200 W
Total connected load (vacuum cleaner plus connected tool)	3,400 W
Airflow, max	4000 L/min (141 cu. ft./min)
Suction, max	25kPa (250 mbar) (100.4 inches of water)
Dust Capacity	25L (6.6 gallons)
Weight	12.9 kg (28.4 lbs)

SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING THIS DEVICE.

To reduce the risk of fire, electric shock, or injury:

- 1.** Do not leave this device unattended when plugged in. Unplug when not in use and before servicing.
- 2.** To reduce the risk of electric shock. Do not expose to rain or immerse in water. Store indoors.
- 3.** Do not allow to be used as a toy. Careful attention is necessary when used by or near children or animals.
- 4.** Use only as described in this manual. Use only manufacturer recommended attachments.
- 5.** Do not use with a damaged power supply cord or plug. If the device is not working properly, has been dropped, damaged, left outdoors, or immersed in or dropped into water, bring it to a service center.
- 6.** Do not pull or carry by the power supply cord, use the power supply cord as a handle, close a door on power cord, or pull power cord around sharp edges or comers. Keep power cord away from heated surfaces.
- 7.** Do not unplug by pulling on power cord. To unplug, grab the plug, not the cord.
- 8.** Do not handle plug or appliance with wet hands.
- 9.** Do not use the device with any opening blocked; keep openings free of solid objects or anything that will impede airflow.
- 10.** Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- 11.** Turn off switch before unplugging.
- 12.** Use extra care when operating on stairs.
- 13.** Do not use this machine to vacuum flammable liquids, or vacuum in areas where these may be present.
- 14.** Connect to a properly grounded outlet only. See Grounding Instructions.
- 15.** Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes. Do not use this device to extract flammable or explosive dusts (such as magnesium, aluminum, etc.). Risk of explosion!
- 16.** Do not use without dust bag and/or filters in place.
- 17.** Do not use to vacuum up caustic or corrosive liquids (e.g. acids, alkalis, solvents).
- 18.** Protect the power cord against heat, oil and sharp edges.
- 19.** Check the plug and power cord regularly and have them replaced by a qualified technician if damaged.
- 20.** Use only approved accessories.

GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or break down while in use, grounding provides a path of least resistance for the electric current and reduces the risk of electric shock to the operator. This appliance has a power cord with equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded.

Do not modify the plug provided with the machine. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Various dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

Lead from lead-based paints, crystalline silica from bricks and cement and other masonry products, and arsenic and chromium from chemically-treated lumber. The risk from these exposures varies, depending on how often you do this type of work.

To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

Intended use

This vacuum cleaner is primarily designed to operate in conjunction with power tools which require dust extraction, such as sanders, saws, wall chasers, scouring machines, etc. This machine extracts non-dangerous dusts, dirt, shavings etc.

This machine may also be used to vacuum water and other non-flammable and non corrosive liquids.

The end user/operator is solely responsible for any damage or accident should the machine be used for any use other than its intended purpose.

Preparation and initial operation

Electrical connection

The operating voltage shown on the rating plate must correspond to the voltage of the power supply. Make sure that the vacuum cleaner is switched off when you plug the power supply

cable into the socket.

CAUTION!

This machine must ALWAYS be plugged into a properly grounded outlet. NEVER operate the machine if it is not grounded. This will result in a static electrical build-up which will destroy the machine's electronic components.

On/Off Switch Modes (see FIG.2)

This machine has a multi-mode On/Off Switch.

In position "OFF" the vacuum cleaner is switched off but there is always current to the Integrated Switching Appliance Socket.

Different modes of operation are possible:

Switch position "MANUAL":

The cleaner motor starts immediately and runs continuously.

Switch position "AUTO –AC":

The Integrated Switching Appliance Socket is live. The cleaner motor starts only when the tool connected to the appliance socket is switched on. There is a 1 second delay in the vacuum starting (to avoid tripping the circuit breaker) and a 10 second delay in shutting off (to clear the hose of dust) followed by a cycle of the filter shaker.

Before turning the switch to the "AUTO –AC" position, ensure that the tool connected to the appliance socket is switched off.

Observe the maximum connected load of 2200W for the Integrated Switching Appliance Socket.

Switch position "AUTO –AIR"(Optional Pneumatic Switching equipped models only):

In this mode, the machine starts only when the air tool connected in series with the Pneumatic Integrated Switching Connector is switched on. Note that if the switch is in this position and there is no air supply connected then the machine will run continuously like the "Manual" switch position.

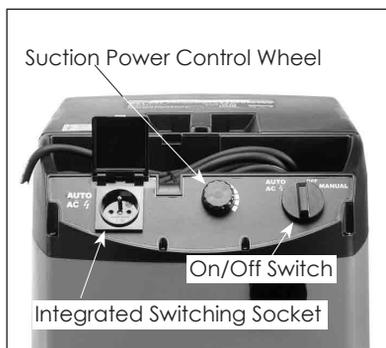


FIG.2

Automatic Filter Shaker Function

This machine is equipped with an automatic electromagnetic filter shaker device. It operates automatically with a cycle every 20 seconds to shake accumulated dust from the Diaphragm Filter. It will also cycle when the switch is switched off (both in manual and automatic modes) It is fully automatic and only operates when the Diaphragm Filter is in place. When it engages, there will be a slight noise. This noise is normal and does not indicate any malfunction of the machine. To minimize noise, always install the Diaphragm Filter with the exposed metal side of the anvil facing downwards.

Suction Power Control (see FIG.2)

The Suction Power Control Wheel can be used to adjust the suction to suit the situation. In some cases, less than full power will be needed. For example, with small sanders, too much suction power will tend to make the sander "stick" to the workpiece. In that case, the suction power needs to be turned down. Lowering the suction power will also have the side benefit of making less noise.

Special instructions for (Optional)Pneumatic Switching Models:

These pneumatic models are equipped with an air coupling and an air nipple for connecting the machine in-line with one's compressed-air tool. Then the integrated switching will be triggered by the air tool. See FIG.3



FIG.3

Connecting a compressed-air tool (Optional Pneumatic Switching Models only)

Connect the air supply to the side marked "Line" and the tool to the side marked "Tool". When the compressed-air module is fitted, the automatic cut-in also operates in conjunction with pneumatic tools.

We also recommend using an air pressure regulator/oiler.

Make sure that the compressed- air tool is switched off when plugging it in and unplugging it!

Application

The 2 rear wheels may be locked by the brakes, which will prevent the machine from rolling away unexpectedly. To lock, either raise or lower the brake levers. To unlock, move the brake levers to the center position. See FIG.4

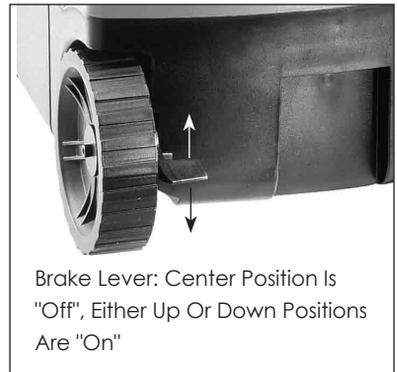


FIG.4

The Electric Blower function

The hose may be connected to the Exhaust Port for powerful blower function. The blower is very useful for a variety of purposes such as drying and cleaning.

The 32mm/37mm Rubber Power Tool Connector

This connector is designed to connect to the dust extraction port of a power tool. Directly connect to the port if it is 32mm. Carefully slice off one section for 37mm ports. Note-Remember to save the sliced off segment, since it may be reversed and reinserted into the connector to sleeve it back down to 32mm. See fig.5

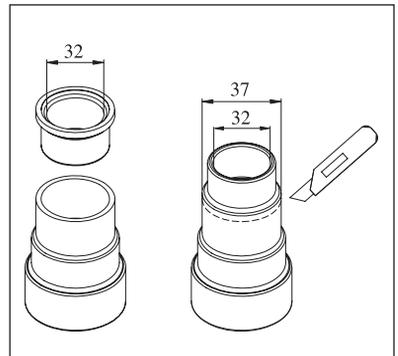


FIG.5

Machine Set up: Filter Configurations:

Removing and Mounting the Diaphragm Filter (see FIG. 6)

Whether wet or dry vacuuming, The diaphragm filter should always be used. It is washable and incorporates the Automatic Filter Shaker. To remove or replace:

- Ensure that the machine is unplugged.

- Open the unit by opening the 2 catches located on the sides of the machine.
- Lift away the Tank Cover
- Remove the Diaphragm Filter
- When replacing the Diaphragm Filter, ensure that it seats properly in the channel at the top rim of the tank so that it makes a good seal. The exposed metal part of the anvil should be facing down.
- Replace the Tank Cover and 2 catches.

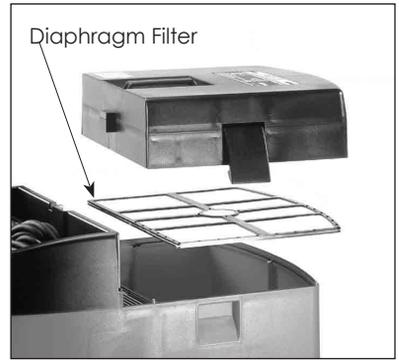


FIG.6

Removing and Mounting the pair of Main Filters (see FIG. 7)

The pleated Main Filters are the standard second stage filters. (The optional special Wet-Use Main Filters are also removed and mounted in the same way as the standard pleated Main Filters). To remove or replace:

- Ensure that the machine is unplugged.
- Open the unit by opening the 2 catches located on the sides of the machine.
- Lift away the Tank Cover
- Looking at the underside of the Tank Cover, push the catch of one of the Filter Frames. The Filter Frame will come away from the Tank Cover.
- The Main Filter may now be removed.
- To replace, first place the Main Filter in the Filter Frame. Then engage the tangs of the Filter Frame on one end and snap in place on the other end. When replacing, ensure that they are seated properly to make a good seal.
- Replace the Tank Cover and 2 catches.

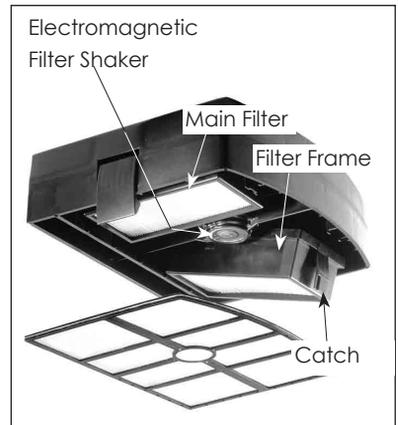


FIG.7

NOTE: If dust is blowing out of the exhaust port, this indicates that at least one of the main filters either has a hole, or is not seated properly.

Mounting Filter Bags (see FIG. 8)

Except when wet vacuuming, the filter bag must always be mounted.

- Ensure that the machine is unplugged.
- Open the unit by opening the 2 catches located on the sides of the machine.
- Lift away the Tank Cover
- Remove the Diaphragm Filter
- Do not leave the bag fully flat and folded. Help the bag to open somewhat by hand so that it will be able to open properly when the machine starts.
- Fully attach the bag opening onto the connection port.
- Replace the Diaphragm Filter (Recommended).
- Replace the Tank Cover and 2 catches.



FIG.8

Vacuuming dry media

WARNING! Not suitable to vacuum hazardous or toxic substances such as asbestos. The filters may not be able to capture all particles and may exhaust them back into the environment!

Before using the vacuum cleaner to extract dry materials, the machine must set up in a dry vacuuming configuration.

The pair of Main Pleated Filters must always be in place. The Filter bag and Diaphragm Filters must both be mounted at all times.

NOTE: It is not recommended to dry vacuum when there is liquid in the tank or if the tank and filters are still wet. Severe caking of dust and possible damage will occur.

Whenever transitioning from wet to dry vacuuming, ensure the entire tank and filter system is clean and dry. If it is necessary to transition often between dry and wet vacuuming, it is best to have 2 sets of first stage and main filters.

Vacuuming liquids

WARNING! Never attempt to vacuum flammable or corrosive liquids!

CAUTION: Never begin wet vacuuming when there is dry dust in the tank. Severe caking of dust

and possible damage to the machine may occur. Always clean the tank before beginning.

A paper disposable filter bag may not be used when vacuuming liquids. Use the washable Diaphragm Filter or a washable filter bag for the first stage and the pair of special Wet-Use Main Filters.

When full, empty the tank by opening the tank cover and carefully dumping out.

The Automatic Liquid Overflow Switch: (see FIG. 9)

When the maximum liquid level is reached, a shut-off switch automatically shuts off the motor. To function properly, the automatic overflow switch must be kept clean. When preparing to vacuum liquids, clean the electrodes before beginning.

NOTE: The automatic overflow switch only functions with electrically conductive liquids, such as water. It will not function with non-conductive liquids, such as oils. When vacuuming these, check the level regularly.



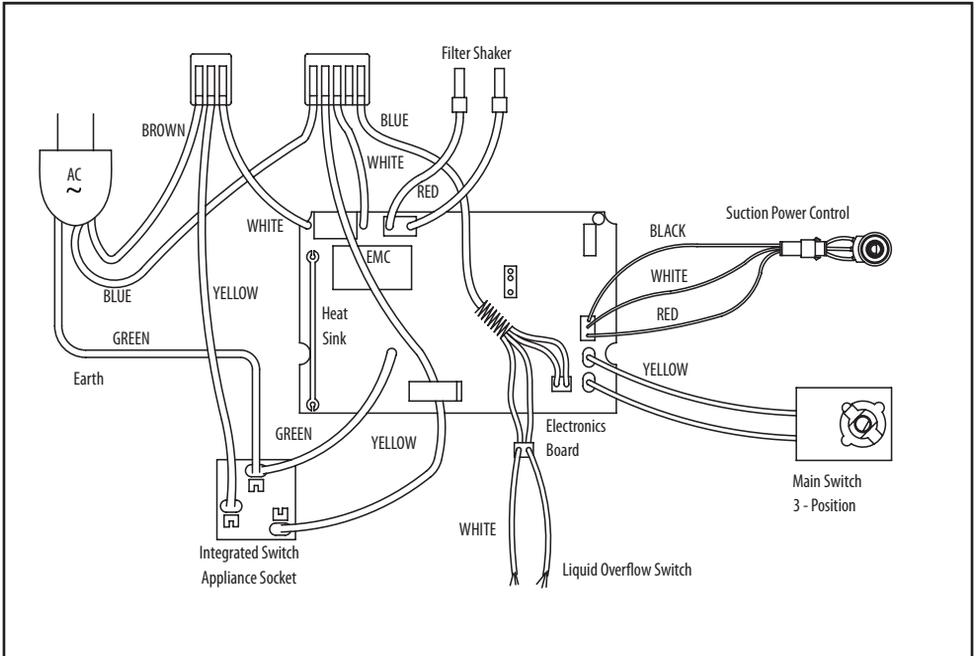
FIG.9

Maintenance and care

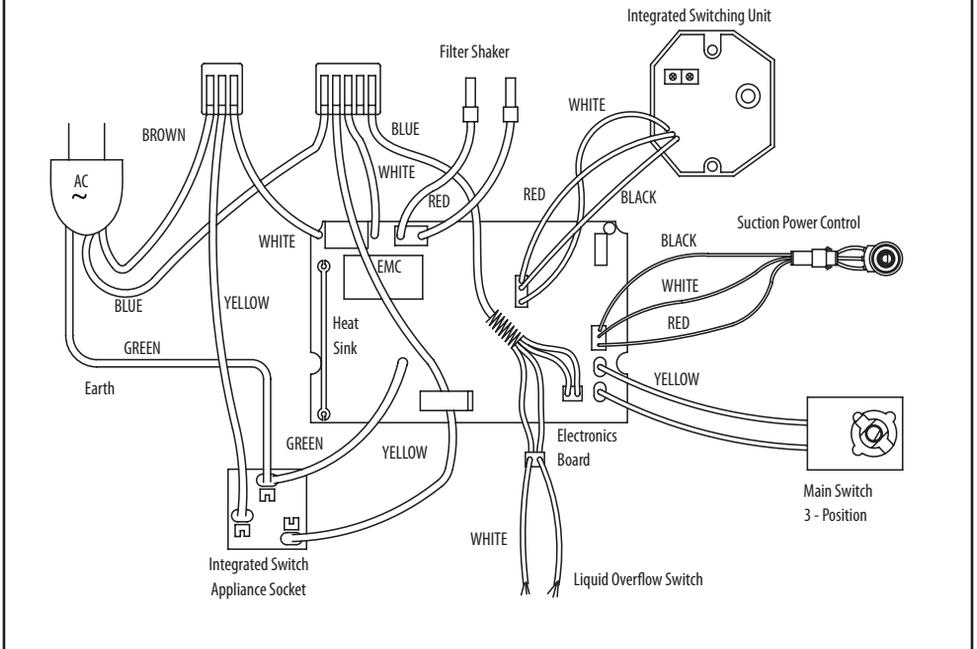
Always unplug power supply cord from the socket before carrying out any maintenance work! Any maintenance and repair work requiring an opening of the motor housing may only be carried out by an authorized service center.

At least yearly, a safety test should be made to check for any possible damage to the filter or leaks in the machine's filtering system.

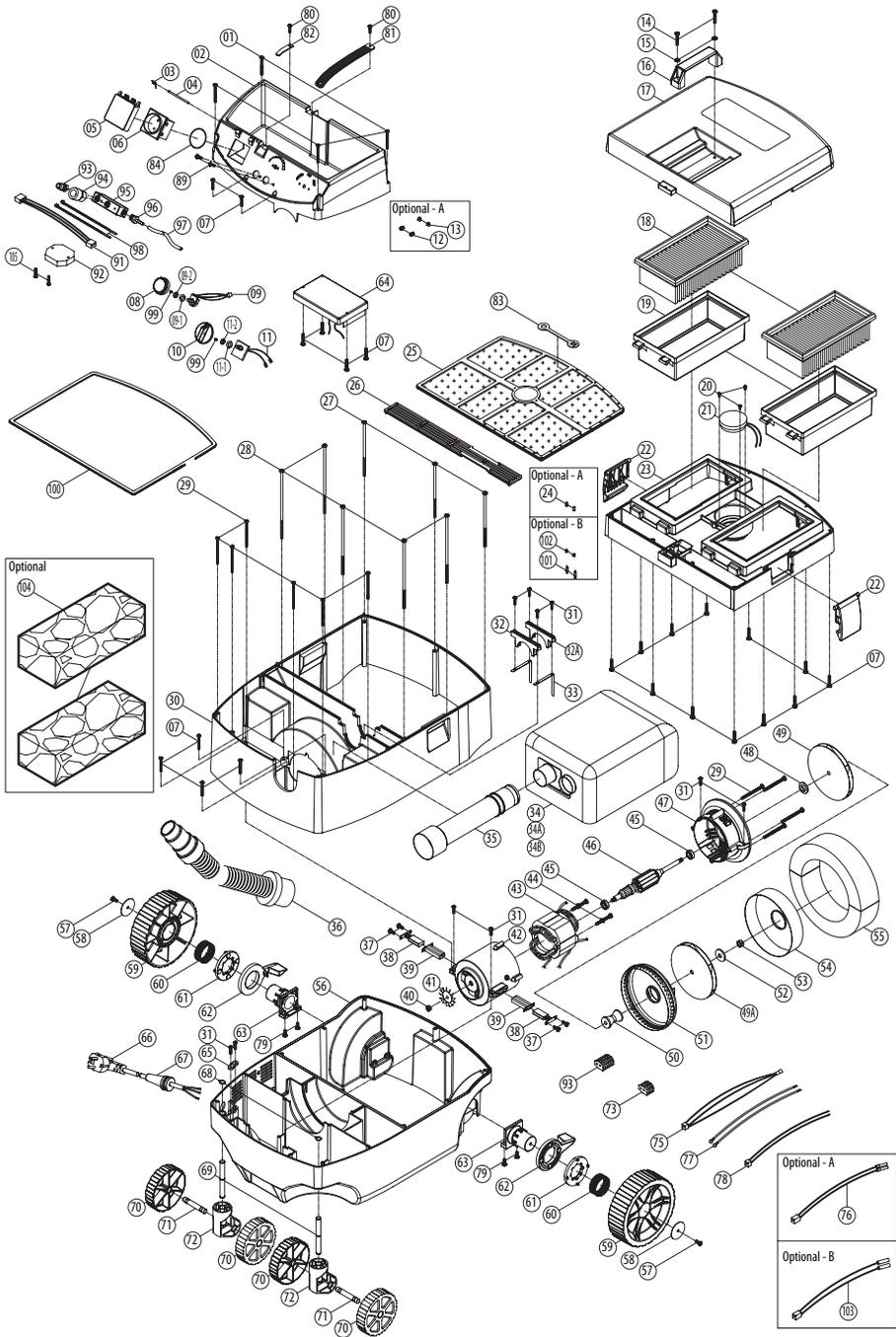
WIRING



Pneumatic Switching Model



EXPLODED VIEW (Pneumatic Switching Model)



PARTS LIST (Pneumatic Switching Model)

No.	Parts Name	Q'ty	No.	Parts Name	Q'ty
1	SCREW M4 x 38	4	50	SPACER-LARGE	1
2	TOP PANEL	1	51	EXHAUST HOUSING	1
3	TORSION SPRING ø0.7 x ø2.5 x ø3.9 x 21L	1	52	FLAT ALUMINUM WASHER ø8 x ø25 x 2	1
4	HINGE PIN ø2.3 x 60	1	53	HEX NUT M8	1
5	HINGED COVER	1	54	INTAKE HOUSING	1
6	INTEGRATED SWITCHING SOCKET	1	55	SOUND DEADENING FOAM	2
7	SCREW M4 x 25	22	56	CHASSIS	1
8	SUCTION POWER CONTROL DIAL	1	57	SCREW M6 x 12	2
9	RHEOSTAT	1	58	FLAT WASHER ø6 x ø40 x 2.5	2
9-1	FLAT WASHER	1	59	WHEEL-REAR	2
9-2	NUT	1	60	SPRING ø2 x ø41.5 x ø45.5 x 4T x 22.6L	2
10	SWITCH KNOB	1	61	WHEEL LOCK DISC	2
11	MAIN SWITCH-4 POSITION	1	62	WHEEL LOCK LEVER	2
11-1	FLAT WASHER	1	63	REAR WHEEL STUB AXLE	2
11-2	NUT	1	64	ELECTRONICS BOARD	1
12	SPRING ø0.5 x ø4 x ø5 x 5T x 7.5L	2	64	ELECTRONICS BOARD	1
13	E-CLIP E-3	2	65	CORD CLIP	1
14	SCREW M5 x 20	2	66	POWER SUPPLY CORD	1
15	FLAT WASHER ø5 x ø12 x 1	2	67	CORD ARMOR	1
16	TOP HANDLE	1	68	EXTERNAL CIRCLIP 5-10	2
17	TANK COVER LID	1	69	CASTOR SHAFT	2
18	PLEATED MAIN FILTER	2	70	WHEEL-FRONT	4
19	FILTER FRAME	2	71	AXLE SHAFT	2
20	SCREW M4 x 8	3	72	CASTOR CARRIER	2
21	FILTER SHAKER UNIT	1	73	THREE WAY CONNECTOR	1
22	CATCH	2	74	N/A	-
23	MAIN TANK COVER	1	75	LEAD FOR SUCTION POWER CONTROL	1
24	CONDUCTOR PIN	2	76	LEAD FOR FILTER SHAKER	1
25	DIAPHRAGM FILTER	1	77	LEAD FOR INTEGRATED SWITCH APPLIANCE SOCKET	2
26	VENT COVER	1	78	LEAD FOR LIQUID OVERFLOW SWITCH	1
27	SCREW M5 x 125	3	79	SCREW M5 x 16	4
28	SCREW M5 x 140	5	80	SCREW M4 x 14	2
29	SCREW M4 x 55	10	81	HOSE STRAP	1
30	BODY	1	82	STRAP HOOK	1
31	SCREW M4 x 16	10	83	PULL STRAP	1
32	BRACKET	1	84	O-RING ø47.5 x 2	1
32A	BRACKET	1	85~88	N/A	-
33	COPPER STRIP-FOR OVERFLOW SWITCH	2	89	SCREW M4 x 12	2
34	VACUUM CLEANER BAG	1	90	N/A	-
34A	VACUUM CLEANER BAG (CLOTH)	1	91	LEAD FOR PNEUMATIC SWITCHING MODULE	1
34B	VACUUM CLEANER BAG (CLOTH WITH ZIPPER)	1	92	INTEGRATED SWITCHING UNIT	1
35	HOSE PORT TUBE	1	93	QUICK RELEASE CONNECTOR (MALE)	1
36	HOSE	1	93	QUICK RELEASE CONNECTOR (MALE)	1
37	SCREW M4 x 12	4	94	QUICK RELEASE CONNECTOR (FEMALE)	1
38	CARBON BRUSH 7 x 12 x 32	2	94	QUICK RELEASE CONNECTOR (FEMALE)	1
38	CARBON BRUSH 7 x 12 x 32	2	95	CONNECTOR PLATE	1
39	BRUSH HOLDER	2	96	TUBE CONNECTOR	1
40	HEX NUT-LEFT HAND THREAD M6	1	97	TUBE 5 x 8 x 70cm	1
41	FAN 70 x 6	1	98	ZIPTIE	2
42	MOTOR HOUSING	1	99	SCREW M4 x 4	2
43	STATOR	1	100	RUBBER SEAL	1
43	STATOR	1	101	CONDUCTOR PIN	2
44	STATOR SCREW M5 x 60	2	102	SPRING ø0.3 x ø5.5 x ø6 x 5T x 13L	2
45	BEARING 6200-2RU	2	103	LEAD FOR FILTER SHAKER	1
46	ARMATURE	1	104	WET MAIN FILTER	2
46	ARMATURE	1	105	SCREW M4 x 20	2
47	MOTOR FRONT COVER	1	106	N/A	-
48	SPACER-SMALL	1	107	N/A	-
49	TURBINE IMPELLER	1	108	FIVE WAY CONNECTOR	1
49A	TURBINE IMPELLER	1			

PARTS LIST

NO.	Parts Name	Q'TY	NO.	Parts Name	QTY
1	SCREW M4 x 38	4	45	BEARING 6200-2RU	2
2	TOP PANEL	1	46	ARMATURE	1
3	TORSION SPRING $\varnothing 0.7 \times \varnothing 2.5 \times \varnothing 3.9 \times 21L$	1	46	ARMATURE	1
4	HINGE PIN $\varnothing 2.3 \times 60$	1	47	MOTOR FRONT COVER	1
5	HINGED COVER	1	48	SPACER-SMALL	1
6	INTEGRATED SWITCHING SOCKET	1	49	TURBINE IMPELLER	1
7	SCREW M4 x 25	22	49A	TURBINE IMPELLER	1
8	SUCTION POWER CONTROL DIAL	1	50	SPACER-LARGE	1
9	RHEOSTAT	1	51	EXHAUST HOUSING	1
9-1	FLAT WASHER	1	52	FLAT ALUMINUM WASHER $\varnothing 8 \times \varnothing 25 \times 2$	1
9-2	NUT	1	53	HEX NUT M8	1
10	SWITCH KNOB	1	54	INTAKE HOUSING	1
11	MAIN SWITCH-3 POSITION	1	55	SOUND DEADENING FOAM	2
11-1	FLAT WASHER	1	56	CHASSIS	1
11-2	NUT	1	57	SCREW M6 x 12	2
12	SPRING (OPTIONAL) $\varnothing 0.5 \times \varnothing 4 \times \varnothing 5 \times 5T \times 7.5L$	2	58	FLAT WASHER $\varnothing 6 \times \varnothing 40 \times 2.5$	2
13	E-CLIP (OPTIONAL) E-3	2	59	WHEEL-REAR	2
14	SCREW M5 x 20	2	60	SPRING $\varnothing 2 \times \varnothing 41.5 \times \varnothing 45.5 \times 4T \times 22.6L$	2
15	FLAT WASHER $\varnothing 5 \times \varnothing 12 \times 1$	2	61	WHEEL LOCK DISC	2
16	TOP HANDLE	1	62	WHEEL LOCK LEVER (0.033KG)	2
17	TANK COVER LID	1	63	REAR WHEEL STUB AXLE	2
18	PLEATED MAIN FILTER	2	64	ELECTRONICS BOARD	1
19	FILTER FRAME	2	64	ELECTRONICS BOARD	1
20	SCREW M4 x 8	3	65	CORD CLIP	1
21	FILTER SHAKER UNIT	1	66	POWER SUPPLY CORD	1
22	CATCH	2	67	CORD ARMOR	1
23	MAIN TANK COVER	1	68	EXTERNAL CIRCLIP S-10	2
24	CONDUCTOR PIN (OPTIONAL)	2	69	CASTOR SHAFT	2
25	DIAPHRAGM FILTER	1	70	WHEEL-FRONT	4
26	VENT COVER	1	71	AXLE SHAFT	2
27	SCREW M5 x 125	3	72	CASTOR CARRIER	2
28	SCREW M5 x 140	5	73	THREE WAY CONNECTOR	1
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30	BODY	1	75	LEAD FOR SUCTION POWER CONTROL	1
31	SCREW M4 x 16	10	76	LEAD FOR FILTER SHAKER (OPTIONAL)	1
32	BRACKET	1	77	LEAD FOR INTEGRATED SWITCH APPLIANCE SOCKET	2
32A	BRACKET	1	78	LEAD FOR LIQUID OVERFLOW SWITCH	1
33	COPPER STRIP-FOR OVERFLOW SWITCH	2	79	SCREW M5 x 16	4
34	VACUUM CLEANER BAG	1	80	SCREW M4 x 14	2
34A	VACUUM CLEANER BAG (CLOTH)	1	81	HOSE STRAP	1
34B	VACUUM CLEANER BAG (CLOTH WITH ZIPPER)	1	82	STRAP HOOK	1
35	HOSE PORT TUBE	1	83	PULL STRAP	1
36	VACUUM HOSE (INCLUDING CONNECTORS) 4M	1	84	O-RING $\varnothing 47.5 \times 2$	1
37	SCREW M4 x 12	4	85	SCREW M4 x 4	2
38	CARBON BRUSH 7 x 12 x 32	2	86	RUBBER SEAL	1
38	CARBON BRUSH 7 x 12 x 32	2	87	CONDUCTOR PIN (OPTIONAL)	2
39	BRUSH HOLDER	2	88	SPRING (OPTIONAL) $\varnothing 0.3 \times \varnothing 5.5 \times \varnothing 6 \times 5T \times 13L$	2
40	HEX NUT-LEFT HAND THREAD M6	1	89	LEAD FOR FILTER SHAKER (OPTIONAL)	1
41	FAN 70 x 6	1	90	WET MAIN FILTER (OPTIONAL)	2
42	MOTOR HOUSING	1	91	N/A	-
43	STATOR	1	92	N/A	-
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