

# **SERVICE MANUAL**

# **VACUUM CLEANER**



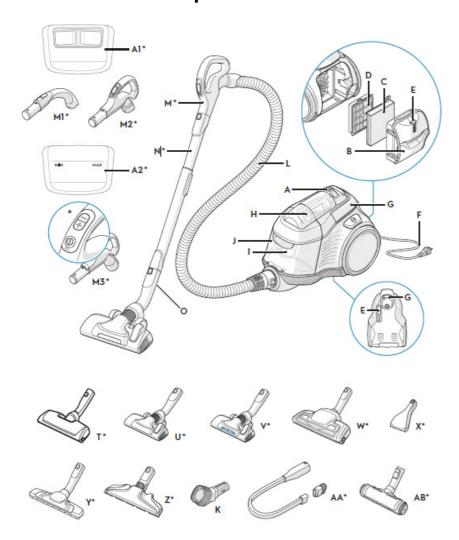
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# 1 General description



- \* Accessories may vary from model to model.
- A. Display
  - A1 rotary knob control\*
  - A2 remote control\*
- B. Filters lid
- C. Fine dust filter
- D. Pre-motor filter
- E. Parking slots
- F. Power cord
- G. Carry handle
- H. Cyclone compartment and nose cone filter
- I. Air channel
- J. Dust compartment
- L. AeroPro hose
- M. AeroPro handle
  - M1 AeroPro Classic handle\* M2 AeroPro Ergo handle\* M3 AeroPro Remote Control handle\*
- N. AeroPro telescopic tube
- O. Parking clip

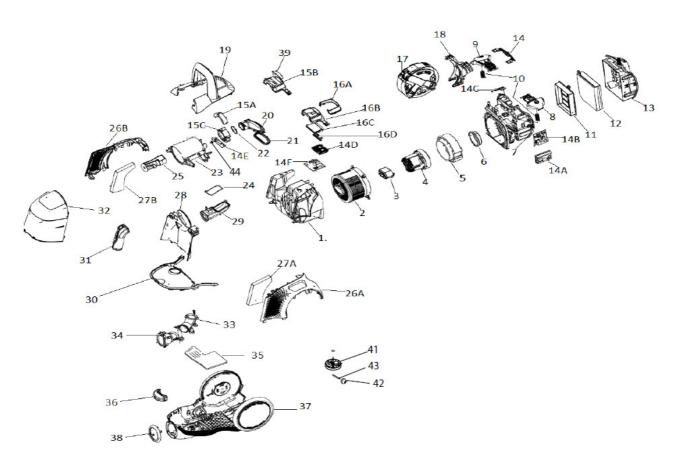
#### **Nozzle Accessories**

- K. AeroPro 3in1 tool
- T. Motorized nozzle\*
- U. FlowMotion nozzle\*
- V. FlowMotion LED nozzle (with front lights)\*
- W. AeroPro Turbo nozzle\*
- X. AeroPro Mini Turbo nozzle\*
- Y. ParkettoPro nozzle\*
- Z. AeroPro FlexProPlus nozzle\*
  AA. AeroPro Long crevice
- nozzle\*

  AB. BedPro nozzle\*
- \* Selected models only

# 1.1 Exploded view

## Service parts



Denomination	Position
MOTOR HOUSING	7
LID MOTOR	1
MOTOR	4
BELLOW	6
SUSPENSION RING	5
SUSPENSION PIN	3
SEALING MOTORHOUSE	999
ABSORBER OUTLET LEFT	27A
ABSORBER OUTLET RIGHT	27B
ABSORBER MOTORHOUSE	35
HOLDER CORD WINDER	18
CORD WINDER	17
LID LEFT	26A
LID RIGHT	26B
PEDAL ON/OFF	8
PEDAL CORD WINDER	9
SPRING PEDAL	10
BUTTON POWER REGULATOR	15C
OUTER POWER REGULATION	15A
FRAME POWER REGULATION	15B
LID DISPLAY	16A
HOLDER PCB	16B
DISPLAY FNA	16C
LIGHTGUIDE	16D
PCB	14A
PCB PEDAL	14C

Denomination	Position
PCB SLIDER	14E
PCB DISPLAY	14D
PCM 2G AKTIV	14F
PCB MAIN POWER MODUL	14B
ADAPTER	999
LOWER PART WITH WHEELS	37
HANDLE LOWER PART	36
LID LOWER PART	30
LID REAR	40
LID DECORATION	39
AIRCHANEL CYCLONE INNER	29
SEALING AIRCHANEL CYCLONE	24
AIRCHANEL CYCLONE COMLETE	20
SEALING CYCLONE INLET	22
LID DUSTCONTAINER INNER	28
HANDLE COMPLETE	19
LID HOSE CONNECTION	38
HOSE CONNECTION INNER	34
AIRCHANEL	33
AIRCHANEL COMPLETE	31
GRILL FILTER COMPLETE	13
SEALING GRILL FILTER	21
DUST COMPARTMENT	23
CONE DUST COMPARTMENT	25
DUST CONTAINER	32
FILTER CASCADE	12
FILTER HYGIENE	11
FILTER MOTOR LIFETIME	2

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### 2 ACCESSIBILITY

Please check doc: 599828493EN, where you can find disassembling process that step by step will allow the Technician to completely dismount the vacuum cleaner.

#### **ATTENTION:**

Boards and electronic devices could be damaged by electrostatic discharges. Don't touch any components without any ESD protection.

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### 3 Electronic Control

### 3.1 Motor power regulation

- 1. Main plug connected:
  - Motor shall be off.
- 2. First start (after main plug is connected):
  - Motor power starts in Max power position (remote version).
- **3.** Power setting is changed by regulation button:
  - Motor power steps up or down.
- 4. Cleaner is turned off by On/Off switch:
  - Motor turns off; last power setting is remembered by the microcontroller (remote version).
- 5. Cleaner is turned on by On/Off switch after being at point 4:
  - Motor turns on, and starts at the last used power setting (remote version).

#### 3.2 RF transmitter

#### Introduction

The RF transmitter is used as remote control for a vacuum cleaner powered by a 3V changeable lithium cell. The transmitter uses the **2.4 GHz (carry over from Ceres/Artemis)**. band for transmitting data inside EU. With the transmitter it is possible to turn the appliance on and off, and regulate the motor power. Estimated lifetime for the battery in normal use is approximately 8-12 months.

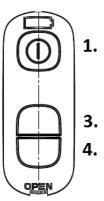
#### Learning

If the PCB has not saved transmitter address – New PCB from supplier

- 1. Plug in the cord to the main. The motor will fluctuate.
- 2. Push the buttons in the given combination at the same time (to do this you have 20s after connection to main )

/ 1+4 /

- 3. If the teaching was successful the cleaner will turn on (1.5s) and after that turns off.
- 4. The cleaner is ready to use.



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#### Reset

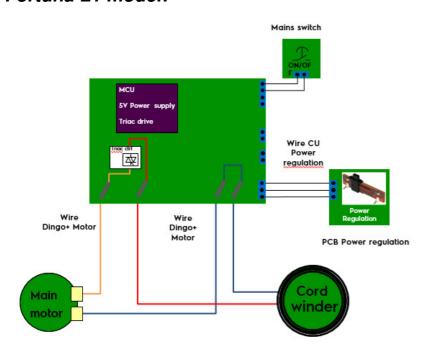
If the receiver has saved transmitter address – New transmitter / New bentend

- 1. Plug in the cord to the main. Do not turn on.
- 2. Send Reset signal 1+3+4 button combination at the same time (to do this you have 20s after connection to main ) If the cleaner received the right reset signal it will fluctuate.
- 3. Unplug the cord from the main.
- 4. Wait min 5sec.
- 5. Plug in the cord to the main again. The cleaner should fluctuate.
- 6. Send teaching signal 1+3 button combination at the same time (to do this you have 20s after connection to main )
- 7. If the teaching was successful the cleaner will turn on (1.5s) and after that turns off.
- 8. The cleaner is ready to use.

## 3.3 Electronic layout

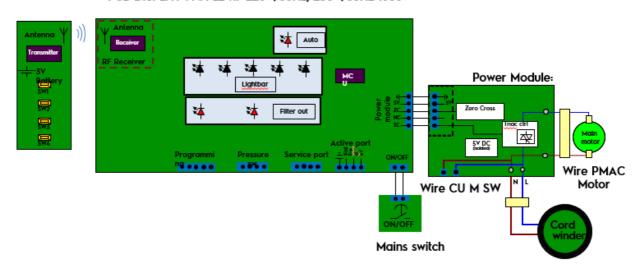
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### Fortuna L1 model:



## Fortuna L2 model:

PCB DISPLAY FNA L2 RF 230V/50Hz 650W PCB DISPLAY FNA L2 RF 220V/60Hz, 230V/50Hz 1800W

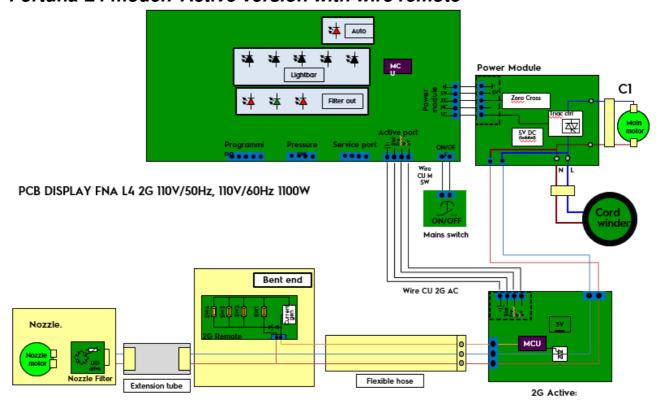


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### Fortuna L4 model: Active version with wire remote



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# 4 TROUBLE SHOOTING

Problem	Checks
	Cleaner without remote: - Investigate if the plastic knob reaches the ON/OFF switch on the PCB Replace the control unit (display PCB)
Cleaner doesn't start	<ul> <li>Cleaner with radio remote: <ul> <li>Investigate if both ON/OFF (cleaner and remote) is not working.</li> </ul> </li> <li>If remote ON/OFF working, but not cleaner ON/OFF: <ul> <li>Investigate if the plastic knob reaches the ON/OFF switch on the PCB.</li> </ul> </li> <li>Replace the control unit (display PCB).</li> <li>If cleaner ON/OFF working, but not remote ON/OFF: <ul> <li>Investigate if the LED on the remote indicates transmission. If not, change battery and try again.</li> </ul> </li> <li>If still no LED indication on remote, change remote control and reprogram the cleaner according to above instruction.</li> <li>If LED indicates transmission, try replacing the remote according to above instruction. If cleaner starts, replace the RF remote control.</li> <li>If still no function, replace the control unit in the cleaner. Be aware of the position of the radio antenna. If replacing the control unit this has to learn the RF-remote address according to above description.</li> </ul> <li>If no reaction on any ON/OFF buttons: replace the control unit (display PCB).</li>
Loss of suction	<ul> <li>Check motor position to be in the centre</li> <li>Check nose cone blockage in the dust container, clean it</li> <li>Check for leakages</li> <li>Check filters to be clean, replace filter if necessary</li> <li>Check the following: blocked tel. tube, hose or nozzle, air channel</li> </ul>
Cleaner doesn't start	<ul> <li>Check motor voltage, if no voltage, check the electronics as below, else check motor TCO and motor.</li> <li>Check communication wire between Power module and control unit for failure or bad connection.</li> <li>Change the control unit.</li> <li>Change the Power module.</li> </ul>
	Cleaner without remote: Investigate if the plastic knob reaches the potentiometer on the PCBResetting the main/power PCB -Change power regulation wheel -Replace the control unit (PCB).
Not possible to change power level	<ul> <li>Cleaner with radio remote:         <ul> <li>Investigate if the LED on the remote indicates transmission. If not, change battery and try again.</li> <li>If still no LED indication on remote, change remote control and reprogram the cleaner according to above instruction.</li> <li>If LED indicates transmission, try replacing the remote according to above instruction. If cleaner starts, replace the RF remote control.</li> <li>If still no function, replace the control unit in the cleaner. Be aware of the position of the radio antenna. If replacing the control unit this has to learn the RF-remote address according to above description.</li> </ul> </li> </ul>
	No failure found
If no any fault found after investigate the appliance, then use following coding	Product: 901 - Please use correct defect code to describe problem details, such as 53 (Customer misuse), 54 (Instructions missing or unclear), 55 (Not meeting expectations), 57 (No fault found)

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