LEGEE-D8 Maintenance Manual

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1.1 Unable to Boot Up

01

Check if the battery is out of power by putting the device onto the charging station and boot it up. LED indicator on the device turns orange when charging.

Run A/B test to make sure the charging station or LuLu is functioning, otherwise,

See 1.2.1 Unable to Recharge by Charging Station

See 1.2.2 Unable to Recharge by LuLu

02

Unscrew the battery from the device and test the **battery voltage**.

Battery Voltage	Battery Status	
13 V~16.8 V	Normal	
0 V	Protection Mode	
		-

Deactivate the Protection Mode:

- 1) Reload the battery onto the device
- 2) Charge the device for 10 min., test voltage again

03

If voltage is not within the normal range, replace the battery.

See 5.12 D7/D8-21700 Li-ion Battery Replacement

If the battery is normal but still unable to boot up, replace the Main Board and test it again.

See 5.3 D8-Main Board Replacement

1.2.1 Unable to Recharge by Charging Station

Tips:

Press the button "Home" on the device or LEGEE App, LEGEE will reposition automatically for recharging.

- Wipe clean the charging contacts on LEGEE and the charging station, if the charging contact is oxidized or has lost the elasticity, please replace the charging contact.
 - ② Connect another adapter to the charging station to check if the adapter malfunctions.
- Check if the LED light on the top of charging station flashes twice then turn into "blue". If not, replace the Dock Board and test again.

 See 5.18 D7/D8-Dock Board Replacement
- If the LED light indicator on the device doesn't turn from orange to green after charging for a while, please use Engineering Mode to check the battery readings. (Normal range: 460~680) See 3.14 LEGEE's Motor Assessment

 Or test the battery voltage and if the battery is normal. If not, replace the battery.

Battery Voltage	Battery Status
13 V~16.8 V	Normal

See 5.12 D7/D8-21700 Li-ion Battery Replacement

Run A/B test for the Main Board and the battery, replace if necessary.

See 5.3 D8-Main Board Replacement

See 5.12 D7/D8-21700 Li-ion Battery Replacement

04

1.2.2 Unable to Recharge by LuLu

Tips:

Turn LEGEE round end toward LuLu.

Press the "Docking/Undocking" button on LuLu, LEGEE will reposition automatically for recharging.

01

- Wipe clean the charging contacts on LEGEE and LuLu, if the charging contact is oxidized or has lost the elasticity, please replace the charging contact.
 See 6.17 LuLu-Charging Contact Module Replacement
- ② Use the charging station to check if LEGEE's charging function is normal, if unable to recharge by both charging station and LuLu, please refer 04.
- ③ Connect another power cord to the LuLu to check if the power cord is broken.

02

Check if the LED light on the top of LuLu is "blue". If not, reconnect to the power source again or replace the LuLu's Main Board or Adapter and test again.

See 6.6 LuLu-Main Board Replacement

03

If the LED light indicator on the device doesn't turn from orange to green after Retainer Plate Replacement charging for a while, please use Engineering Mode to check the battery readings.

(Normal range: 460~680) See 3.14 LEGEE's Motor Assessment

Or test the battery voltage and if the battery is normal. If not, replace the battery.

Battery Voltage	Battery Status
13 V~16.8 V	Normal

See 5.12 D7/D8-21700 Li-ion Battery Replacement

04

Run A/B test for LEGEE's Main Board, Rear board and the battery, replace if necessary.

See 5.3 D8-Main Board Replacement

See 5.15 D8-Inject Water Module Replacement
D8-Rear Board Replacement

See 5.12 D7/D8-21700 Li-ion Battery Replacement

1.3.1 Unable to Return to the Charging Station

01

- ① Wipe clean the charging contacts on LEGEE and the charging station, if the charging contact is oxidized or has lost the elasticity, please replace the charging contact.
- ② Please clear the objects near the charging station.
- ③ Please avoid placing the charging station near the reflective object.
- Should the furniture have been moved or the interior layout has been changed too much that LEGEE is unable to identify its location, please redraw a new map.
- 02

Check if the LED light on the top of charging station flashes twice then turn into blue If not, replace the Dock Board and test again.

See 5.18 D7/D8-Dock Board Replacement

03

Log in Engineering Mode to check the readings of the Dock Board.

See 3.8 Dock Board Assessment
Or run A/B test for the Dock Board and the Front PCB, then replace the failed part.

See 5.18 D7/D8-Dock Board Replacement

See 5.4 D8-Front PCB Assembly Replacement

1.3.2 Unable to Return to LEGEE LuLu

- 01
- ① Wipe clean the charging contacts on LEGEE and LuLu, if the charging contact is oxidized or has lost the elasticity, please replace the charging contact.

 See 6.17 LuLu-Charging Contact Module Replacement
- ② Please clear the objects near LuLu.
- ③ Please avoid placing LuLu near the reflective object.
- 4 Should the furniture have been moved or the interior layout has been changed too much that LEGEE is unable to identify its location, please redraw a new map.
- ⑤ When start using LEGEE LuLu, please remove the charging station and redraw a new map.
- 02

Check if the LED light on the top of LuLu is "blue". If not, reconnect to the power source again or replace the LuLu's Main Board or Adapter and test again.

See 6.6 LuLu-Main Board Replacement

See 6.12 Adapter Replacement LuLu-Retainer Plate Replacement

03

If LEGEE is unable to return to its charging position or move back and forth on the ramp

- ① Check if the ramp is installed correctly.
- ② Wipe clean the caterpillar belts. [picture 1]
- 3 Check the cliff sensor readings in the engineering mode, if the readings are low when LEGEE is on the black ramp, please use the gray ramp.
 See 3.11 Cliff Sensor Assessment
- ④ Test LEGEE's back IR in the engineering mode, change LEGEE's Rear Board if needed. See 3.17 Back IR Test
- ⑤ Check LuLu's IR readings in the engineering mode, change LuLu's Dock Board if needed.

See 3.9.1 LuLu IR Sensors Abnormal

See 6.13 LuLu-Dock Board Replacement

See 5.15 D8-Inject Water Module Replacement
D8-Rear Board Replacement

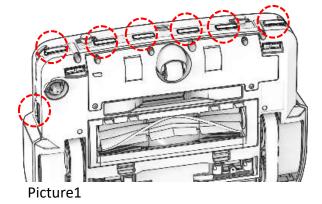
1.4 Abnormal Movement of the Device

1 Turn off the device, then clean \prec

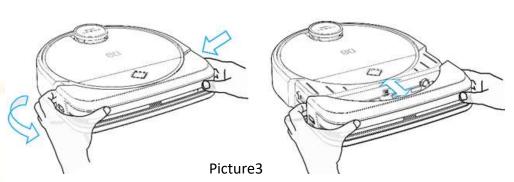
dirt on the 4 Cliff Sensors

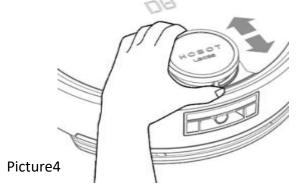
dirt on the front and right FDS sensors. [Picture1]

entangled hair between the Side Brush. [Picture2]









Picture2

02

If the device continually moves backward...

- ① Check if the Cleaning Cloth is flatly attached to the device in the correct position.
- ② Press the left, left-front, right, right-front of the Bumper and check if the bumper gets stuck. If yes,

reinstall or replace the Bumper. [Picture3] See 3.10 Bumper Sensor Assessment

See 5.2 Bumper Sensor Module & IR Detect
Switch Assembly Replacement

- 3 Check if LDS cover is stuck. [Picture4] See 5.16 7/D7/D8-Lidar Replacement
- 4 Check if the Side Brush Module's readings are within the normal range.
 If not, replace a new Side Brush Module.
 See 3.14 LEGEE's Motor Assessment

See 5.9 D7/D8-Side Brush Module Replacement

1.4 Abnormal Movement of the Device

03 If the device stops moving...

Check if Lidar is stuck or working abnormally, replace a new Lidar if needed.

See 5.16 7/D7/D8-Lidar Replacement

04 If the device is moving in circles...

- ① Check if the Caterpillar Belts are entangled by hair, clean the hair and then test it again.
- ② If not, check the readings of the Wheel Motor Module. See 3.14 LEGEE's Motor Assessment
 - If the Wheel Motor Module is working normally, replace it and then run A/B test.
 - Replace the Main Board if necessary and then test it again.

See 5.11 Wheel Repair & Replacement

See 5.3 D8-Main Board Replacement

05

If the device is hitting the obstacles which the height is lower than the device...

- ① Please wipe clean the FDS sensors and check the readings. See 3.12 FDS Sensor Assessment
- ② Or replace the Front PCB Assembly .

See 5.4 D8-Front PCB Assembly Replacement

1.5 Vacuum is Weak

Check if the Trash Bin is correctly installed or if the Trash Bin is full.
Please clean the high efficiency filter and check if there's blockage in the suction.

Check if the Vacuum Motor readings is normal.
If not, test it again after replacing a new one.

See 5.14 D8-22N Vacuum Motor Assembly Replacement

Run an A/B Test for the Vacuum Motor and the Main Board.
Replace the Main Board if necessary and then test it again.

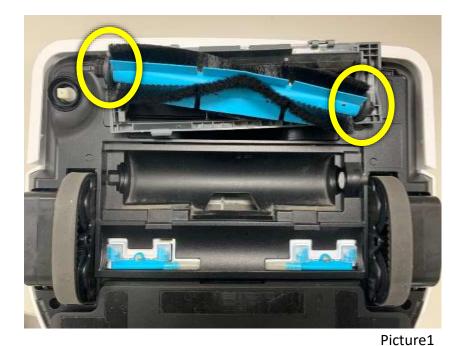
See 5.3 D8-Main Board Replacement

1.6 Brushroll doesn't Work

Take out the Brushroll and then clean the dirt on it as well as the gap on both sides. [Picture1].

Check the Brushroll Motor readings in 02 engineering mode.

See 3.14 LEGEE's Motor Assessment



Run an A/B Test for the Brushroll Motor and the Main Board. 03 Replace the Main Board if necessary and test it again.

See 5.5 Brushroll Motor Replacement

See 5.3 D8-Main Board Replacement

1.7 Side Brush is Not Spinning

Pull up the Side Brush, clean hair between the Side Brush and the axis then test it again.

If the Side Brush is broken, replace the Side Brush Module and test it again.

See 5.9 D7/D8-Side Brush Module Replacement

Disconnect the Side Brush Module from the Main Board, then test it with 5V power supply to see if the motor is running.

See 3.14 LEGEE's Motor Assessment

Run A/B test for the Side Brush Module and the Main Board. Replace the Main Board if necessary and then test it again.

See 5.3 D8-Main Board Replacement



03

1.8 No Water Spray

Check if there is water in the Water Tank or the water has blocked the air holes on the lid, fill water or remove some water.

Check if the Water Spray function is turned off [Picture1]. The LED light indicator is white when the spray is off and blue when the spray is on.

Test the water spray function by pressing the spray button on the App [Picture2].

If the water spray is working when testing but not when mopping, LEGEE may misjudged the floor as the carpet due to jammed hair on the brushroll.

See 1.6 Brushroll doesn't Work

If the water does not spray in any case, use the push pin to clear the nozzles clogs then test it again. If the Spray Nozzles are still clogged. Replace the nozzles then test again.

Clear the blockage if the Water Pipes are abnormally twisted or blocked [Picture3]. If not, change the Pipe Kits and test again.

See 5.13 Water Pump Replacement & D8-Pipe Kits Replacement

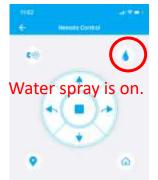
Check the readings of the Water Pump.

See 3.14 LEGEE's Motor Assessment

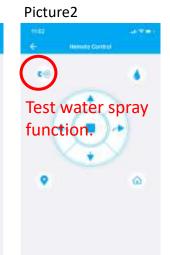
If not, replace the Water Pump and test again.

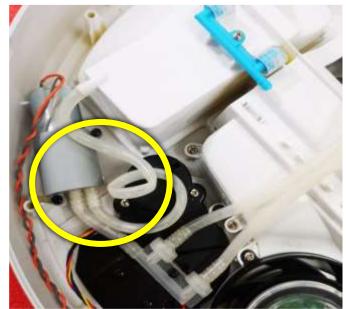
See 5.13 Water Pump Replacement & D8-Pipe Kits Replacement

Picture1









Picture3

1.9 Water Leakage

01

Please refer to the table on the next page to resolve.

02

Check if the Spray Nozzles and the Pipes are firmly connected [Picture1].

03

Disassemble the device and check if the water leakage is inside the device.

Replace the Pipe Kits and test again.

See 5.13 Water Pump Replacement & D8-Pipe Kits Replacement



Picture1

1.9 Water Leakage

				Solution	Batch with Potential Risk		
Scenario	Leaking Spot	Leakage	Condition	Yellow: need repair Green: fix by user	Ukraine* 100pcs	Lithuania * 800pcs	Russia* 866pcs
D8 stays still or after flipping the device	on waterproof membrane and D8 cover	Water on the D8 cover and the wetted waterproof membrane	Waterproof membrane on D8 water tank + detergent	Replace the waterproof membrane with adhesive Mylar.	V		
		Leakage under the D8 nozzles > 3cm diameter					
D8 stays still	D8's spraying nozzle		Impurities in the water	Change the pipe kit and use TDS 5-300ppm water			
			Weak check valve	Change the check valve	V	V	V
			vveak crieck valve				
	LuLu's water refill outlet and the base	D8's water tank is not refilled, and LuLu's base tray has water	D8's rear water refill inlet is blocked	Replace D8-Inject Water Module	D8 shipped before May		
During refilling by LuLu	D8's water tank is overfilled and the exceed water stream down the bumper and LuLu's ramp		When using pure water or RO water	Please use TDS 5-300ppm water			
	D8's spraying nozzle	Leakage under the D8 nozzles > 3cm diameter	Di a sala da di da DO	Please use white water tank lid on	White water tank lid is		
	D8's water tank lid	Water goes out through D8's water tank lid	Blue water tank lid on D8	D8	provided	with LEGEE	LuLu
During mop- washing by LuLu	InstantDrain and the	The waste water falls on LuLu's base	Waste water tank is not fastened	Please fasten the waste water tank			
	base of LuLu		InstantDrain is clogged	Please clean the InstantDrain			

1.10 Mopping Pad is not Mopping or with Noise

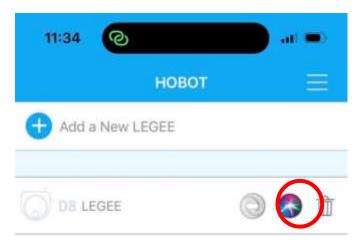
Check if the mopping pad is working normally in the engineering mode. See 3.14 LEGEE's Motor Assessment If the mop fails on lifting, test it again after replacing a new lifting motor module. See 5.8 D8-Lifting Motor Module Replacement If the mop fails on reciprocate mopping, test it again after replacing a new Sweep motor module or Crankshaft assembly. See 5.6 D8-Sweep Motor Module Replacement See 5.7 D8-Crankshaft Assembly Replacement 02 If the mopping pad is working when testing but not when mopping, LEGEE may misjudged the floor as the carpet due to jammed hair on the brushroll. See 1.6 Brushroll doesn't Work Run A/B test for the Lifting Motor Module and the Main Board. Replace the Main Board if necessary then test again. See 5.3 D8-Main Board Replacement

1.11 Wi-Fi/Hotspot Connection Issues

01

Please do follows then try again:

- ① A/B Test: Test by another Wi-Fi or use another phone.
- ② Reset Wi-Fi from Wi-Fi Router.
- Make Sure to turn off VPN and Anti-Virus function.
- ④ Set the Date & Time to Automatic.
- ⑤ Remove the linked offline LEGEE in the App. [Picture1]
- © Check Wi-Fi/bluetooth list in the cellphone "Settings" and look for "HBT-LEGEE-xxxx" or "TY-xxxx", then choose "forget the device."
- ⑦ Remove HOBOT LEGEE App and reinstall.
- ® Disconnect other Bluetooth devices such as headphones or speakers.



Picture1

02

Can only detect the device that have been connected to the LEGEE App before.

Picture2

Turn on LEGEE, check if the LED indicator flashes "white" [Picture2] with voice prompt "hardware error." if so, the Wi-Fi Module on the Main Board is malfunction, please replace the Main Board and test again.

See 5.3 D8-Main Board Replacement



1.12 Lidar (LDS) Error Detection

Turn on the device and test the signal.

See 3.13 LDS Sensor Assessment

If the device stops moving shows "Error Code 46" on the App, tap the top of LDS cover and use a vacuum cleaner to clear the trapped objects.

O2 Check if the wire connection is loose. [Picture1].

Run an A/B test for the Lidar and the Main Board. Replace the failed part if necessary.

See 5.16 7/D7/D8-Lidar Replacement

See 5.3 D8-Main Board Replacement



Picture1

1.13 Trash Bin's compressor is mal-functioning

Turn the device on.
Access to the Engineering Mode from the APP to test the Compactor Motor.

See 3.14 LEGEE's Motor Assessment

Check the compressing movement to see if it is jammed or there is any abnormal noise.

If required, please replace the Trash bin, Trash bin motor module, or Main board.

See 5.17 D8-Trash Bin Motor Module Replacement

See 5.3 D8-Main Board Replacement

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2.1 Unable to Boot Up



Please make sure LuLu is connected to the power. Check if the LED light on the top of LuLu is "blue". If not, reconnect to the power source again or replace the LuLu's Main Board or Adapter and test again.

See 6.6 LuLu-Main Board Replacement

See 6.12 Adapter 20V/3.0A 100~240VAC Replacement LuLu-Retainer Plate Replacement

2.2 Red/Pink Light Flashing

If the LED light on the top of LuLu is not "blue", please follow below instructions to resolve. Red Light: Please replace the Main Board. See 6.6 LuLu-Main Board Replacement Pink Light: 03 Please make sure the water tanks are in place, the waste water tank has been emptied and the clean water tank is refilled. Or please refer See 2.10 Water Tank Status Detection Error See 2.8 The Washing Module is Stock or Making Noise

2.3 Water Overflow

Please clean the overflow in the base tray. Empty the waste water tank and fasten the lid then put is back to LuLu. Use the water bottle to remove the water from LEGEE's water tank. Make LEGEE-D8 to return to LuLu and press the button on the left to start washing and refilling process. After the washing and refilling process, please check: 03 If there's no waste water in the tank See 2.4 Unable to Collect Waste Water If there's no water in LEGEE-D8's water tank See 2.5 Unable to Refill LEGEE's Water Tank

2.4 Unable to Collect Waste Water

01

LuLu has lost the air seal condition.

- ① Please make sure the waste water tank lid is closed tightly.
- ② Check if the silicon seal around the water tank lid is loose or broken.
- ③ Please check if the Water Seal Sleeve are loose or broken.

LuLu won't be able to collect the waste water from the instant drain under non-air-seal condition.

02

Please check if the Vacuum Pump module is installed correctly, if misplaced the inlet and out let tube, the air will be blown to the instant drain and cause waste water overflow.

See 6.5 LuLu-Hall Sensor Replacement

03

Please check if the waste water tank is full, if it is full without app and LED notification, please check the LuLu-Hall sensor.

See 3.15 LuLu's Motor and Sensor Assessment

See 2.10 Water Tank Status Detection Error

04

Please check if the vacuum pump is functioning, please replace the vacuum pump if needed.

See 3.15 LuLu's Motor and Sensor Assessment

See 6.11 LuLu-Vacuum Pump Module Replacement LuLu-Retainer Plate Replacement



2.5 Unable to Refill LEGEE's Water Tank

01

If water overflow to the base tray instead of filling-in LEGEE's water tank, please replace the inject water module.

See 5.15 D8-Inject Water Module Replacement
D8-Rear Board Replacement

02

If there's no water overflow on the base tray, please check if the pipe in the clean water tank is loose, blocked or broken.

03

Please check if the clean water tank has water, if it is empty without app and LED notification, please check the LuLu-Hall sensor.

See 3.15 LuLu's Motor and Sensor Assessment

See 2.10 Water Tank Status Detection Error

See 6.5 LuLu-Hall Sensor Replacement

04

Please check if the Water pump, Solenoid valve_Refilling are functioning and the pipes are not loose, blocked or broken, replace the parts if needed.

See 3.15 LuLu's Motor and Sensor Assessment

See 6.10 LuLu-Water Pump Replacement LuLu-Water Pump Support Replacement

See 6.7 LuLu-Solenoid Valve_Refilling Replacement LuLu-Solenoid Valve_Washing Replacement



2.6 The Cleaning Nozzle is not Spraying Water

Please check if the pipe in the clean water tank is loose, blocked or broken.

Please check if the clean water tank has water, if it is empty without app and LED notification, please check the LuLu-Hall sensor.

See 3.15 LuLu's Motor and Sensor Assessment

See 2.10 Water Tank Status Detection Error

See 6.5 LuLu-Hall Sensor Replacement

Please check if the Water pump, Solenoid valve_Washing are functioning and the pipes are not loose, blocked or broken, replace the parts if needed.

See 3.15 LuLu's Motor and Sensor Assessment

See 6.10 LuLu-Water Pump Replacement LuLu-Water Pump Support Replacement

See 6.7 LuLu-Solenoid Valve_Refilling Replacement LuLu-Solenoid Valve_Washing Replacement



03

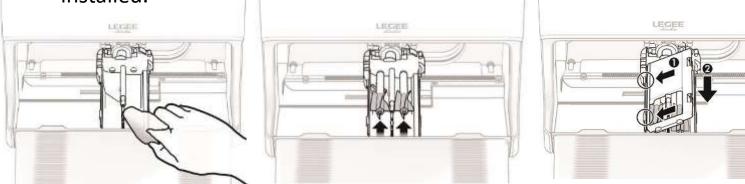
2.7 The Washing Brushes are not Working or Making Noise

01

Please remove the foreign object in the instant drain or tangled on the cleaning brushes.

Please check if the cleaning brush and the cover are correctly







02

Please check the readings of LuLu-Brush motor module, replace is needed.

See 3.15 LuLu's Motor and Sensor Assessment

See 6.22 LuLu-Brush Motor Module Replacement

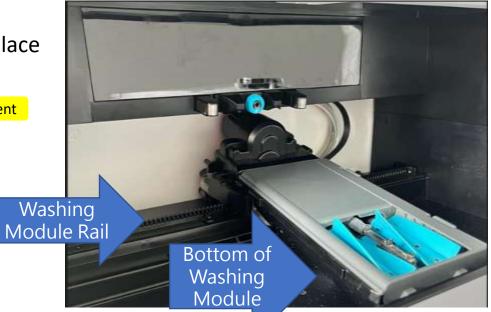
2.8 The Washing Module is Stock or Making Noise

O1 Please check if there's foreign objects stuck or tangled on the washing module rail or under the washing module.

Please check the translation motor module, replace if needed.

See 3.15 LuLu's Motor and Sensor Assessment

See 6.21 LuLu-Translation Motor Module Replacement



2.9 The Drying Function is Not Working

Please run A/B test for below parts:

See 3.15 LuLu's Motor and Sensor Assessment

Adapter

See 6.12 Adapter 20V/3.0A 100~240VAC Replacement
LuLu-Retainer Plate Replacement

LuLu-Main Board

See 6.6 LuLu-Main Board Replacement

LuLu-Blower

See 6.14 LuLu-Blower Replacement

PTC Heater

See 6.19 LuLu-PTC Heater Replacement

2.10 Water Tank Status Detection Error

Please make sure the clean water tank and waste water tank are placed properly, remove obstacles in the tank hall.

Please check if the magnet is missing? [red circle part]

Check if the LuLu-Hall sensor is working, replace if needed. See 3.15 LuLu's Motor and Sensor Assessment

See 6.5 LuLu-Hall Sensor Replacement



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3.1 Basic Workflow

Firmware Update

App sends new firmware to LEGEE

LEGEE installs new firmware. Takes about 5 mins, please don't exit the App.

LEGEE sends new firmware to LuLu via back IR. Takes about 3 hours, please do not cut off the power.

LuLu installs new firmware

Cleaning

Identify the map and orientation

Pre-wet the cleaning cloth

Clean the Appointed or Selected Area

Clean the Entire Area

Auto Recharge Auto Wash Auto Refill

Re-orientation

Continue cleaning

Refilling

The washing module moves to the center

Start vacuum pump to collect water

Start solenoid valve_refilling and water pump

D8 detects water tank is full or 50 seconds later

Stop water pump, solenoid valve_refilling and vacuum pump Washing

Start vacuum pump to collect water

Start Solenoid valve_washing and water pump

Start cleaning brush

LEGEE moves back and forth and the washing module moves left and right to wash the cleaning cloth
Takes a bout 5 minutes

Stop water pump, solenoid valve_washing and vacuum pump

3.2 Tips for Problem Solving

- 1. Acquire Model#, S/N, purchase date and place, then refer to the maintenance manual.
- 2. Identify and resolve the problem remotely:
 - Connection issue:
 - Ask the user to record the screen then looking for the error, it works better then verbal communication.
 - Firmware issue:
 - Abnormal move, missing spot, task incomplete, etc.
 - Please ask the user to record a video and generate an event log for further analysis.
 - Hardware issue:

See 3.4 How to Generate the Event Log

See 3.5 How to Read the Event Log

- Fall, spin, noise, not spraying, parts not moving, etc.
- Log-in user's HOBOT account then enter engineer mode to test the motors and sensors.

See 3.7.1 Enter Engineering Mode

3. On-site test and part replacement.

3.3 Error Codes

LEGEE-D8

There are several ways to observe the Error:

- On device LED Indicator is flashing white
- Voice prompt plays "the hardware is error, please contact the local retailer"

There are several ways to read the Error No.

- The error code will show on the App See 3.6.1 LEGEE-D8 Error Code Decoder
- From Event Log sent by consumers

See 3.4 How to Generate the Event Log

See 3.5 How to Read the Event Log

Please Log-in to HOBOT account and enter the Engineering Mode to check the readings.

See 3.7.1 Enter Engineering Mode





LEGEE LuLu

When LuLu hardware encounters an abnormality, it indicates the error code by flashing red and blue LEDs. See 3.6.2 LEGEE LuLu Error Code Decoder Please unplug the device and then re-power it to see if it returns to normal.



03

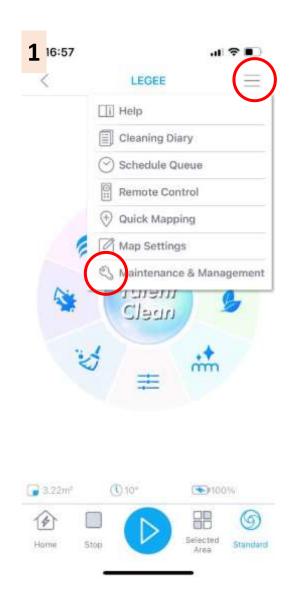
01

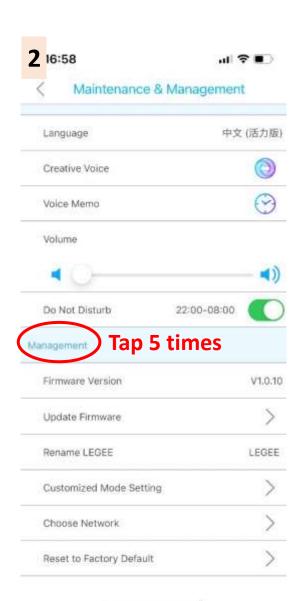
02

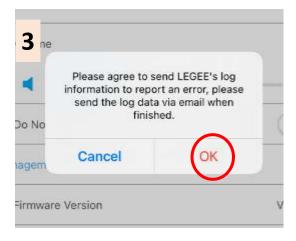
01

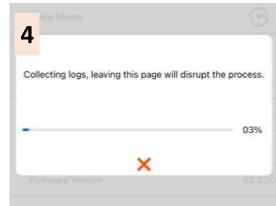
3.4 How to Generate the Event Log

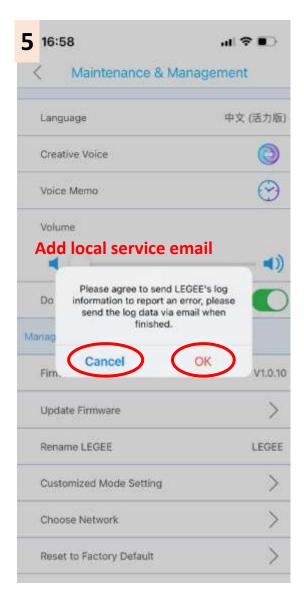
Ask the consumer to collect the log for you Provide this page to the consumer as instructions.





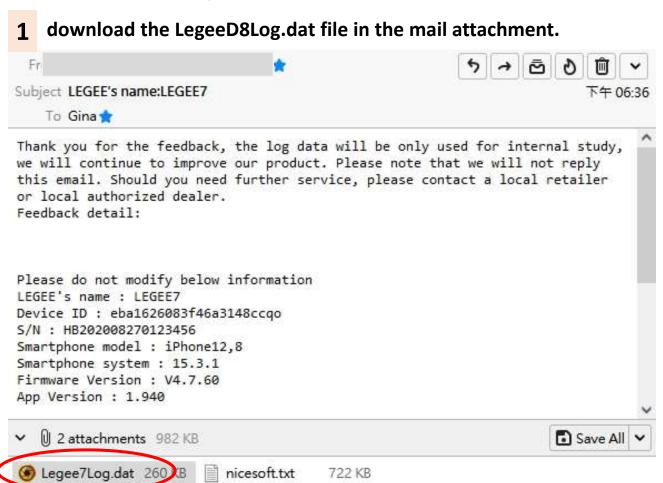




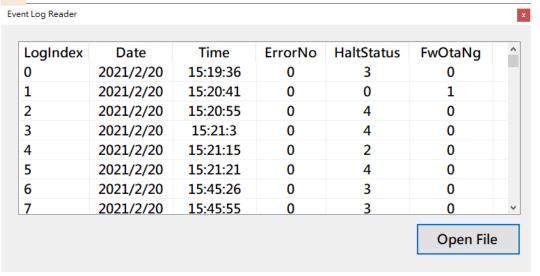


3.5 How to Read the Event Log

When you receive the mail from the consumer...



- Open with the EventLogReader.exe
 Please note, this tool is only for D8 and LuLu.
- Select Open File, and choose the .dat file your just downloaded.



3.6.1 LEGEE-D8 Error Code Decoder

Error Code (Component Malfunction)				
Code	Malfunction	Maintenance		
46	Lidar	Check 5.16 7/D7/D8-Lidar Replacement or 5.3 D8-Main Board Replacement		
51	Side Brush Module	Check 5.9 D7/D8-Side Brush Module Replacement or 5.3 D8-Main Board Replacement		
52	Vacuum Motor	Check 5.14 D8-22N Vacuum Motor Assembly Replacement or 5.3 D8-Main Board Replacement		
53	Brushroll Motor	Check 5.5 D7/D8-Brushroll Motor Module Replacement or 5.3 D8-Main Board Replacement		
54	Left Wheel Module	Check 5.11 Wheel Repair & Replacement or 5.3 D8-Main Board Replacement		
55	Right Wheel Module	Check 5.11 Wheel Repair & Replacement or 5.3 D8-Main Board Replacement		
56	Water Pump	Check 5.13 Water Pump Replacement or 5.3 D8-Main Board Replacement		
57	Trash Bin Motor Module	Check 5.17 D8-Trash Bin Motor Module Replacement		
58	Lifting Motor Module	Check 5.8 D8-Lifting Motor Module Replacement		
59	Sweep Motor Module	Check 5.6 D8-Sweep Motor Module Replacement		
62	Main Board Reference Voltage	Check 5.3 D8-Main Board Replacement		
63	Battery	Check 5.12 D7/D8-21700 Li-ion Battery Replacement or 5.3 D8-Main Board Replacement		

	Firmware Upgrade Status						
	Code		Malfunction Maintenance				
	1	Firmware Upgrade Failure x					
Ev	vent Log Reader						
	LogIndex	Date	Time	ErrorNo	HaltStatus	FwOtaNg	^
	^	2021/2/20	15.10.20	0	3	0	
	1	2021/2/20	15:20:41	0	0	1	
				•	U		
	2	2021/2/20	15:20:55	0	4	0	
	2		15:20:55 15:21:3	0	·	-	
		2021/2/20		· ·	4	-	
	3	2021/2/20 2021/2/20	15:21:3	0	4	-	
	3 4	2021/2/20 2021/2/20 2021/2/20	15:21:3 15:21:15	0	4 4 2	-	

Cleaning Task Stopped				
Code	Malfunction	Maintenance		
1	Sensor Malfunction	Check Cliff Sensors or Bumper Sensor		
2	Device Tilt	X		
4	Device is stuck	X		
7	Trash bin not installed	X		
8	Bumper stuck	Check Bumper Sensor		
9	Side Brush Module Stuck	Check Side Brush		

3.6.2 LEGEE LuLu Error Code Decoder

Error Code (Component Malfunction)				
Code	Malfunction	Maintenance		
11	LuLu-Main board	Check 6.6 LuLu-Main Board Replacement		
12	LuLu-Main board or Translation motor module	Check 6.6 LuLu-Main Board Replacement or 6.21 LuLu-Translation Motor Module Replacement		
13	LuLu-Main board or Brush motor module	Check 6.6 LuLu-Main Board Replacement or 6.22 LuLu-Brush Motor Module Replacement		
14	LuLu-Main board or LuLu-Dock Board or LuLu-Charging Contact Module	Check 6.6 LuLu-Main Board Replacement or 6.13 LuLu-Dock Board Replacement or 6.17 LuLu-Charging Contact Module Replacement		
15	LuLu-Main board or LuLu-Water Pump	Check 6.6 LuLu-Main Board Replacement or 6.10 LuLu-Water Pump/Water Pump Support Replacement		
16	LuLu-Main board or LuLu-Vacuum Pump Module	Check 6.6 LuLu-Main Board Replacement or 6.11 LuLu-Vacuum Pump Module/Retainer Plate Replacement		
17	LuLu-Main board or LuLu-PTC Heater	Check 6.6 LuLu-Main Board Replacement or 6.19 LuLu-PTC Heater Replacement		
23 / 24 / 25	LuLu-Translation Motor Module error	Check Washing module and the rail under it		
33	LuLu-Brush motor module error	Check if there's obstacles on LuLu-Brush		

When LuLu hardware encounters an abnormality, it indicates the error code by flashing red and blue LEDs. The error code consists of two digits, with the red LED representing the tens place and the blue LED representing the ones place; for example, if the red LED flashes twice followed by the blue LED flashing three times, it indicates error code 23.

• Initially, it is recommended to advise users to unplug the device and then re-power it to see if it returns to normal. If the problem persists, proceed with component inspection or repair as indicated in the table.

3.7.1 Enter Engineering Mode



Use Engineering Mode to Clarify the Problem Remotely

- ① Ask the user to share their HOBOT account by showing the screen capture of the "share my LEGEE" page.
- In case the user is using Quick login with a third party account:

 a) Apply a new HOBOT account and reconnect to LEGEE, or
 b) Use repair center's HOBOT account and reconnect to LEGEE
 * The original settings and maps are all stored in LEGEE so nothing will be missing.
- ③ The repair team can access LEGEE remotely
 - a) Tap "Talent Clean" 5 times then enter the pin code: LEGEE, to enter engineering Mode.
 - b) Generate Log for further study.

3.7.2 Engineering Mode Interface

LEGEE Sensor readings FCR: 192 BCR 263 Lidar traces Wave hands to see the trace HB2022081600123456 RTC(Y/M/D H:M): 2024/02/16 08:48 SQT(Y/M/D H:M): 0/00/00 00:00 Device info & 0 RW enc 0 RW cur LW cur **Motor readings** O Abs angl Battery 659 RSSI -44 29 Lidar RPS 574 Total cur Work Hour 0 Water LV Test 1 Motor testing buttons & Brushroll Motor Side Brush Motor **Motor readings** Water Pump Vacuum Motor Sweep Motor Calibration/voice test/ **LuLu's Engineering Mode** Rear IR Demo Test2

LuLu

1 HMS 0 WHS 0

Firmware Version Position:

Translation Motor

Brush Motor

Blower

Water Pump

valve_Refillir

Test1

WS FW Test1

WS FW Test2

WS Status

0xb025 Value 1

Test2

LUTC123456

Translation Motor

Test3

Update

Update

Vacuum Pump

Heater

valve_Washing

Water Pump

1.25

Serial Number

Firmware Version

Sensor readings

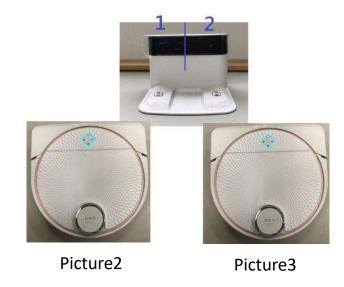
Motor testing buttons & Motor readings

Make sure LEGEE-D8 is charging by LuLu, then tap to enter LuLu's Engineering Mode. The readings will be appear with about 5 second delay.

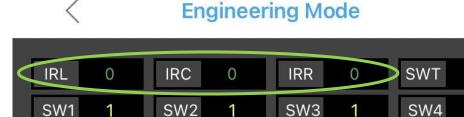
3.8 Dock Board Assessment

- 1. When the dock is connected to the adaptor, the LED indicator will flash, then turn into "blue". [Picture1].
- 2. When LEGEE-D8 touches the dock and starts charging, the LED indicator will flash "blue" light.
- Adjust the position of LEGEE-D8 in front of the charging station, and observe the IRL, IRC, IRR readings in the Engineering Mode.





Position of LEGEE vs Charging Station		IRC	IRR
LEGEE at the front-left of the charging station (picture2)	1	1	1
LEGEE at the front-right of the charging station(picture3)		2	2
Can't detect the Charging station		0	0



283

FCR

192

BCR

263

FCL

3.9.1 LuLu IR Sensors Abnormal

Adjust the position of LEGEE-D8 in front of LuLu, and observe the IRB readings in the Engineering Mode.





3.9.2 LuLu IR Sensors Tilted

When LEGEE-D8 is parked in an odd position.



See 5.15 D8-Inject Water Module Replacement
D8-Rear Board Replacement

(1) LEGEE-D8







Check if the Rear Board is misplaced

See 6.13 LuLu-Dock Board Replacement

(2) LEGEE LuLu



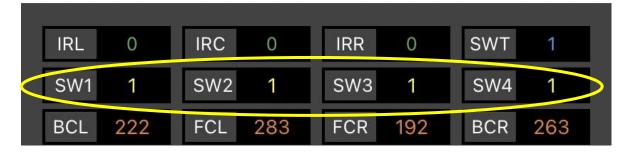


Check if LuLu-Dock board is misplaced.

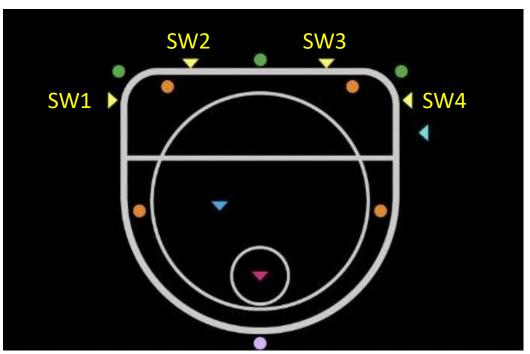
3.10 Bumper Sensor Assessment

Observe the Bumper Sensor readings while pressing the left(SW1), left-front(SW2), right-front(SW3) and right(SW4) of the Bumper.





Bumper Status	Readings
Pressed	0
Not Pressed	1



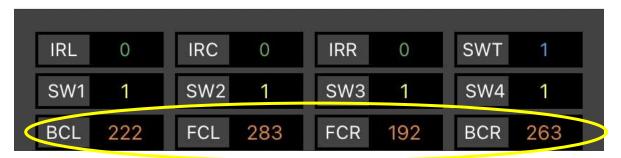
3.11 Cliff Sensor Assessment

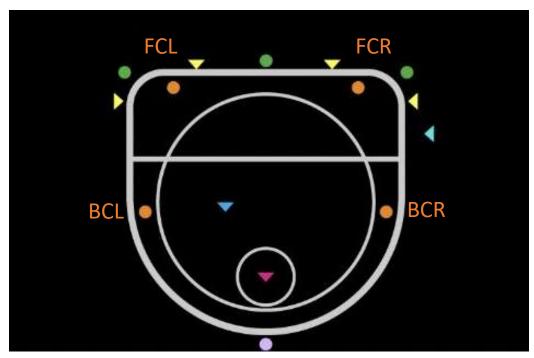
Cliff Sensor can detect the stair or gap that is higher than 6cm.

Observe the Cliff Sensor readings: BCL, FCL, FCR, BCR.

- Place LEGEE-D8 on the ground, depending on the surroundings, normal readings should fall in between 150~400.
- The readings would gradually decrease when LEGEE-D8 is lifted away from the ground.







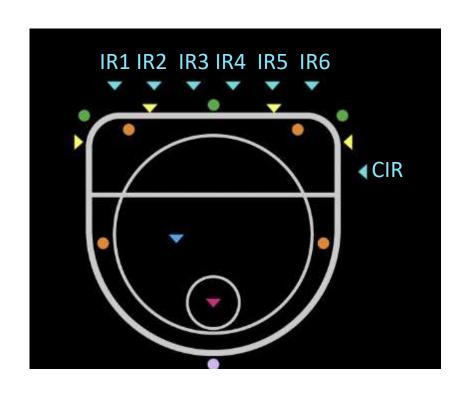
Sensor Status	Readings
Not on cliff	150~400
Detects cliff	<7

3.12 FDS Sensor Assessment

- For the front 6 sensors readings(left to right): IR1, IR2,
 IR3, IR4, IR5, IR6. For the right 1 sensor reading: CIR.
- Place LEGEE-D8 on the ground. If there is no obstacle (such as the charging station) in the front, the readings should be -100. When an obstacle is approaching, the readings would gradually increase.



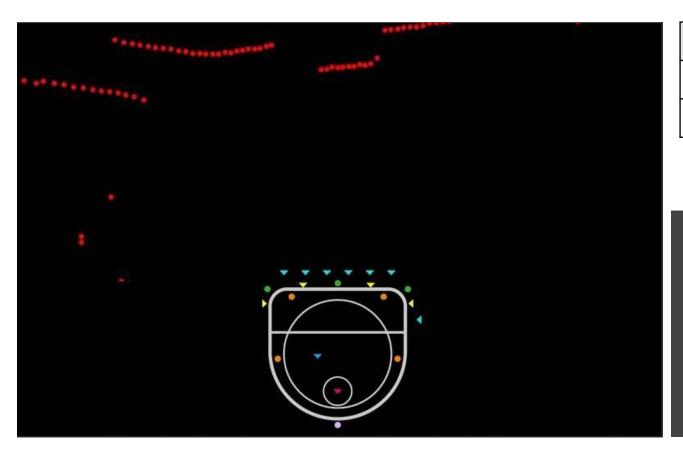


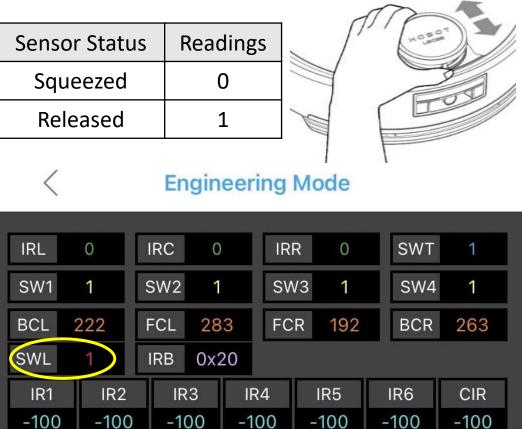


Sensor Status	Readings
Far from object	-100
near the object	increase

3.13 LDS Sensor Assessment

- The red dots will reflect the surroundings, wave hands in front of LDS to test.
- Check if the LDS cover sensor is working properly by squeezing the top of the LDS sensor cover, it should bunce back smoothly.





08

3.14 LEGEE's Motor Assessment

Left Wheel Module

readings (LW cur) should be < 200

Battery

readings should between 460-680

Brushroll Motor (Roller Motor)

readings should be within 15~50 on hard floor

Water Pump

readings should be within $40^{\circ}60$ while water in tank, or <20 while the tank is empty

Sweep Motor

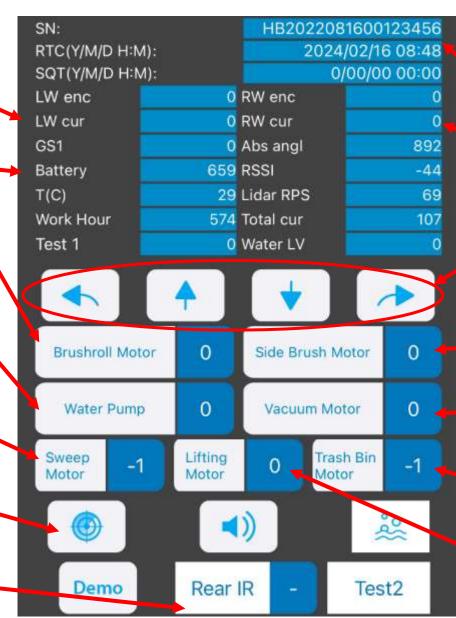
readings should be within 30~70

LDS Calibration

calibrate after changing Main Board or LDS

Back IR Test

tap to test Back IR



LEGEE Serial Number

Right Wheel Module

readings (RW cur) should be < 200

Wheel Motor Module

should work normally in accordance with the button "turn left, turn right, go forward, reverse"; observe the readings of LW/RW cur to clarify

Side Brush Motor (Brush Motor)

readings should be < 15

Vacuum Motor

readings should be within 150~250

Compactor Motor

should work normally when tap "Compactor"

Lifting Motor

should work normally when tap "Lift"

3.15 LuLu's Motor and Sensor Assessment

Clean Water Tank

In place: 1, Empty/Missing: 0

Waste Water Tank

In place: 1, Full/Missing: 0

Translation Motor

Tap to move the washing module left or right, readings should between 40-80

Brush Motor

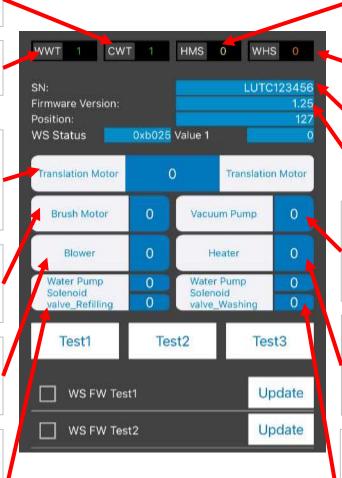
Tap to start the cleaning brush, readings should between 40-80

Blower

Tap to start the blower, readings should between 10-30

Water Pump & Solenoid Valve_Refilling

Tap to start filling water (use a towel to catch the ejected water) readings should between 10-50 for Pump and 90-120 for Valve



Recall Key

Pressed: 1, Release: 0

Wash Key

Pressed: 1, Release: 0

LuLu Serial Number

Firmware Version

Vacuum Pump (Drain)

Tap to start collecting water from Instant Drain, readings should between 10-50

PTC Heater

Tap to start heating for 10 seconds and the blower will also start, readings should between 80-200

Water Pump & Solenoid valve_Washing

Tap to start spraying water in the washing module (prepare a towel to catch the ejected water) readings should between 10-50 for Pump and 90-120 for Valve

Use LEGEE-688's remote control to quickly test LuLu (also use this method to clear the water from the pipes after maintenance)

To Activate the Quick Testing Mode

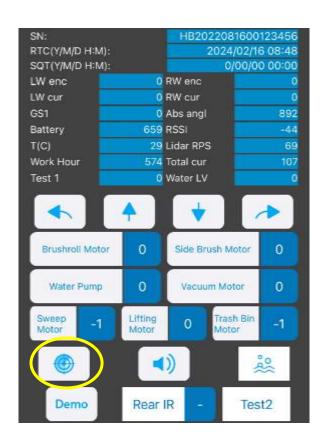
Cut the Power → Press and Hold the Wash

Key while connect to the Power, when seeing the cleaning brush rolls slightly, you've activated the quick testing mode.



3.16 LDS Calibration

(Please calibrate after Main Board or Lidar Replacement)



Place the device as the below position

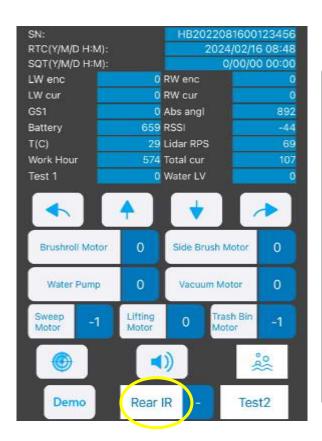


Light-colored wall. No metal or dark-colored wall.



3.17 Back IR Test

Tap the "Back IR" button to test if LEGEE's Back IR is functioning.



Place the device as the below position



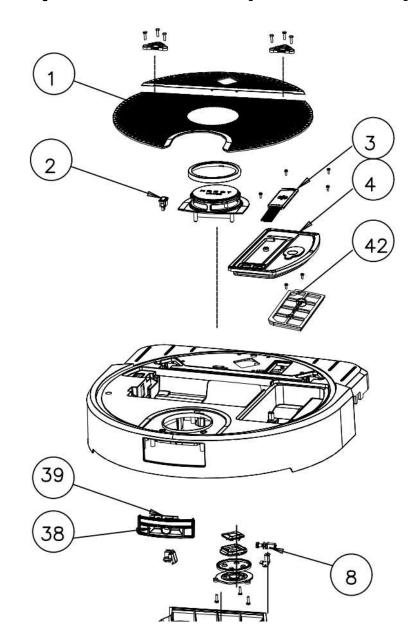
Light-colored wall. No metal or dark-colored wall.

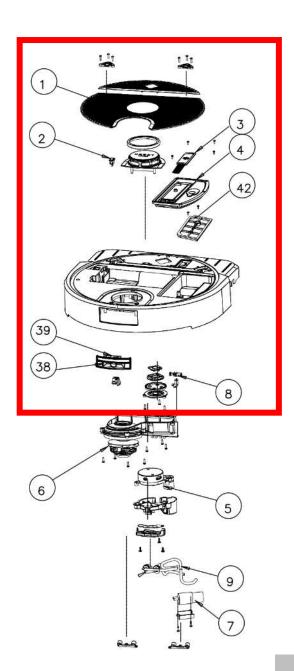


4. Hardware and Component Repair & Maintenance Precautions	Slide No.
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4.1 LEGEE-D8 Components Exploded View (Cover 2-1)

No	Part No	Description
1	LG888W0022	D8-IMD Nameplate
2	LG888P9001	D8-Power switch
3	LG777A0003	D7/D8-Cleaning tool
4	LG888W0026	D8-Water tank cover assembly
8	LG888W0018	D8-Trash bin motor module
38	LG888W0061	D8-Inject water module
39	LG888PCB04X	D8-Rear board
42	LG888P2077-01	D8-Water filter screen



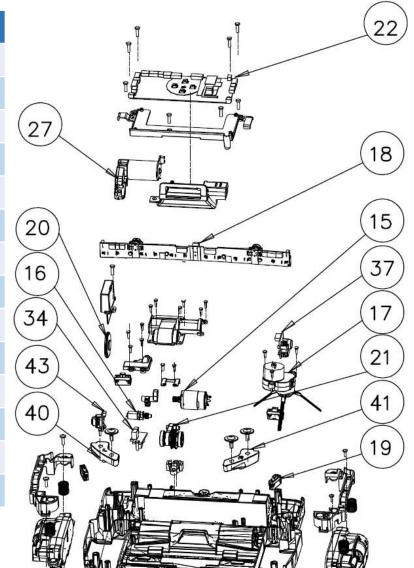


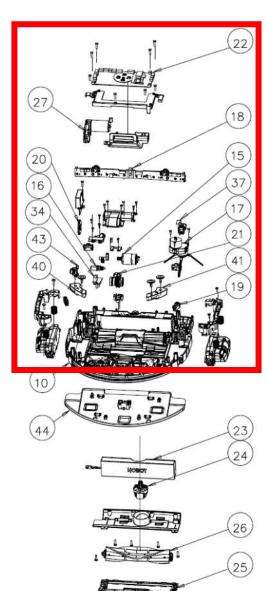
4.1 LEGEE-D8 Components Exploded View (Cover 2-2)

No	Part No	Description		
5	LG700P1002-01	7/D7/D8-Lidar		2
6	LG888W0007	D8-22N Vacuum motor assembly		
7	LG668P0093B	Water pump		
9	LG888W0024	D8-Pipe kits	00 80	
		6		39
			5	38
			9	6
			<u>a_a</u>	

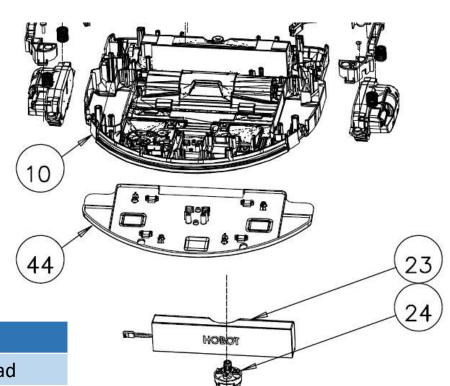
4.1 LEGEE-D8 Components Exploded View (Base 2-1)

No	Part No	Description
15	LG888W0019	D8-Sweep motor module
16	LG888W0027	D8-Lifting motor module
17	LG777W0014	D7/D8-Side brush module
18	LG888W0015	D8-Front PCB assembly
19	LG700PCB04X	7/D7/D8-Cliff module
20	LG700P8006-01	7/D7/D8-Speaker
21	LG888W0013	D8-Crankshaft assembly
22	LG888PCB01X	D8-Main board
27	LG777W0023	D7/D8-Brushroll motor module
34	LG777PCB08X	D7/D8-Battery adapter board
37	LG888W0016	D8-IR detect switch assembly
40	LG888P6104	D8-Left counterweight
41	LG888P6105	D8-Right counterweight
43	LG700W0016	7/D7/D8-Bumper sensor module

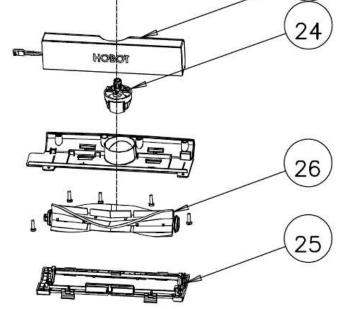


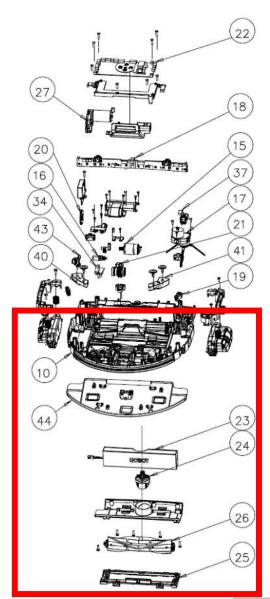


4.1 LEGEE-D8 Components Exploded View (Base 2-2)



No	Part No	Description	
10	LG888W0017	D8-Base with sweep pad	
23	LG777P1001	D7/D8-21700 Li-ion battery	
24	LG777P2059	D7/D8-Universal wheel	
25	LG777P2057	D7/D8-Brushroll cover	
26	LG777P2056	D7/D8-Brushroll	
44	LG888P2010	D8-Sweep pad	

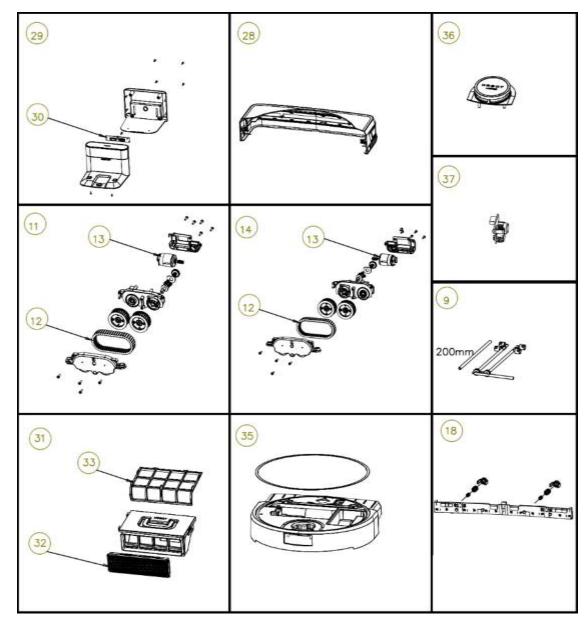




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4.1 LEGEE-D8 Components Exploded View: Modules

No	Part No	Description	
9	LG888W0024	D8-Pipe kits	
11	LG777W0009-02 D7/D8-Right wheel mod		
12	LG668P0067	Caterpillar belt S5M	
13	LG668W0007	Wheel motor module	
14	LG777W0010-02	D7/D8-Left wheel module	
18	LG888W0015	D8-Front PCB assembly	
28	LG888W0004	D8-Bumper	
29	LG777W0006	D7/D8-Charging station	
30	LG777PCB05X	PCB05X D7/D8-Dock board	
31	LG888W0003 D8-Trasht bin		
32	LG777P8003	D7/D8-High efficiency filter	
33	LG888P2014	D8-Screen filter	
35	LG888W0001	D8-Top cover assembly	
36	LG777W0008	D7/D8-Lidar cover assembly	
37	LG888W0016	D8-IR detect switch assembly	



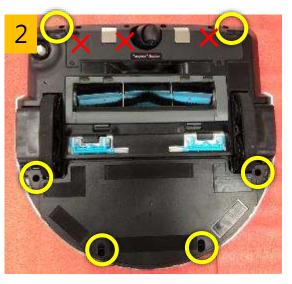
4.2 Disassembling LEGEE-D8

Precautions before Disassembling

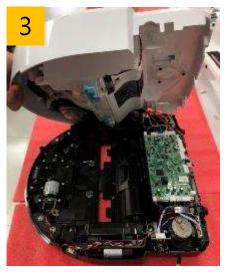
- Remove side brush
- Remove cleaning cloth
- Remove brushroll and brushroll's cover
- Drain water tank
- Use APP to spray out the left water



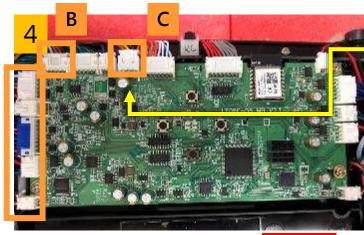
Remove the bumper by pressing one side



Unscrew 6 pcs screws

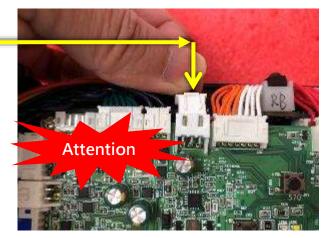


Unveil the top cover carefully



Unplug A/B/C connectors See 4.7

X C connector is against to power cable. Please make sure to unplug it for safety concern.



Tip: band at 45 degree angle to easily unplug



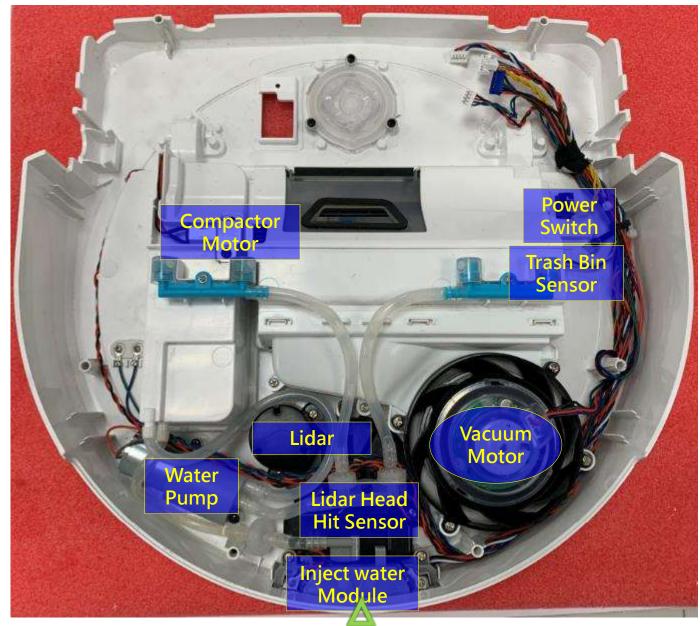
Base See 4.4 Cover See 4.3

4.3 LEGEE-D8 Configuration: Cover



IR Sensor

on Rear Board



4.4 LEGEE-D8 Configuration: Base

Battery (on the bottom)

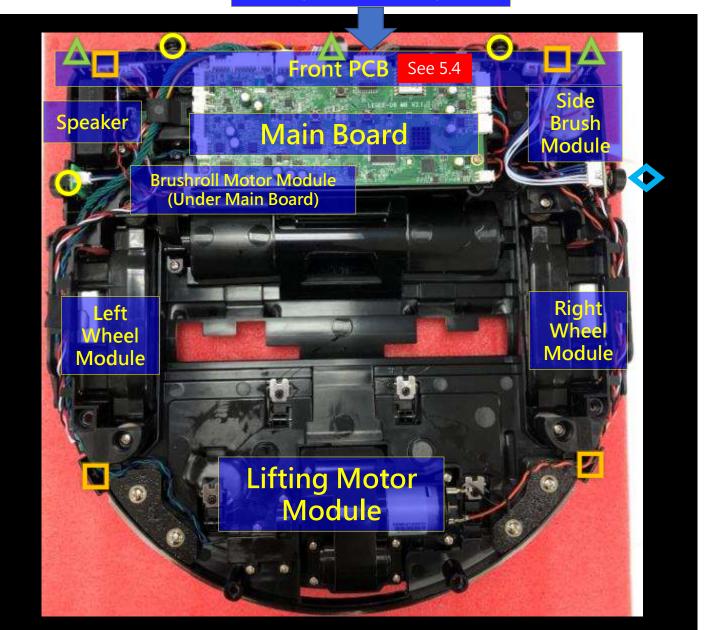


Bumper Sensor

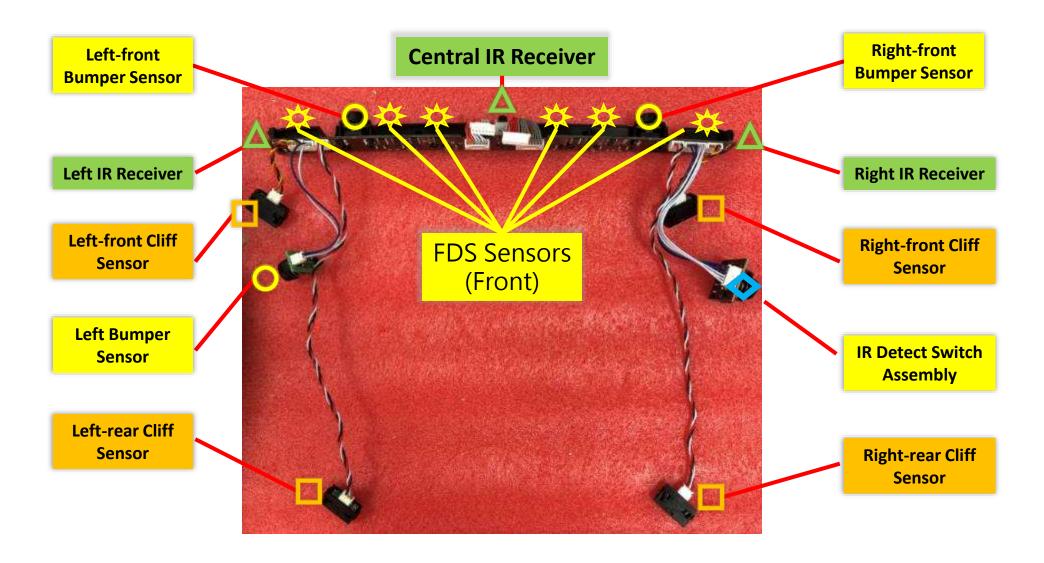
Cliff Sensor

FDS Sensor

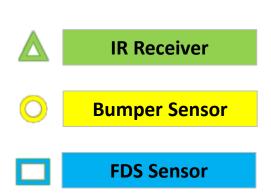
Other sensors see 4.5~4.6

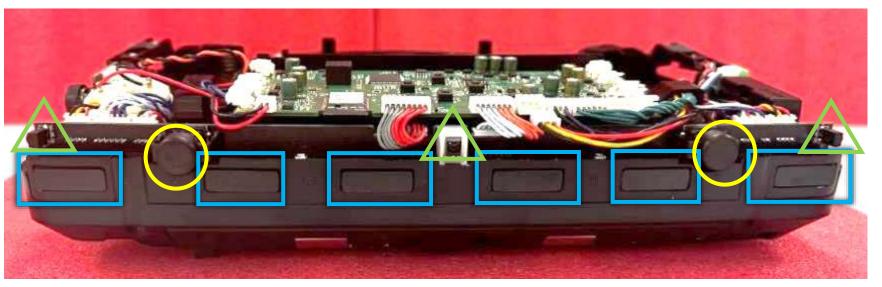


4.5 LEGEE-D8 Front PCB Assembly

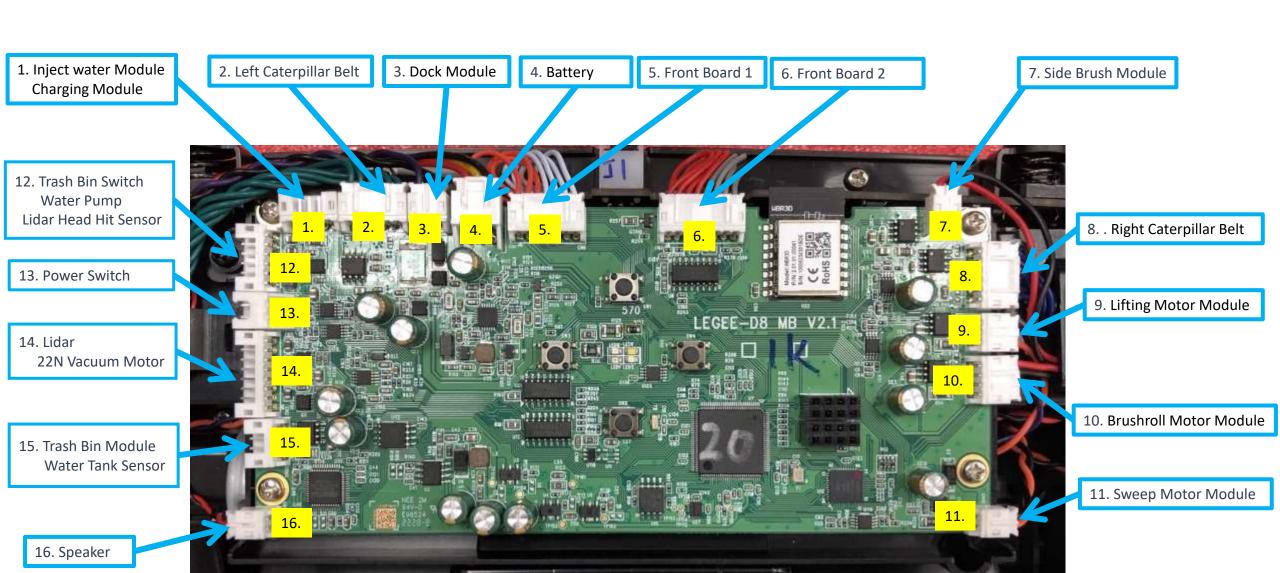


4.6 LEGEE-D8 Front PCB Assembly: Sensors Configuration





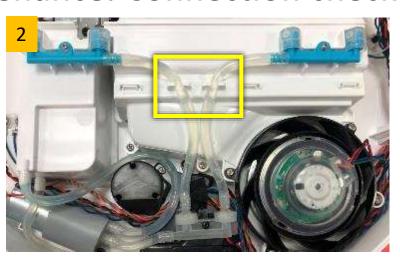
4.7 LEGEE-D8 Main Board Layout



4.8 LEGEE-D8 After Maintenance: Connection check



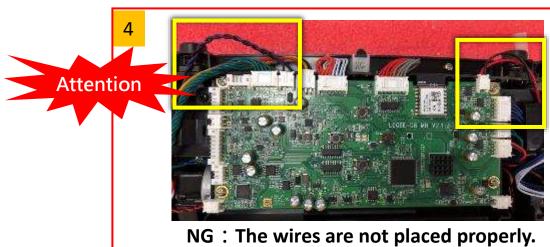
Plug the battery wire after repair, and make sure the wires are placed inside the cover

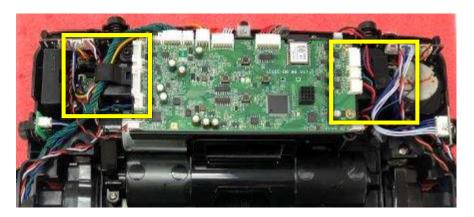


Make the pipes are positioned in the right place without being folded



Make sure the cover is tightly closed





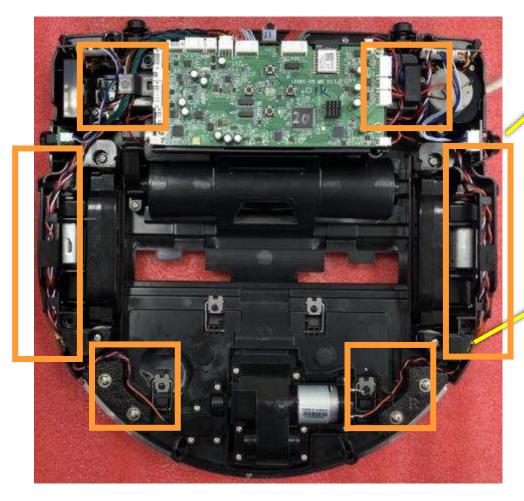
OK: The wires are placed in the slots correctly.

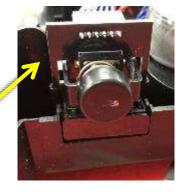
Important!! Please calibrate after replacing Main Board or LDS

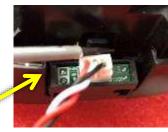
See 3.14 LEGEE's Motor Assessment

4.9 LEGEE-D8 After Maintenance: Wires Check

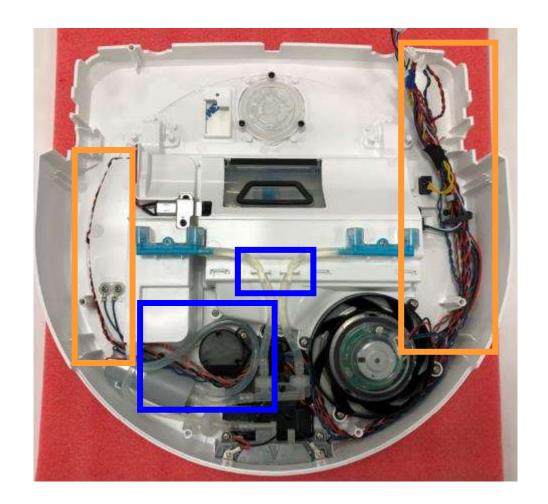
Please pay attention to how the pipes and wires are organized





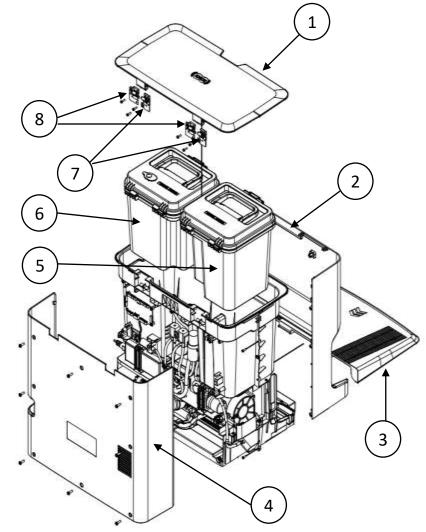


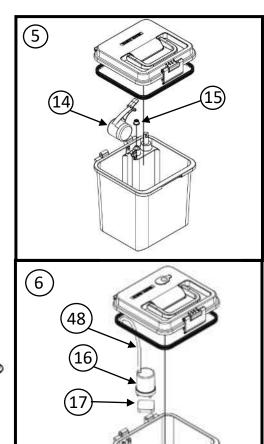
* Make sure the IR detect switch assembly and Bumper sensor are in position.

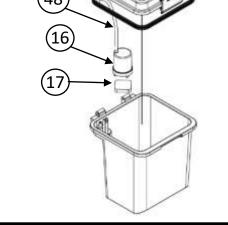


4.10 LuLu Components Exploded View: Shell and Water Tank

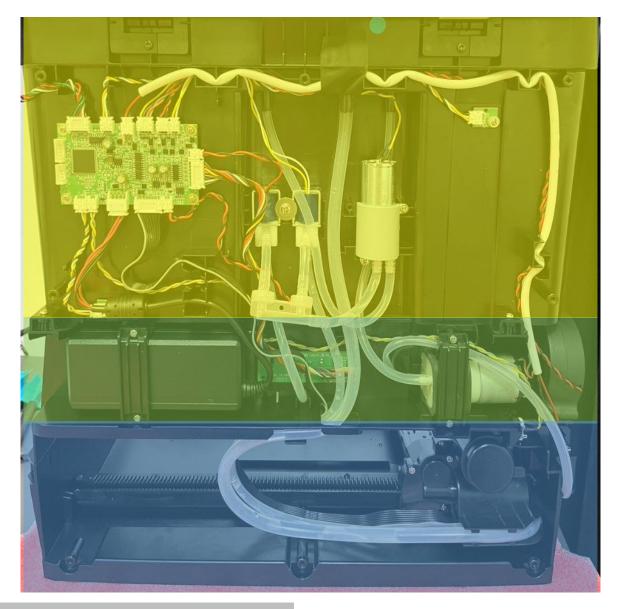
No	Part No	Description	
1	LG100P2004	LuLu-Top cover	
2	LG100P2005	LuLu-Front cover	
3	LG100P2022-01	Ramp	
4	LG100P2006	LuLu-Rear cover	
5	LG100W0007	Waste water tank module	
6	LG100W0009	Clean water tank module	
7	LG100P2008	Top cover bracket_Right	
8	LG100P2007	Top cover bracket_Left	
14	LG100W0008	Float of waste water tank	
15	LG100P4006	Air seal sleeve	
16	LG100W0010	Water filtration module	
17	LG100P9003	Filter packet of clean water tank	
48	LG668P0107-08	LuLu-Clean water tank pipe (4*6mm) 190mm	



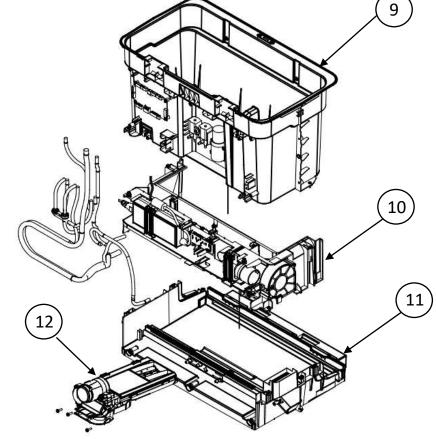




4.10 LuLu Components Exploded View: Modules

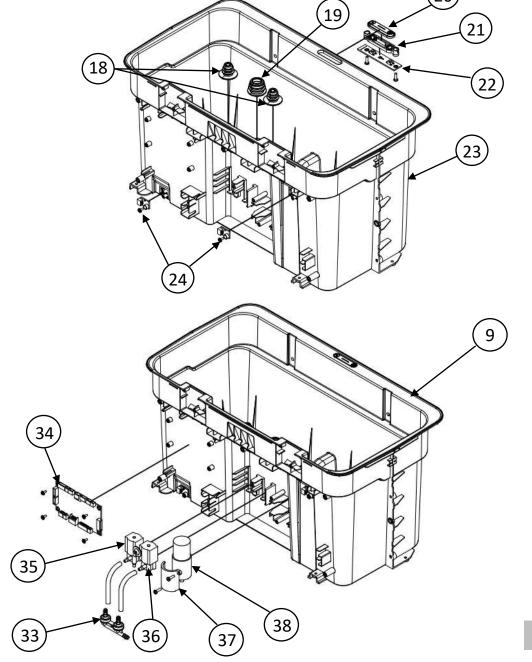


No	Part No	Description
9	LG100W0006	Tank station module
10	LG100W0005	Charging station module
11	LG100W0003	Washing base module
12	LG100W0004	Washing module



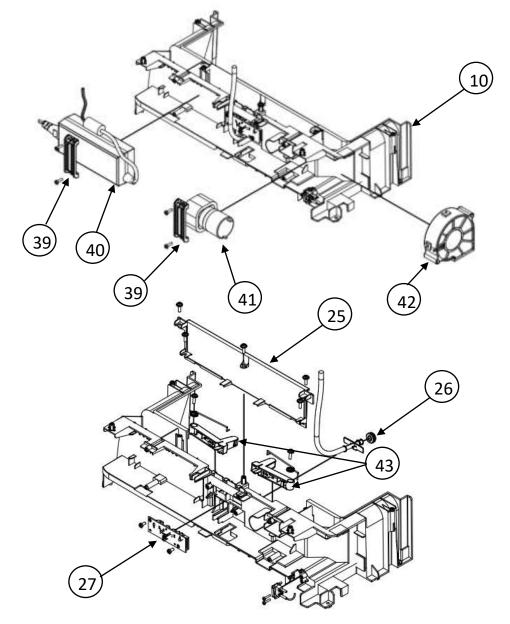
4.10 LuLu Components Exploded View: Tank station module

No	lo Part No Description		
9	LG100W0006 Tank station module		
18	LG100P4003	Water seal sleeve_8X15	
19	19 LG100P4004 Water seal sleeve_15		
20	LG100P4001	LuLu-Button	
21	LG100P2009	LuLu-Button support	
22	LG100PCB04X	LuLu-Button main board	
23	LG100P2026	Water tank station	
24	LG100PCB03X	LuLu-Hall sensor	
33	LG700P2023	Check valve	
34	LG100PCB01X	LuLu-Main board	
35	LG100P1006-01	Solenoid valve_Refilling	
36	LG100P1007-01	Solenoid valve_Washing	
37	LG668P0046-01	Water pump support	
38	LG668P0093B	Water pump	



4.10 LuLu Components Exploded View: Charging station module

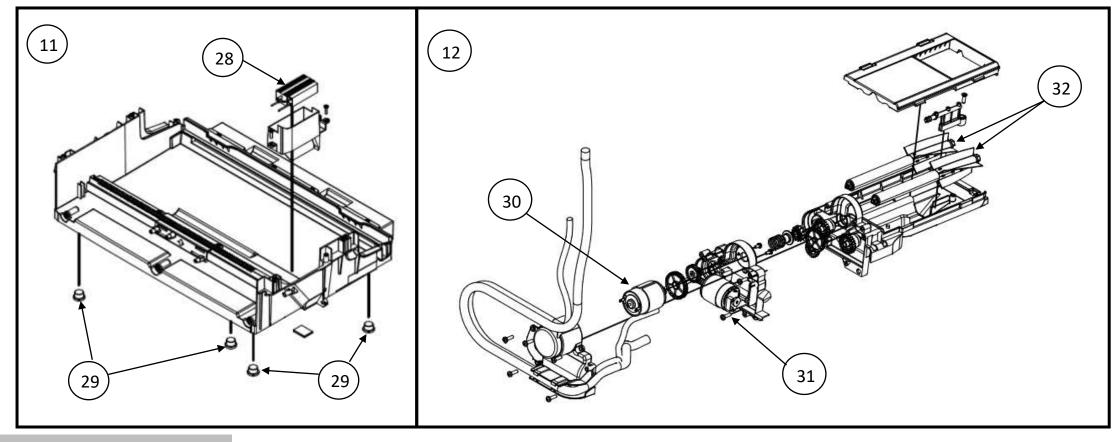
No	Part No	Description
10	.0 LG100W0005 Charging station module	
25	5 LG100P2021 LuLu-IR cover	
26	LG100P4002	Refilling seal sleeve
27	LG100PCB02X	LuLu-Dock board
39	9 LG100P2025 Retainer plate	
40	LG100P1004-01	Adapter 20V/3.0A 100~240VAC
41	LG100W0011	Vacuum pump module
42	LG100P1003	LuLu-Blower
43	LG100W0012	LuLu-Charging contact module



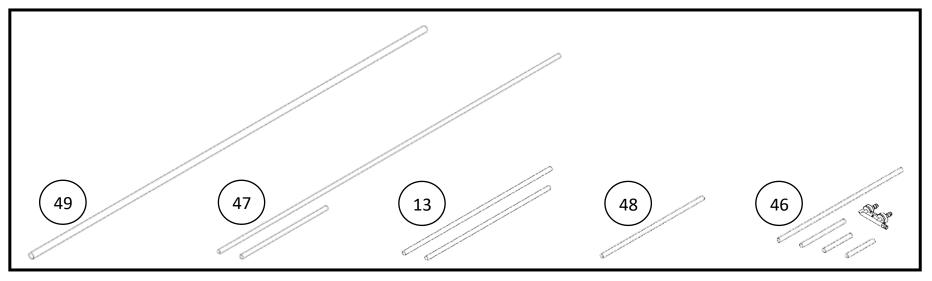
4.10 LuLu Components Exploded View: Washing base & Washing

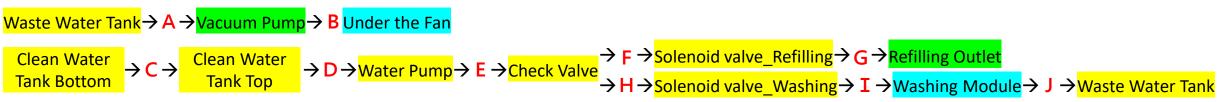
No	Part No	Description
11	LG100W0003	Washing base module
28	LG100P9001	PTC heater
29	LG100P7004	Round feet pad

No	Part No Description	
12	LG100W0004	Washing module
30	LG100W0001	Brush motor module
31	LG100W0002	Translation motor module
32	LG100P2001	LuLu-Brush



4.10 LuLu Components Exploded View: Pipes



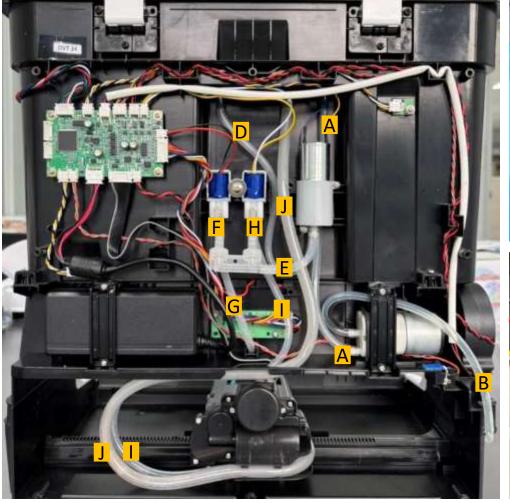


No	Part No	Description	Pipe/Length	Diameter
13	LG100W0027	LuLu-Vacuum pump pipe kits	A (230mm)+B (275mm)	
48	LG668P0107-08	LuLu-Clean water tank pipe (4*6mm) 190mm	<mark>C</mark> (190mm)	
46	LG100W0028	LuLu-Water pump and check valve pipe kits	D (230mm) + E (80mm) F&H (50mm) + check valve	4*6 mm
47	LG100W0029	LuLu-Washing and refilling pipe kits	G (160mm) + I (640mm)	
49	LG100P4102	LuLu-Waste water pipe (6*9mm) 740mm	J (740mm)	6*9 mm

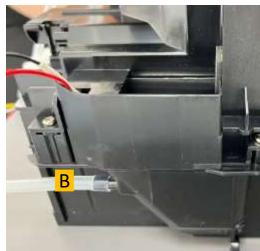
4.11 Pipe Introduction

Waste Water Tank \rightarrow A \rightarrow Vacuum Pump \rightarrow B Under the Fan

```
Clean Water Tank Bottom \rightarrow C \rightarrow Clean Water \rightarrow D \rightarrow Water Pump \rightarrow E \rightarrow Check Valve \rightarrow H \rightarrow Solenoid valve_Washing \rightarrow I \rightarrow Washing Module \rightarrow J \rightarrow Waste Water Tank
```





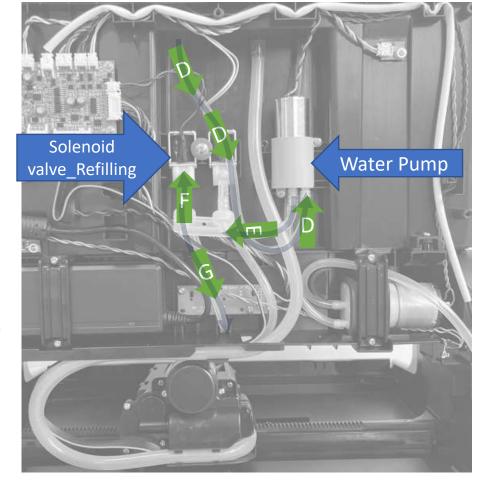


4.11 Refilling Water Flow

Clean Water Tank Bottom \rightarrow C \rightarrow Clean Water Tank Top \rightarrow D \rightarrow Water Pump \rightarrow E \rightarrow Check Valve \rightarrow F \rightarrow Solenoid valve_Refilling \rightarrow G \rightarrow Refilling Outlet





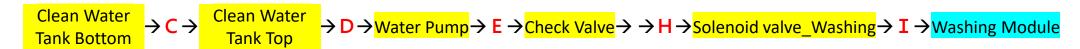






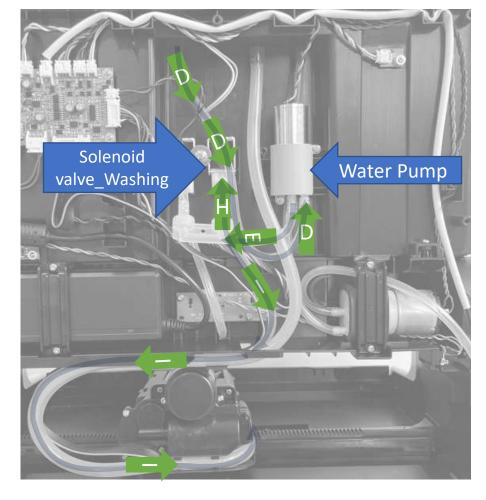
Refilling complete: LuLu will stop refilling LEGEE's water tank after 50 seconds or when LEGEE detects the water tank is full

4.12 Washing Water Flow











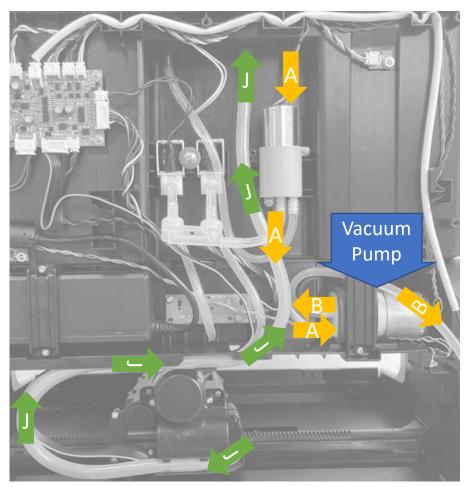
4.13 Waste Water Flow

This pipe is behind the water pump

Washing Module \rightarrow J \rightarrow Waste Water Tank \rightarrow A \rightarrow Vacuum Pump \rightarrow B Under the Fan

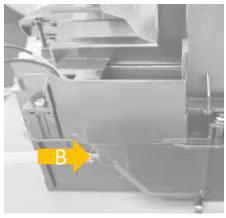
Waste Water

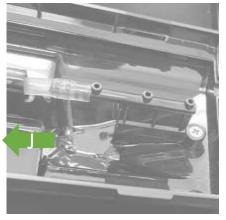
Air



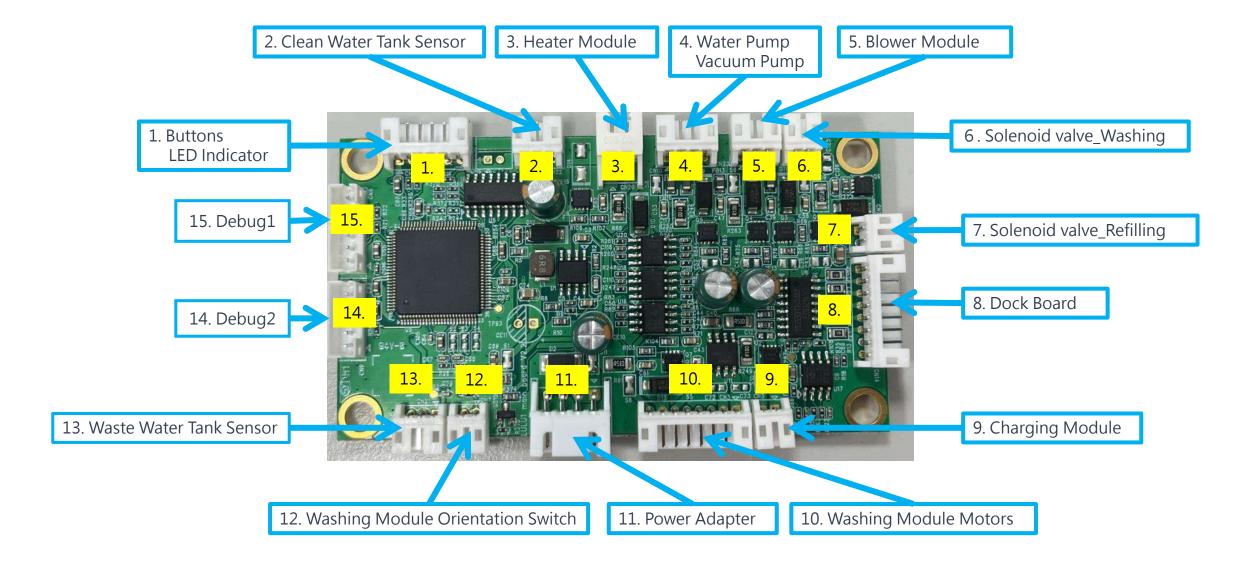




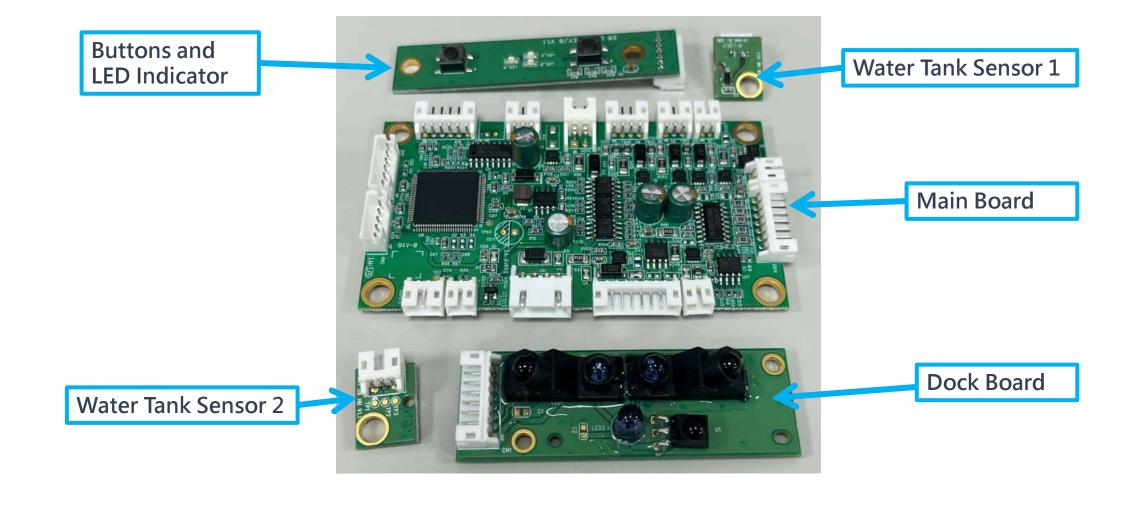




4.14 LuLu Main Board Layout

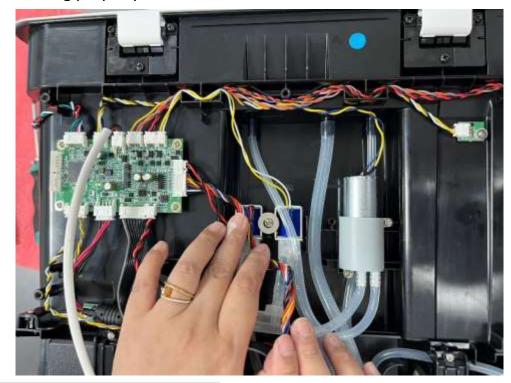


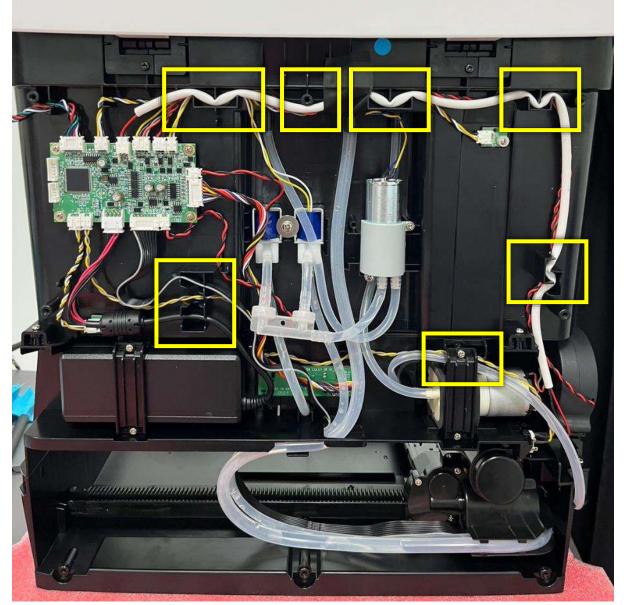
4.15 LuLu PCB Boards



4.16 LEGEE LuLu After Maintenance: Wires Check

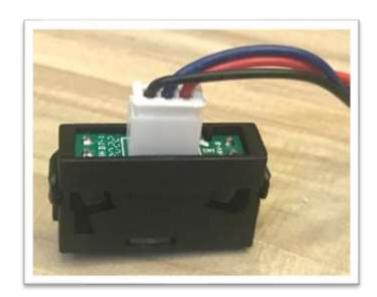
- Make sure the Solenoid valves are placed and connected to the pipes correctly.
- Make sure Water Pump and Vacuum Pump are connected to the pipes correctly.
- Make sure the wires and cables are not block the screw holes.
- Tidy all the wires and cables in the cable trucking and tuck in the PTC Heater cable (with white tube) to secure.
- Please use a LEGEE-688 remote control or engineering mode to remove water from the pipes and make sure all functions are working properly.



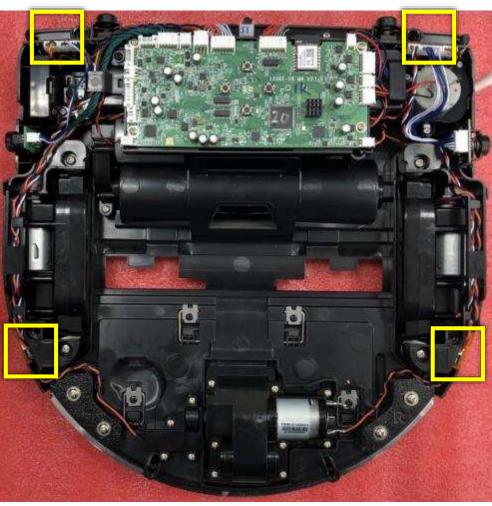


5. LEGEE-D8 Component Replacement Instruction					
5.1	7/D7/D8-Cliff Module LG700PCB04X Replacement	80			
5.2	Bumper Sensor Module LG700W0016 & IR Detect Switch Assembly LG888W0016 Replacement	81			
5.3	D8-Main Board LG888PCB01X Replacement	82			
5.4	D8-Front PCB Assembly LG888W0015 Replacement	83			
5.5	D7/D8-Brushroll Motor Module LG777W0023 Replacement	84			
5.6	D8-Sweep Motor Module LG888W0019 Replacement	85			
5.7	D8-Crankshaft Assembly LG888W0013 Replacement	86			
5.8	D8-Lifting Motor Module LG888W0027 Replacement	87			
5.9	D7/D8-Side Brush Module LG777W0014 Replacement	89			
5.10	7/D7/D8-Speaker LG700P8006-01 Replacement	90			
5.11	Wheel Repair & Replacement	91			
5.12	D7/D8-21700 Li-ion Battery LG777P1001 Replacement	96			
5.13	Water Pump LG668P0093B & D8-Pipe Kits LG888W0024 Replacement	97			
5.14	D8-22N Vacuum Motor Assembly LG888W0007 Replacement	99			
5.15	D8-Inject Water Module LG888W0061 & D8-Rear Board LG888PCB04X Replacement	100			
5.16	7/D7/D8-Lidar LG700P1002-01 Replacement	101			
5.17	D8-Trash Bin Motor Module LG888W0018 Replacement	105			
5.18	D7/D8-Dock Board LG777PCB05X Replacement	107			

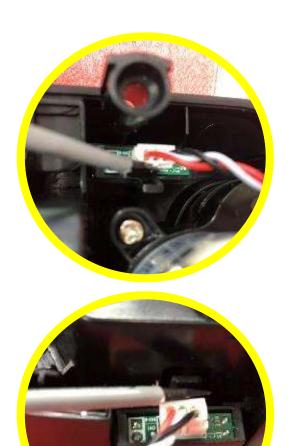
5.1 7/D7/D8-Cliff Module Replacement LG700PCB04X



7/D7/D8-Cliff module



The position of Cliff Module after disassembly

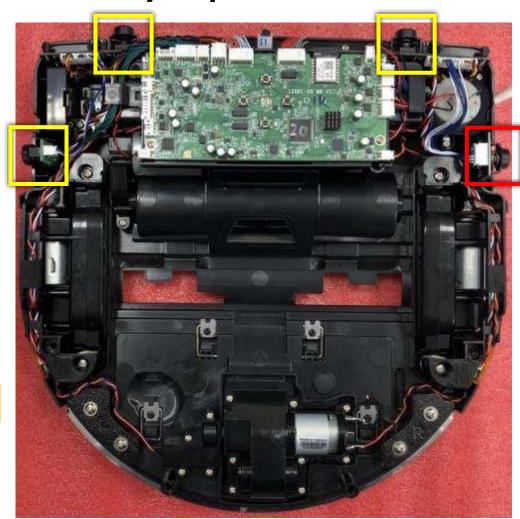


Tip: Use a flat tip screwdriver to remove the Cliff Module from the base

5.2 Bumper Sensor Module Replacement LG700W0016 & IR Detect Switch Assembly Replacement LG888W0016



7/D7/D8-Bumper sensor module



- Bumper sensor module
- IR detect switch assembly



D8-IR detect switch assembly

5.3 D8-Main Board Replacement LG888PCB01X



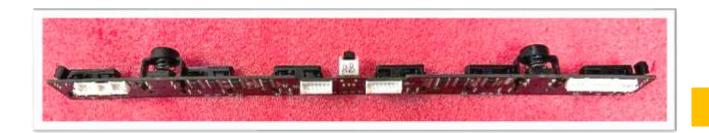
Remove 4pcs screws

D8-Main Board

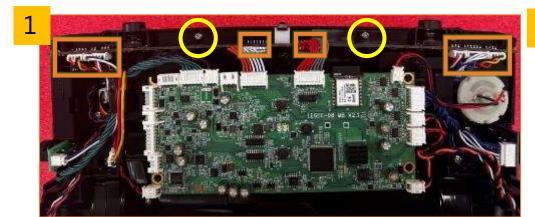
Important!! Please calibrate after replacing Main Board

See 3.16 LDS Calibration

5.4 D8-Front PCB Assembly Replacement LG888W0015



D8-Front PCB Assembly



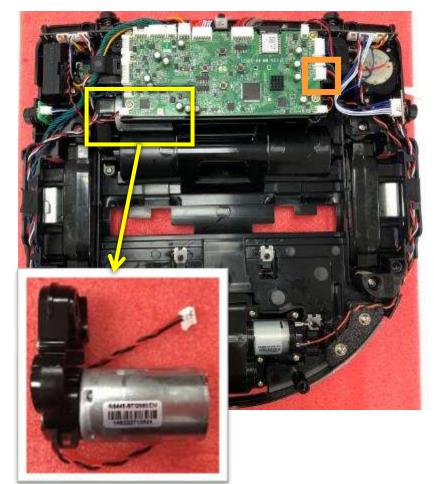
Remove 4pcs screws



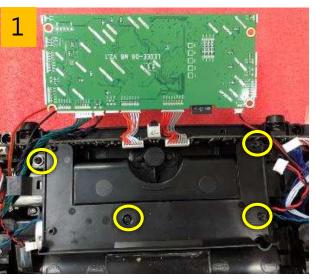
Remove the cover to fin the D8-Front PCB Assembly

5.5 D7/D8-Brushroll Motor Module Replacement LG777W0023

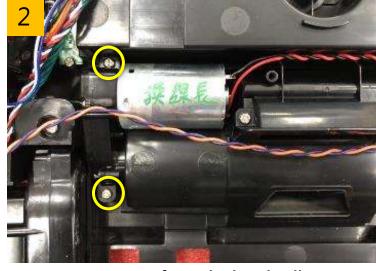
Please remove the main board in advance, See 5.3 D8-Main Board Replacement



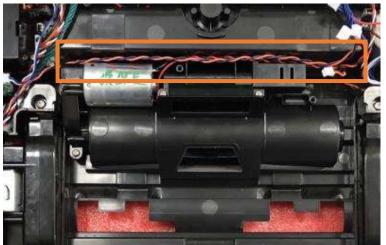
D7/D8-Brushroll Motor Module



Remove 4 screws to unveil the cover

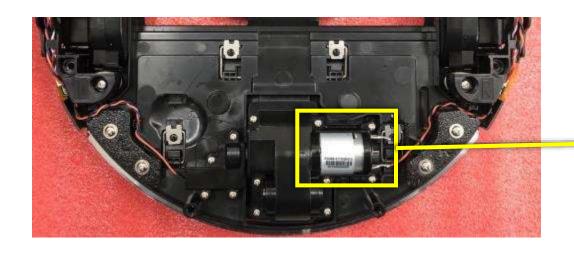


Remove 2 screws from the brushroll motor



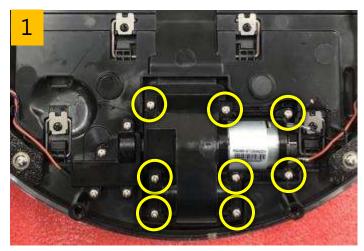
The wires should be organized and positioned at the original place

5.6 D8-Sweep Motor Module Replacement LG888W0019



Sweep Motor Module

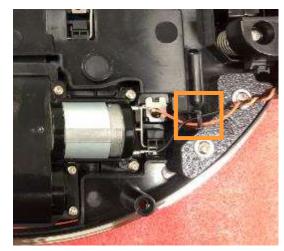




Remove 8 screws to unveil the cover

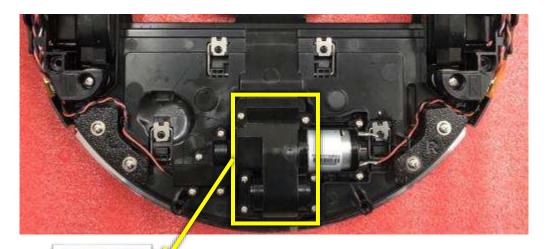


The overall look after disassembly



The wires should be organized and positioned at the original place

5.7 D8-Crankshaft Assembly Replacement LG888W0013



Remove 8 screws to unveil the cover

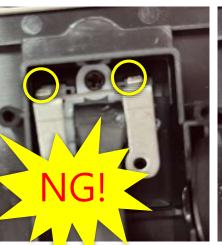
Remove 2 screws



D8-Crankshaft Assembly



Press till in place

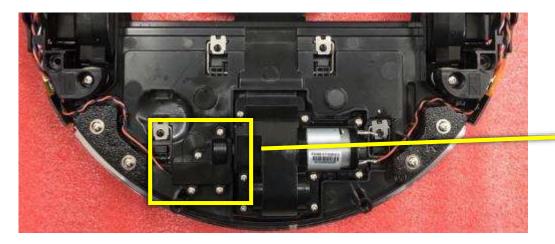




The metal hook should be tuck under the plastic

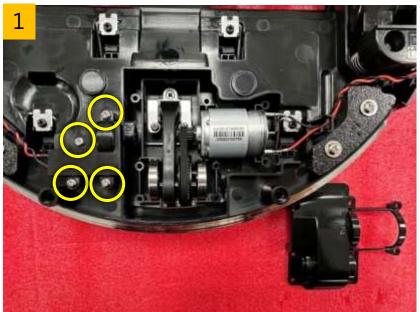
5.8 D8-Lifting Motor Module Replacement LG888W0027

Remove the Crankshaft cover in advance, See 5.7





D8-Lifting Motor Module







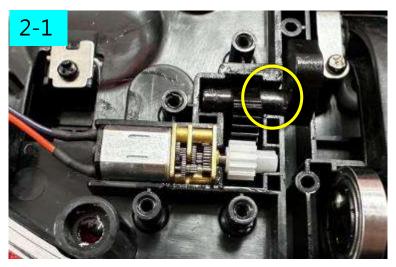


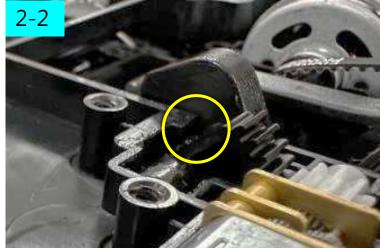
Remove 4 screws to unveil the cover

Next Page

5.8 D8-Lifting Motor Module Replacement LG888W0027

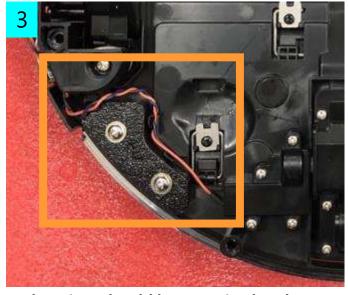
The Black and White gear teeth should mesh each other





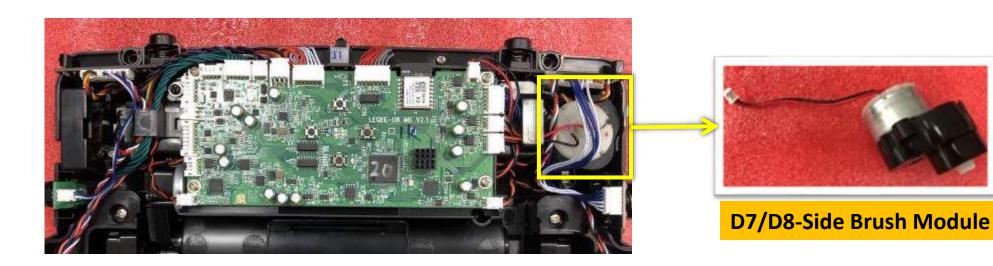
The black gear's shaft should be lower than the recess's top

Install Back Instruction



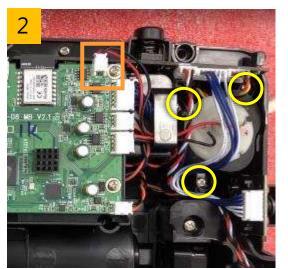
The wires should be organized and positioned at the original place

5.9 D7/D8-Side Brush Module Replacement LG777W0014



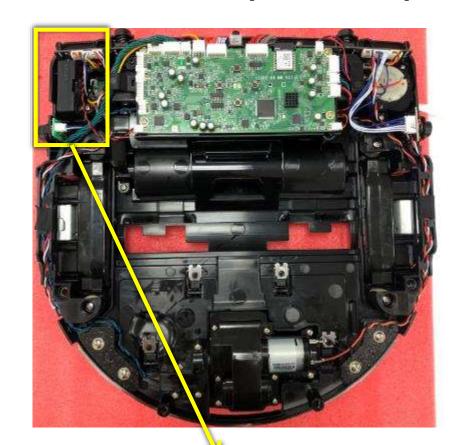


Remove the side brush

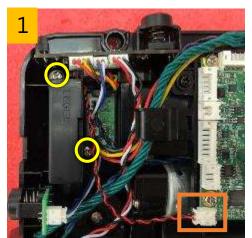


Remove 3 screws and unplug the wire connection

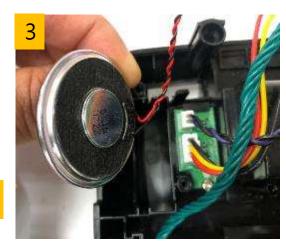
5.10 7/D7/D8-Speaker Replacement LG700P8006-01







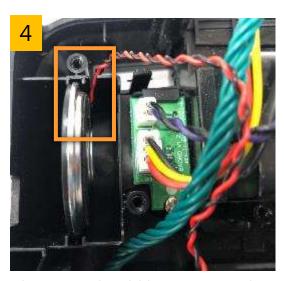
Remove 2 screws and unplug the wire connection



Remove speaker

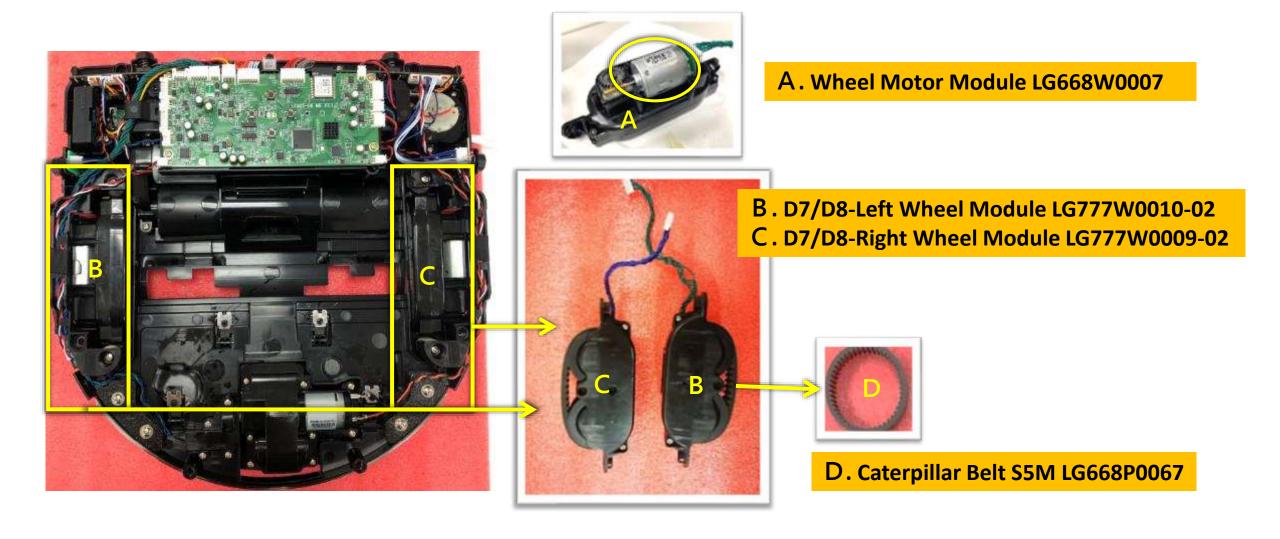


Unveil the plastic cover



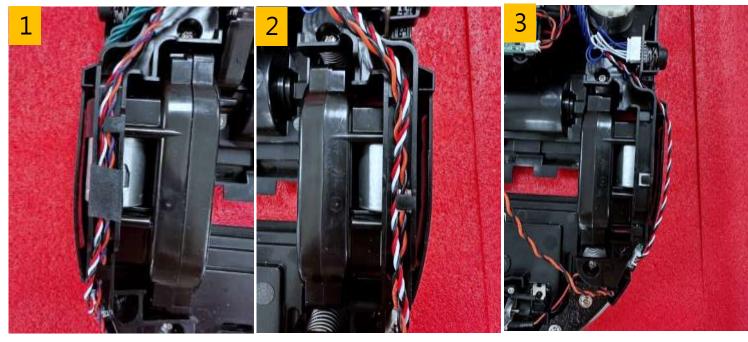
The wires should be positioned at the original place after maintenance

5.11 Wheel Repair & Replacement

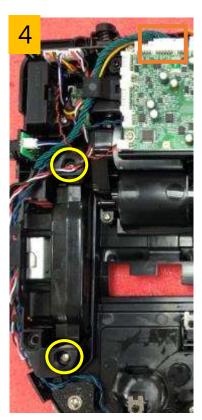


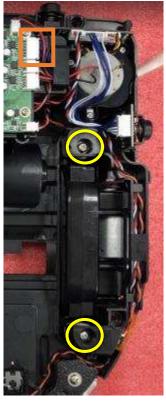
5.11 Wheel Repair & Replacement

D7/D8-Left Wheel Module LG777W0010-02 D7/D8-Right Wheel Module LG777W0009-02



Remove the tape to withdraw the wires





Remove 2 screws and unplug the wire connection from each side

5.11 Wheel Repair & Replacement: Install/Uninstall the Wheel Module

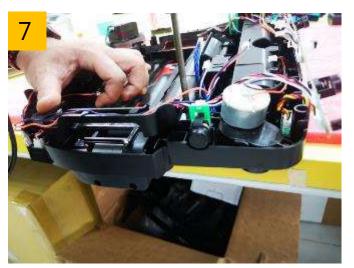




Notice! The springs may bump off!



Remove the Wheel Module



Tip: Working on the edge of the table is helpful for assembly

5.11.1 Caterpillar Belt S5M Replacement LG668P0067





Remove 4 screws

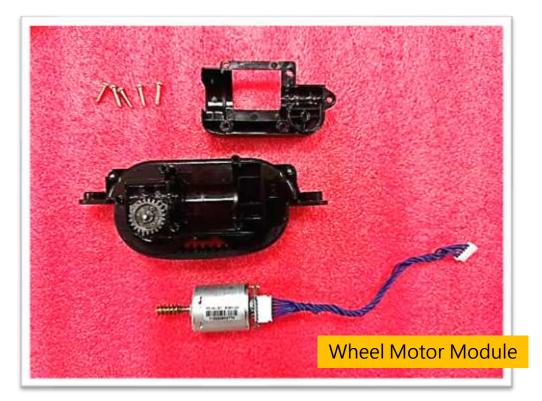


- 1.Belt and Wheel's teeth should mesh each other
- 2. 2 Wheels(with screws) should face toward the same side.



Install the gear back at correct position

5.11.2 Wheel Motor Module Replacement LG668W0007





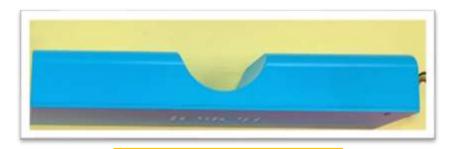
Remove 5 screws





- 1. Please check the grease condition after disassembly
- 2. Please refer to Picture A for the correct grease amount. To add sufficient(not overflow from the cover

5.12 D7/D8-21700 Li-ion Battery Replacement LG777P1001



21700 Li-ion Battery



Remove 3 screws

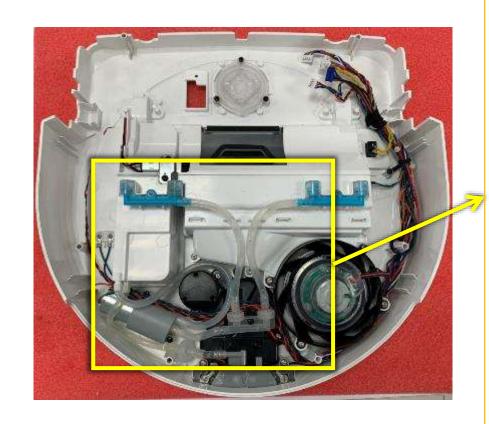


The overall look of disassembly

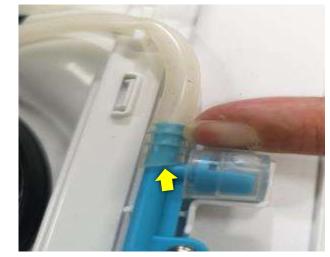


Unplug the wires

5.13 Water Pump Replacement LG668P0093B & D8-Pipe Kits Replacement LG888W0024







Make sure the pipes are firmly plugged in

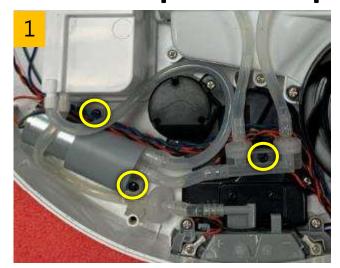


Don't fold the pipe

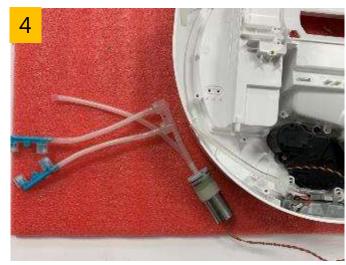
D8-Pipe Kits

Next Page

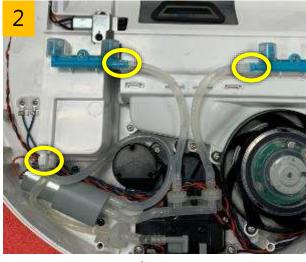
5.13 Water Pump Replacement LG668P0093B & D8-Pipe Kits Replacement LG888W0024



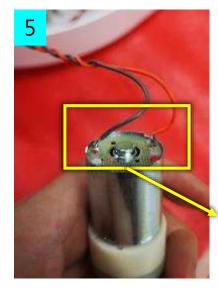
Remove 3 screws



The look of disassembly



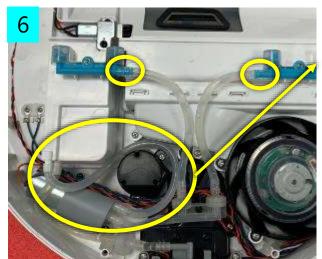
Disconnect 3 pipe's connections



Disassemble the wire before replacing the water pump



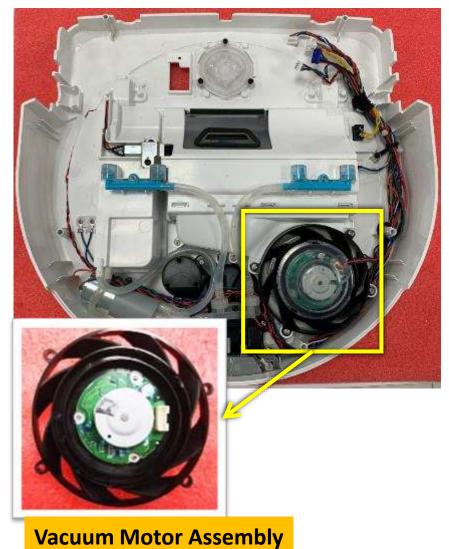
Unveil the plastic cover

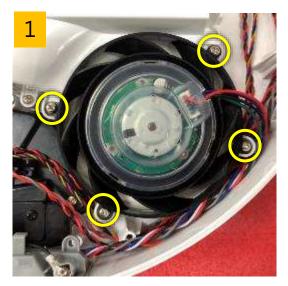


The short pipe is connected to the nozzle, the longer pipe is connected to the water tank and the pump

Arrange the pipes in S-shape to avoid blockage

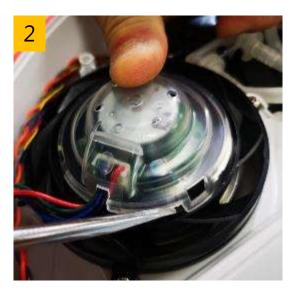
5.14 D8-22N Vacuum Motor Assembly Replacement LG888W0007





Remove 4pcs screws

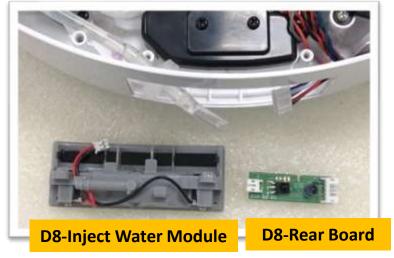


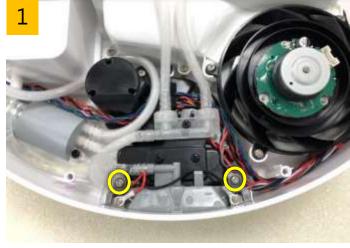


Use flat head screwdriver to lift the cover

Unplug the wires and then take out the motor

5.15 D8-Inject Water Module Replacement LG888W0061 D8-Rear Board Replacement LG888PCB04X





Remove 2 screws from the Inject water module



Press the clip to remove the complete module



Disconnect the water pipe



Slide out the rear board

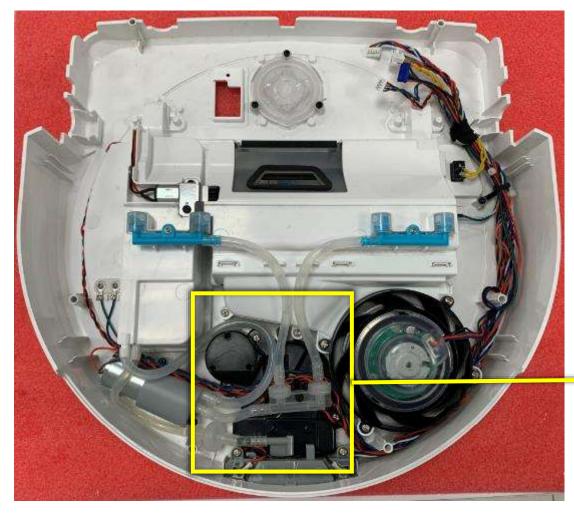


The look of disassembly



Unplug the connection to replace a new rear board

5.16 7/D7/D8-Lidar Replacement LG700P1002-01



The wires should be positioned at the original place and fastened by an electrical tape after maintenance.

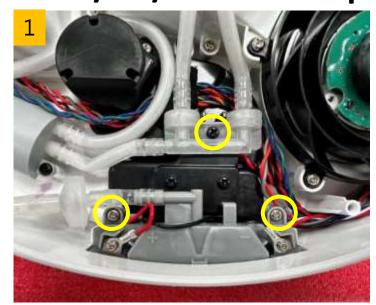






Next Page

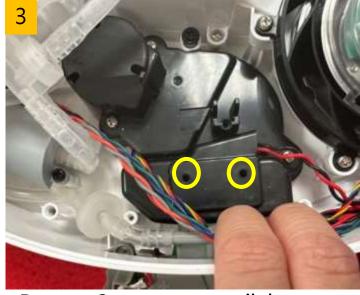
5.16 7/D7/D8-Lidar Replacement LG700P1002-01



Remove 3 screws to loose the check valve and Inject Water Module



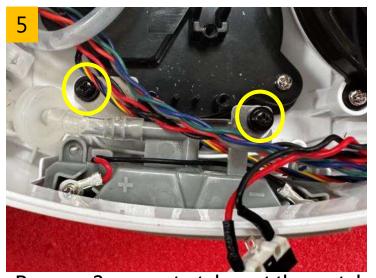
Remove inject water module and the pipes



Remove 2 screws to unveil the cover

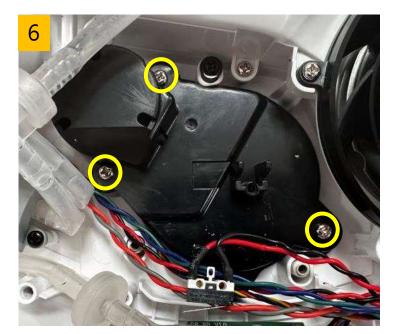


Remove Lidar head hit sensor



Remove 2 screws to take out the metal plate

5.16 7/D7/D8-Lidar Replacement LG700P1002-01



Remove 2 screws to unveil the plastic cover



Remove the electrical tape

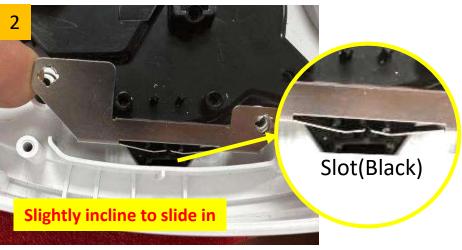


Unplug the connection

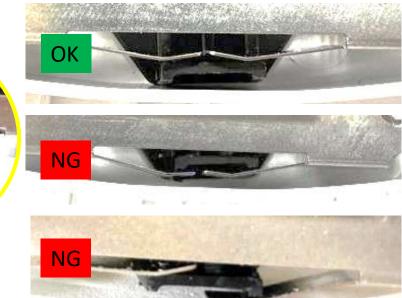
5.16 7/D7/D8-Lidar Replacement LG700P1002-01 Install Back Instruction

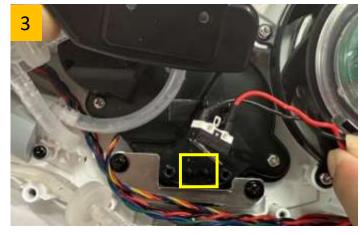


Put back the electrical tape and cover back. Fasten with 3 screws



The metal plate shall be position properly. The spring shall locate in the slot.

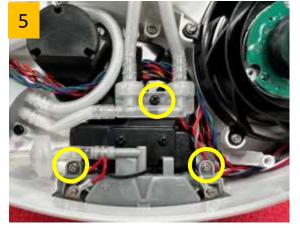




Install Lidar head hit sensor against to the pillars and cover back. Fasten with 3 screws.



The wire need to pass through the cover.



Screw back the pipes and Inject Water Module

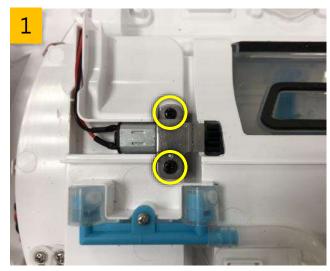
Important!!
Please calibrate
after replacing LDS

See 3.16 LDS Calibration

5.17 D8-Trash Bin Motor Module Replacement LG888W0018 Include the water level detectors



Trash Bin Motor Module (with water level detectors)



Remove 2 screws to take out the metal plate on the motor



Remove 2 screws (the water level detectors)

from the wires



Remove 1 screw then take out the Trash bin motor module

5.17 D8-Trash Bin Motor Module Replacement LG888W0018

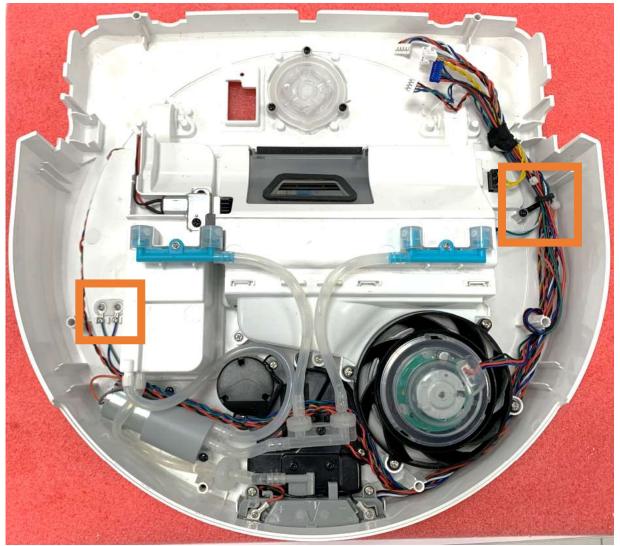
Install Back Instruction



Wire end's bump side up.
Put in the screw



Place a silicon gasket from the screw's end



The wires should be organized and positioned at the original place

Please tidy up the wires along the side and the slots accordingly.

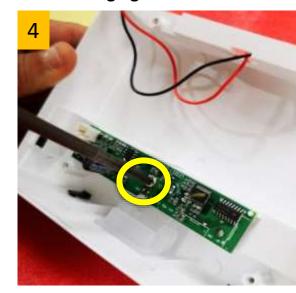
5.18 D7/D8-Dock Board Replacement LG777PCB05X



D7/D8-Dock Board



Unscrew 4pcs screws on the back side of the charging station



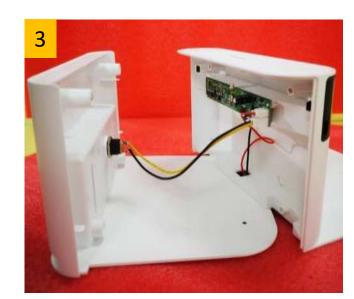
Unscrew 1pc screw then unplug the wire



Unscrew 2pcs screws on the bottom of the charging station



Take out the dock board



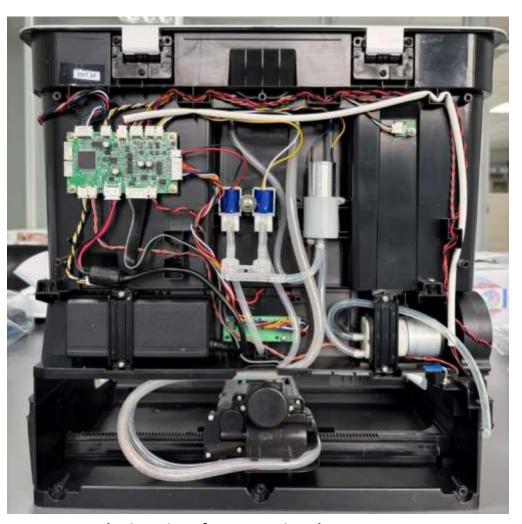
Disassemble the charging station

6. L	EGEE	LuLu Component Replacement Instruction	Slide No.			Slide No.
	6.1	LuLu-Rear Cover LG100P2006 Replacement	109	6.14	LuLu-Blower LG100P1003 Replacement	119
	6.2	LuLu-Top Cover LG100P2004 & LuLu-Top Cover Bracket LG100P2008/LG100P2007 Replacement	110	6.15	Separation LuLu-Water Tank Station ModuleLG100W0006 &	120
	6.3	LuLu-Front Cover LG100P2005 Replacement	111		LuLu-Charging Station ModuleLG100W0005	
	6.4	LuLu-Button LG100P4001/LG100P2009/LG100PCB04X	112	6.16	LuLu-IR Cover LG100P2021 Replacement	121
	0.4	Replacement	112	6.17	LuLu-Charging Contact Module LG100W0012	122
	6.5	LuLu-Hall Sensor LG100PCB03X Replacement	113		Replacement Separation	_
	6.6	LuLu-Main Board LG100PCB01X Replacement	114	6.18	LuLu-Charging Station ModuleLG100W0005 &	124
	6.7	LuLu-Solenoid Valve_Refilling LG100P1006-01 & LuLu-	115		LuLu-Washing Base ModuleLG100W0003	
		Solenoid Valve_Washing LG100P1007-01 Replacement		6.19	LuLu-PTC Heater LG100P9001 Replacement	126
	6.8	Check Valve LG700P2023 Replacement	116	6.20	Take Down Washing ModuleLG100W0004 Replacement	127
	6.9	LuLu-Refilling Seal Sleeve LG100P4002 Replacement	116	C 21	LuLu-Translation Motor Module LG100W0002	420
	6.10	LuLu-Water Pump & Water Pump Support	117	6.21	Replacement	128
		LG668P0093B/LuLu-Water Pump Support Replacement		6.22	LuLu-Brush Motor Module LG100W0001 Replacement	130
	6.11	LuLu-Vacuum Pump Module LG100W0011/LuLu- Retainer Plate LG100P2025 Replacement	117	6.23.1	LuLu-Washing and refilling pipe kits -Washing Pipe: G LG100W0029 Replacement	131
	6.12	Adapter 20V/3.0A 100~240VAC & Retainer Plate LG100P1004-01/LuLu-Retainer Plate Replacement	118	6.23.2	Lulu-Washing and refilling nine kits Refilling Dine: T	132
	6.13	LuLu-Dock Board LG100PCB04X Replacement	118			

6.1 LuLu-Rear Cover Replacement LG100P2006



Unscrew 8pcs screws to remove rear cover



The interior after removing the rear cover

6.2 LuLu-Top Cover Replacement LG100P2004 LuLu-Top Cover Bracket Replacement LG100P2008/LG100P2007

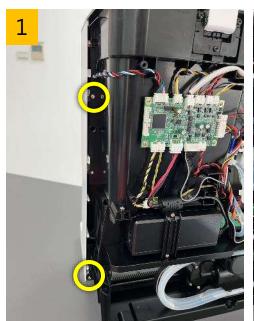


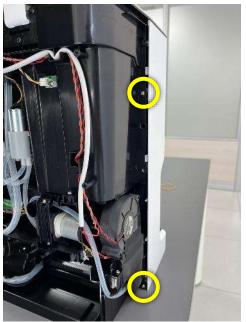
Top Cover/Top Cover Bracket



Unscrew 3pcs screws to disassemble the top cover

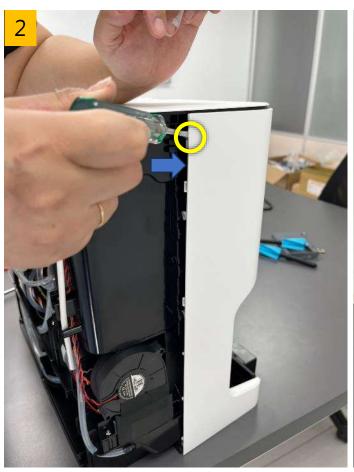
6.3 LuLu-Front Cover Replacement LG100P2005

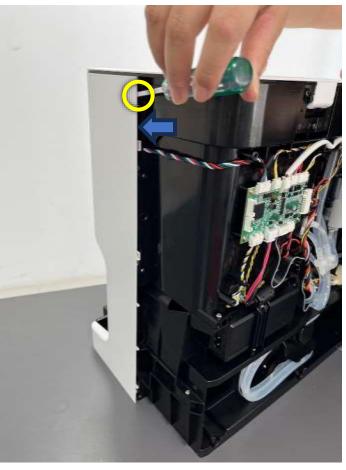






Unscrew 2pcs screws on each side and 2pcs screws in side of water tank container



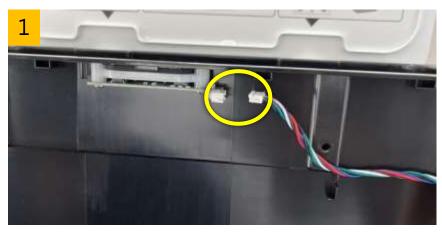


Use flat head screwdriver to lift the side of the cover

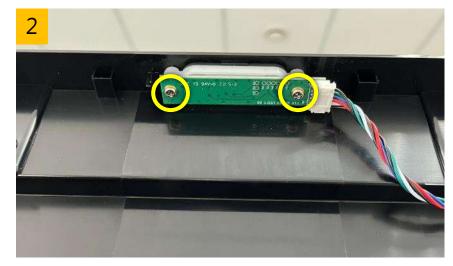
6.4 LuLu-Button Replacement LG100P4001/LG100P2009/LG100PCB04X



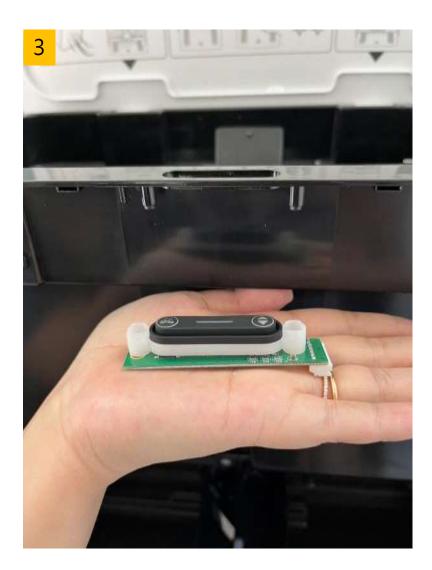
Button
Button support
Button Main Board



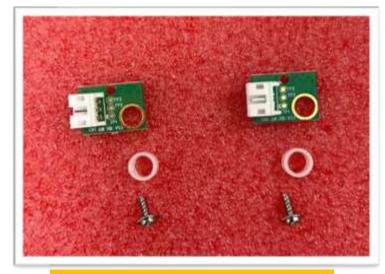
Disconnect the cable



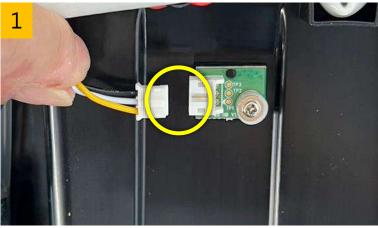
Unscrew 2pcs screws

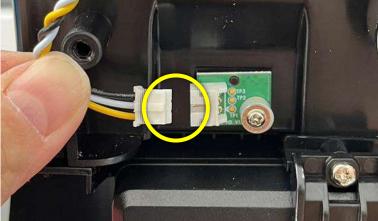


6.5 LuLu-Hall Sensor Replacement LG100PCB03X

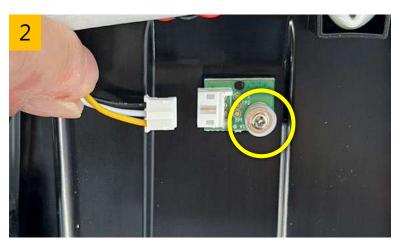


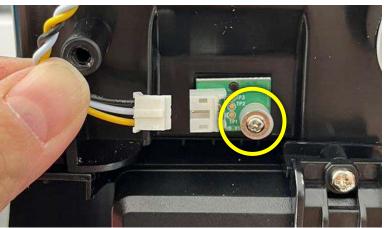
Hall Sensor (for both waster water tank and clean water tank)





Disconnect the cable



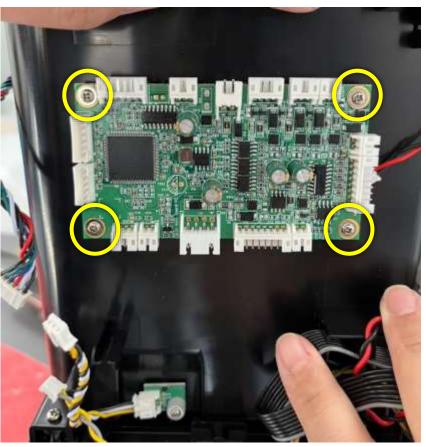


unscrew

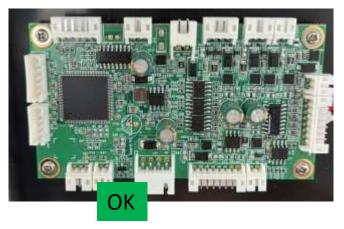
6.6 LuLu-Main Board Replacement LG100PCB01X



Main Board



Disconnect all the cables then unscrew 4pcs screws.

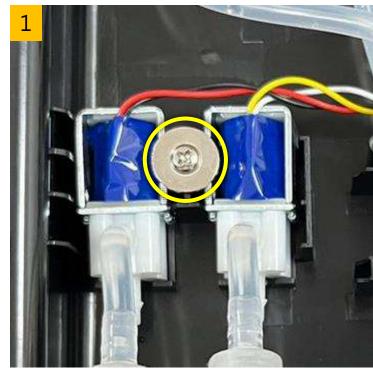


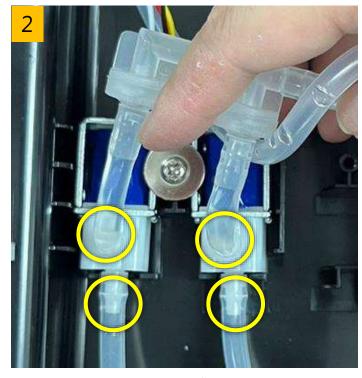


When re-install, please pay attention to make sure it is installed in correct orientation.

6.7 LuLu-Solenoid Valve_Refilling Replacement LG100P1006-01 LuLu-Solenoid Valve_Washing Replacement LG100P1007-01







Unscrew

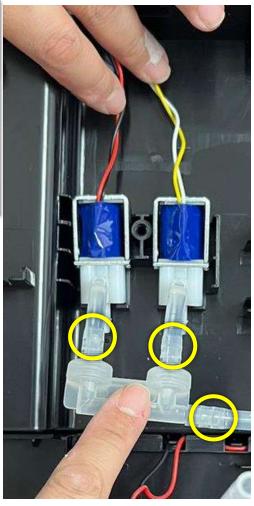
Disconnect the pipes

LuLu-Solenoid
Valve_Refilling
(Left side, red and blue wire)

LuLu-Solenoid
Valve_Washing
(Right side, yellow
and white wire)

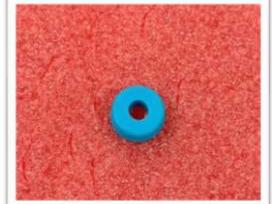
6.8 Check Valve Replacement LG700P2023

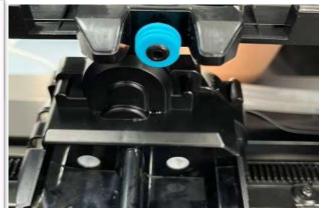
Check Valve



Disconnect the pipes

6.9 LuLu-Refilling Seal Sleeve Replacement LG100P4002





Refilling Seal Sleeve

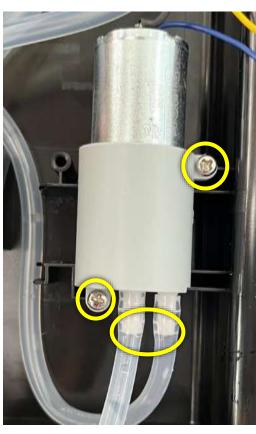


Remove by hand

6.10 LuLu-Water Pump Replacement LG668P0093B/LuLu-Water Pump Support Replacement LG668P0046-01



Water Pump
Water Pump Support



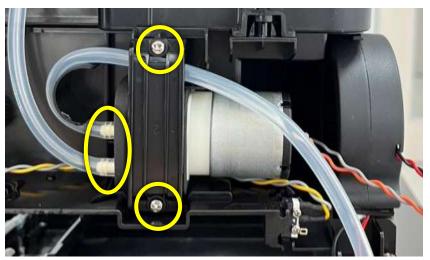
Unscrew 2pcs screws and disconnect 2 pipes

6.11 LuLu-Vacuum Pump Module Replacement LG100W0011/LuLu-Retainer Plate Replacement LG100P2025



Vacuum Pump

Retainer

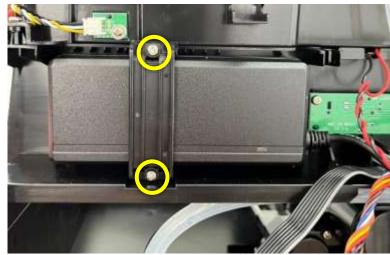


Unscrew 2pcs screws to remove the retainer and disconnect 2 pipes

6.12 Adapter 20V/3.0A 100~240VAC Replacement LG100P1004-01/LuLuRetainer Plate Replacement LG100P2025



Retainer/Adapter

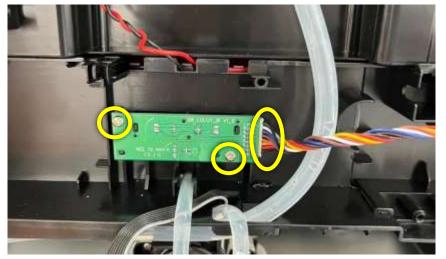


Unscrew 2pcs screws and remove the retainer to release adapter

6.13 LuLu-Dock Board Replacement LG100PCB04X



Dock Board

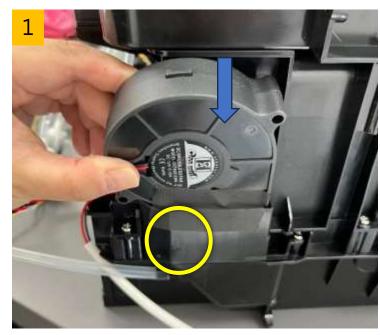


Disconnect the cable and unscrew 2pcs screws

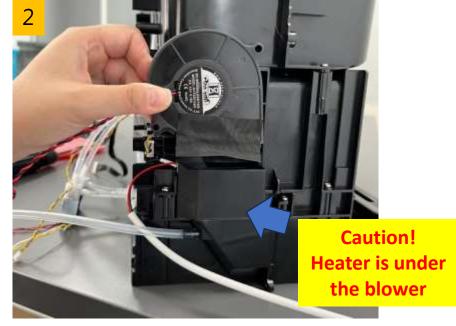
6.14 LuLu-Blower Replacement LG100P1003



Blower



Take out the top first

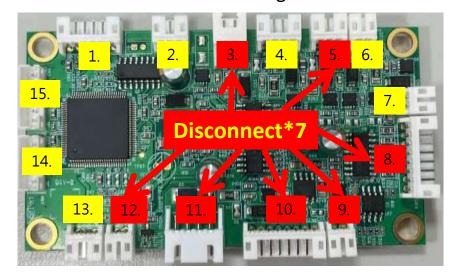


Remove the tape

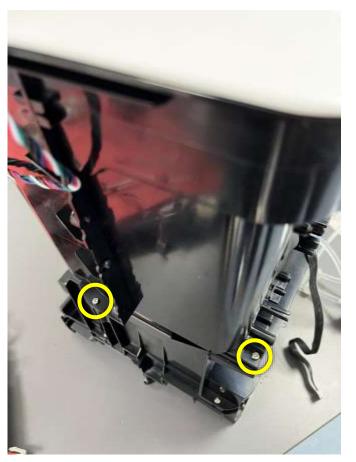
6.15 Separation: LuLu-Water Tank Station Module LG100W0006 & LuLu-Charging Station Module LG100W0005

Must disconnect all the cables, wires and pipes between two modules (marked in RED)

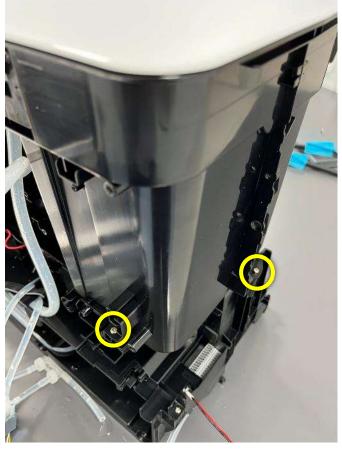
- 8 Cables and Wires
 - Dock Board → 1 wire → Charing contacts



- 4 Pipes
 - Waste Water Tank → A → Vacuum Pump
 - Washing Module → J → Waste Water Tank
 - Solenoid valve_Refilling → G → Refilling Outlet
 - Solenoid valve_Washing → I → Washing Module

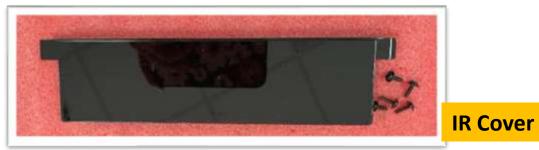


Unscrew 2pcs screws on the left



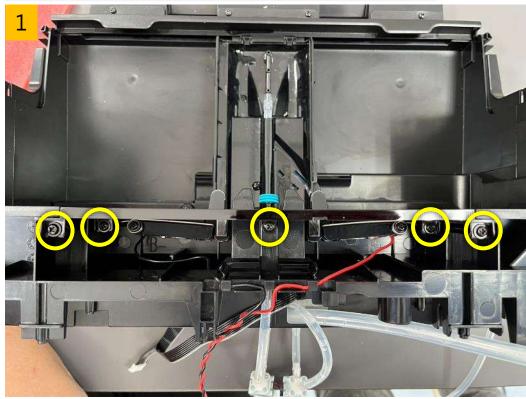
Unscrew 2pcs screws on the right

6.16 LuLu-IR Cover Replacement LG100P2021

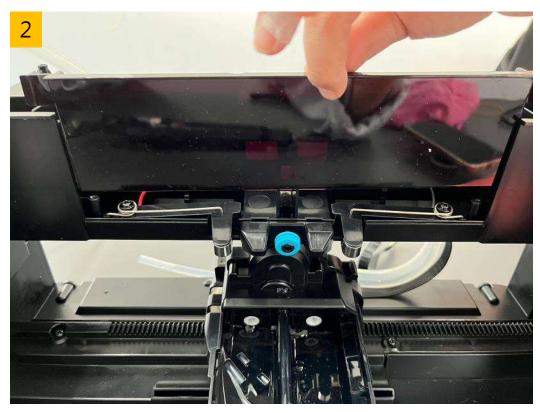


Must Separate LuLu-Water Tank Station Module & LuLu-Charging Station Module

See 6.15 Separation: LuLu-Water Tank Station Module & LuLu-Charging Station Module

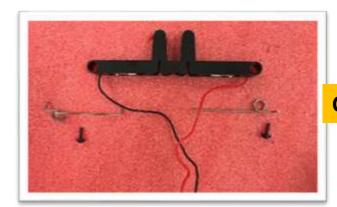


Unscrew 5pcs screws behind the IR cover



Slide up the IR cover

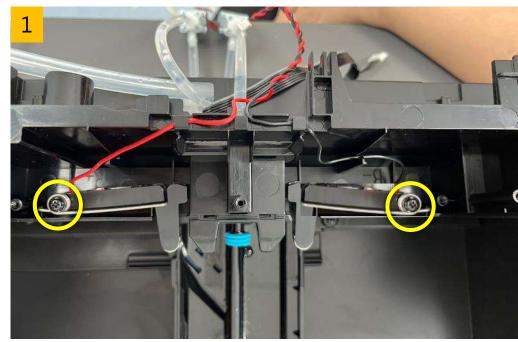
6.17 LuLu-Charging Contact Module Replacement LG100W0012



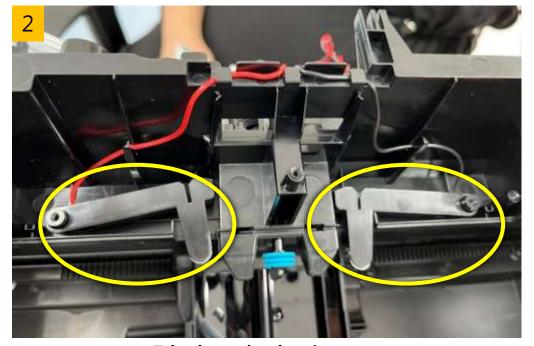
Charging Contact Module

Must Separate LuLu-Water Tank Station Module & LuLu-Charging Station Module

See 6.15 Separation: LuLu-Water Tank Station Module & LuLu-Charging Station Module



Unscrew 2pcs screws and remove the spring



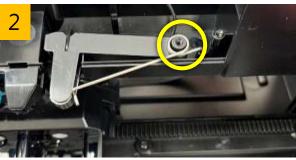
Take down the charging contact

6.17 LuLu-Charging Contact Module Replacement LG100W0012

Install Back Instruction



Install the charging contact, please pay attention to the wire color



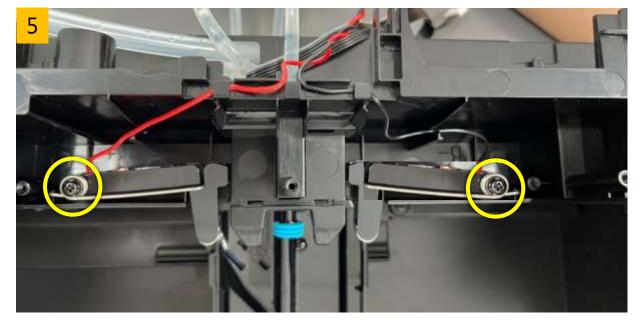
Hook the spring on the top of the charging contact





Secure the spring and insert the other end to the slot

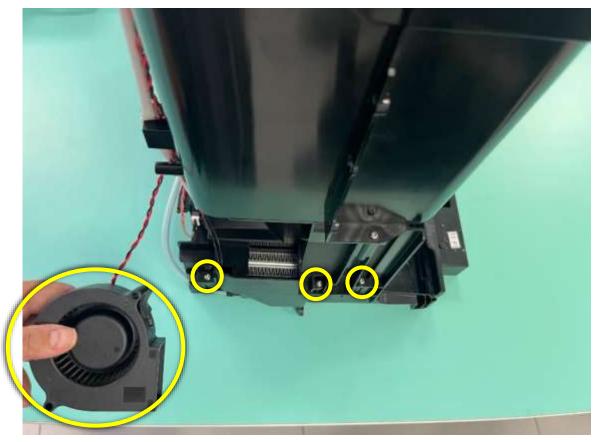
When facing the charging contacts
Red wire is on the left
Black wire is on the right

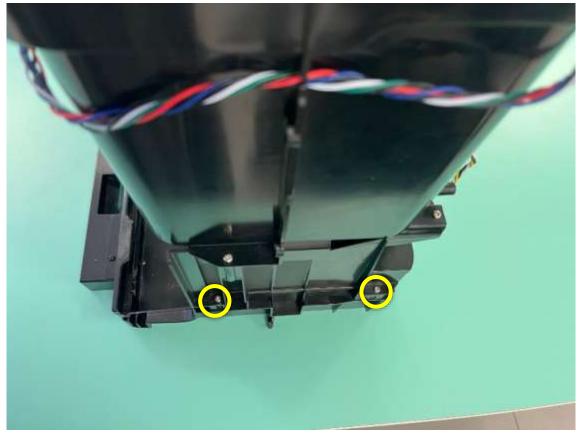


Screw back 2pcs screws

6.18 Separation: LuLu-Charging Station Module LG100W0005 & LuLu-Washing Base Module LG100W0003

Does not need to disconnect wires, cables or pipes.



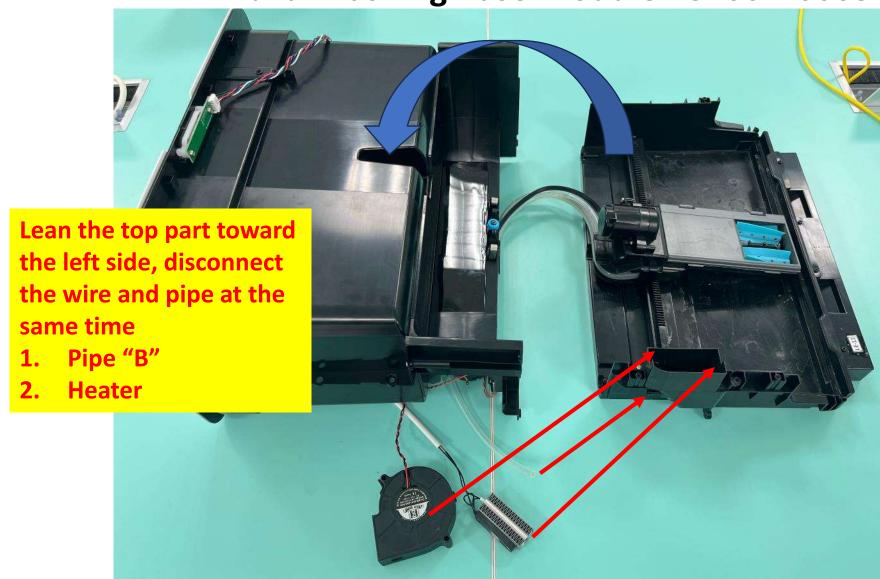


Remove blower

See 6.14 LuLu-Blower Replacement

Unscrew 2pcs screws on both sides

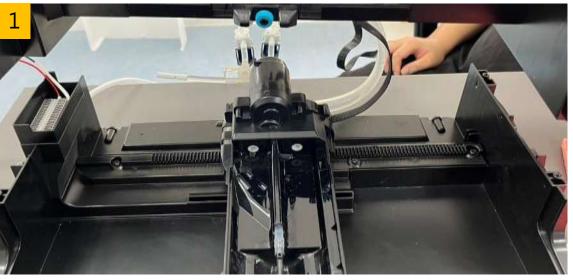
6.18 Separation: LuLu-Charging Station Module LG100W0005 & LuLu-Washing Base Module LG100W0003



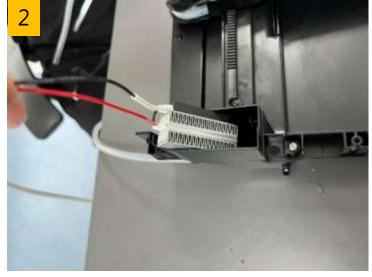
6.19 LuLu-PTC Heater Replacement LG100P9001



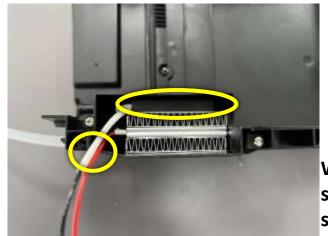
PTC Heater



Slightly Separate LuLu-Charging Station Module & LuLu-Washing Base Module

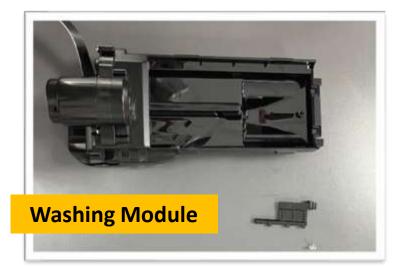


Take out the PTC heater



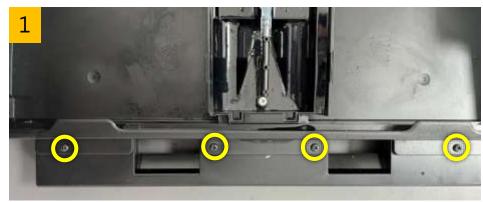
When installing the PTC heater, the wire should face inner side of the shell and make sure it passes through the gap

6.20 Take Down Washing Module LG100W0004



Does not need to Separate LuLu-Charging Station Module & LuLu-Washing Base Module Must disconnect the wires, cables and pipes:

- Cable: #10 Washing Module Cable
- Pipes: Washing Module → J → Waste Water Tank → I → Washing Module



Unscrew 4pcs screws to remove the front bar



the front bar



Unscrew 3pcs screws to detach the washing module from LuLu



The screw holes

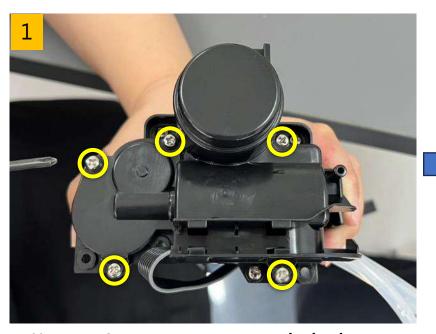
6.21 LuLu-Translation Motor Module Replacement LG100W0002

Must take down Washing Module from LEGEE-LuLu

See 6.20 Take Down Washing Module LG100W0004



Translation Motor Module



Unscrew 4pcs screws to remove the back cover



Disconnect the cable to remove the translation motor



After removing the back cover

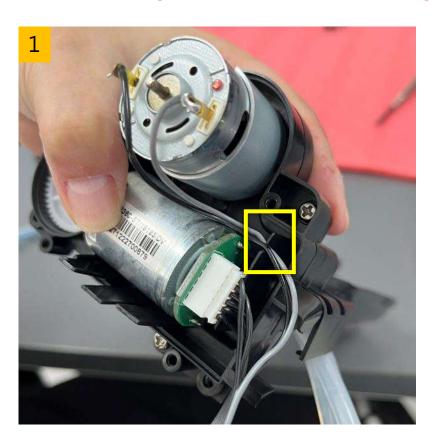


After removing the translation motor

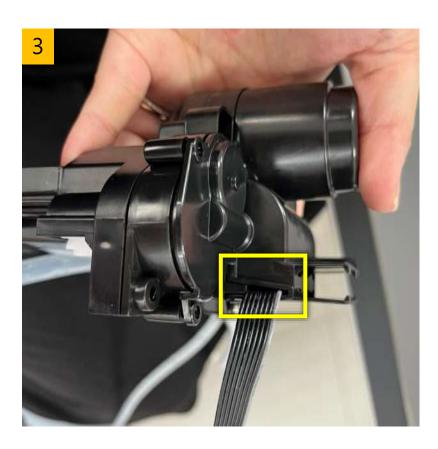
6.21 LuLu-Translation Motor Module Replacement LG100W0002

Install Back Instruction

Pay attention to loop the wire through the gaps







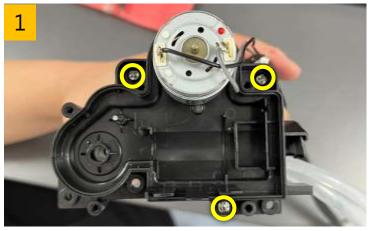
6.22 LuLu-Brush Motor Module Replacement LG100W0001

Must take down
Translation Motor from
Washing Module

See 6.21 LuLu-Translation Motor
Module Replacement



Brush Motor Module



Unscrew 3pcs screws to remove the middle cover



Flip to the right

Flip the middle cover to the right and unscrew 2pcs more screws



When reassembling, please ensure the spring is back in place before closing

6.23.1 LuLu-Washing and refilling pipe kits Replacement LG100W0029 Washing Pipe: G

Must take down Washing Module from LEGEE-LuLu

See 6.20 Take Down Washing Module



Remove the cleaning brushes and unscrew 1pc screw to remove the spraying nozzle



Disconnect the pipe from the nozzle

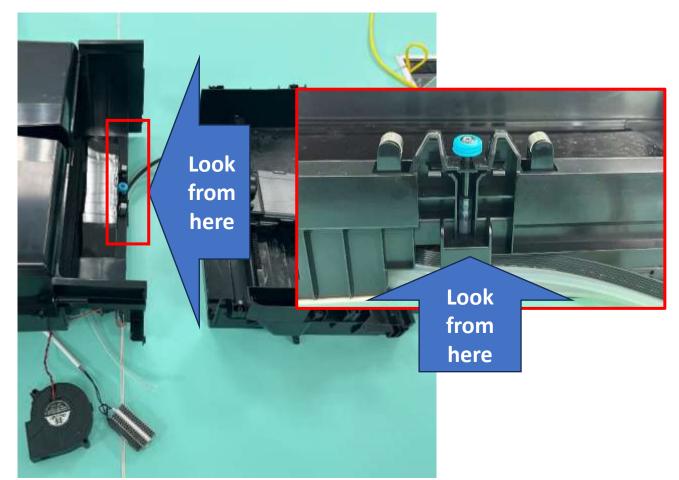


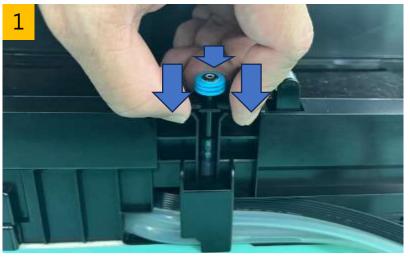
Flip to the back and remove the pipe

6.23.2 LuLu-Washing and refilling pipe kits Replacement LG100W0029 Refilling Pipe: I

Must Separate LuLu-Charging Station Module & LuLu-Washing Base Module and disconnect refilling pipe

See 6.18 Separation: LuLu-Charging Station Module & LuLu-Washing Base Module





Press down the latch with thumb and index finger and push out the refilling nozzle



Pull out to disconnect the pipe

7. FAQ		Slide No.
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	About Auto Recognition Mopping & Smart-Lifting Mopping Pad	136
	About Water Tank and LEGEE Detergent & Cleaning the Cleaning Cloth	137
	About Cleaning Effectiveness & Trash Bin	138
	About Maintenance and Accessories & APP Connection	139

About Recharging

About Recharging

LEGEE returns to the charging station without completing the cleaning task.	 The battery is low (orange and blue light flashing). LEGEE will resume cleaning after it's sufficiently charged. If LEGEE returns to the charging station with sufficient power: LEGEE may have misjudged the landscape due to the floor molding or due to moving furniture, closed doors and considered the task completed. LEGEE could also be blocked by narrow hallways or doorways so make sure to clear away the obstacles. Please check if there are virtual barriers blocking the way so LEGEE considered the task completed. Check if you have only chosen specific rooms instead of the entire house for the current cleaning task.
LEGEE cannot return to the charging station.	 Place the charging station in an open space or clear the objects around it and clean the sensors with clean dry cleaning cloth. Check if the adapter is properly connected to the charging station and is plugged into the power socket, the charging indicator will show blue light. There is adhesive—which leaves no stain on the floor—under the charging station for fixation, please make sure the charging station is firmly fixed on the ground.
Tips when charging LEGEE.	 It is advised to keep LEGEE switched on when charging, LEGEE will be able to return to the charging station automatically in case LEGEE is moved. The power consumption is very low when LEGEE is standing by, letting LEGEE stay connected to the charging station can help to maintain the battery's best performance.

About Navigation and Map Creation

About Navigation and Map Creation

What's LEGEE SLAM Navigation?	LEGEE (Lidar, Encoder, Gyro, E-compass, and Position Estimation) is our unique navigation system integrating 5 different technologies to help LEGEE to plan the best cleaning route, with FDS system, LEGEE is able to detect the small objects and avoid hitting them.
Does the full-length mirror affect the cleaning path of LEGEE?	The full-length mirror will affect LEGEE's detection of surroundings, please set up a virtual box/barrier to ensure LEGEE can move along the default cleaning path.
Is it necessary to tidy up the things on the ground before let LEGEE start to clean?	Please put away objects including wires, cloths, slippersetc. on the floor to improve cleaning efficiency and safety before LEGEE starts to clean.
Unable to save a default map.	The cleaned area must be larger than 3m ² . Use the "Quick Mapping" function so LEGEE will enter the rooms to make a brief scan and complete mapdrawing in a shorter period of time. Make sure LEGEE has not been moved or lifted off the floor during cleaning.
Conditions for using the default map for cleaning.	LEGEE will detect its surrounding area and see if it matches the default map before cleaning. The default map will be displayed if LEGEE is able to match the surroundings, the divided areas, virtual barriers and virtual boxes will also be followed when cleaning. When LEGEE failed to identify the default map and settings, it will clean thoroughly to create a new map.

About Auto Recognition Mopping & Smart-Lifting Mopping Pad

About Auto Recognition Mopping

If the thickness of the carpet is greater than 7mm?	The key factor is whether LEGEE sinks more than 7mm after climbing up on the carpet, instead of the height of the carpet. Additionally, do not use LEGEE on the shag/frieze carpet, LEGEE could be trapped and wet or damage the carpet.
Can LEGEE auto-switch to Dry mode when detecting the wooden floor?	LEGEE can't distinguish the material between different hard floors, please manually assign the cleaning modes on the App.
Can LEGEE be used to clean the marble/granite/epoxy floor?	LEGEE can work normally on the marble/granite/epoxy floor.
Can LEGEE work safely along the edge of the staircase?	There are 4 cliff sensors at the bottom of LEGEE to avoid LEGEE falling off the cliff that is deeper than 6cm.

About Smart-Lifting Mopping Pad

Can the mopping pad auto-lift while one wheel of LEGEE climbs up on the carpet and another is on the ground?	Though LEGEE will stop spraying water and lift the mopping pad automatically when it detects the carpet, it is suggested to use the room divider to define the carpet area on your map for best performance.
How to protect the wooden floor from the wet cleaning cloth after the cleaning task completion?	LEGEE can auto-lift the mopping pad while charging and after the cleaning task completion. Since there may be a situation where the cleaning cloth lightly touches the ground due to the mechanism tolerance, it's recommended to purchase the waterproof mat to protect the wooden floor.

About Water Tank and LEGEE Detergent & Cleaning the Cleaning Cloth

About Water Tank and LEGEE Detergent

Can the water tank be filled with any liquid, such as the electrolytic water.	For LEGEE and LuLu, pure water and the LEGEE detergent are the only 2 allowed liquids to fill in the water tank. Any liquid other than them may damage the water pipe or clog the pipes. Please clean the spray nozzle with the push pin if the spray nozzle is clogged. For LEGEE-LuLu, please use the enclosed TDS meter to make sure the water quality is between 5-300 to ensure the water level can be detected correctly.
After fill in the water, the App keeps showing the water tank is empty.	Please turn on LEGEE and let it operate for a bit while after filling in the water, then the water tank indication on the App will turn green. There is also a button on the App that can be pressed to test the water spray functions.
Is there a special wooden floor detergent available?	A special detergent for wooden floor is not available. An excellent cleaning result can be achieved with pure water added to the water tank only. Dry Mode is also a good choice to help you take care of the wooden floor if it can't be wet mopped. LEGEE detergent is suitable to clean the hard floor, in case you have delicate flooring material, we recommend trying it first in less noticeable or edge corners to confirm before using.

About Cleaning the Cleaning Cloth

The cleaning frequency of the cleaning cloth depends on personal request, it's recommended to clean the cleaning cloth every time after using it.	When use without LEGEE-LuLu, the cleaning frequency of the cleaning cloth depends on personal habit. As the flat-mop would trap the dirt on its front end to keep the mopping efficiency, it's recommended to clean the cleaning cloth every time after using it. When use with LEGEE-LuLu, you can set the washing frequency as you like.
What's LEGEE LuLu's power consumption when drying the mop?	The power consumption of the dryer is 25W, which means it consumes 0.025 kWh of electricity per hour. It can run for a maximum of 4 hours each time. If used every day for one month, it would consume $0.025 * 4 * 30 = 3$ kWh of electricity.

About Cleaning Effectiveness & Trash Bin

About Cleaning Effectiveness

Does the 800g mopping force of LEGEE-D8 reduce the mopping result compared to the 1800g mopping force of LEGEE 7?	LEGEE-D8 attaches with a specially designed cleaning cloth. Plus the 800g mopping force and 1300 times per minute reciprocate mopping, D8 brings an excellent cleaning result! Besides mopping, the Tangless Suction 4-in-1 is also the invention to deal with the regular hair and dirt.
Is it possible to cause LEGEE to move abnormally when it sucks in the small things like staples?	LEGEE can work normally as usual because it's designed with a large suction mouth and 2 filters, staples does not harm.
Which is better for cleaning long hair, LEGEE-D8, LEGEE-D7 or LEGEE 7?	LEGEE-D8, LEGEE-D7 and LEGEE 7 are all good for anti-tangling hair due to the front suction design. LEGEE-D7 is suitable for all-terrain, including the carpet and the hard floor; while LEGEE 7 can bring a outstanding mopping result when it comes to a sticky floor. If the user is seeking for both functions, then LEGEE-D8 would be the wise choice.

About Trash Bin

It shows that the trash bin is still full after you've emptied it and washed the filter.	LEGEE-D8 detects the electricity current to identify the trash bin's condition. If the trash bin is too full to weaken the suction power, the alert message would pop up. If the condition is not resolved after empty the trash bin, please clean or replace the screen filter. On the other hand, if the compressing flap cannot moves smoothly, please remove the hair or similar objects from the compressing flap.
How often does the compressor compress the trash?	LEGEE-D8 would compress the trash automatically. The user would not have to adjust the frequency. When the cleaning job is complete, D8 would compress one more time to make sure the trash is firmly compressed.
Would the compressor stuck if the trash bin contains solid or large object?	The compressing force is stable and mild. The solid or large object would consume more space than regular trash.

About Maintenance and Accessories & APP Connection

About Maintenance and Accessories

Why does the status icon stay red after I clean the sensors/refill the water/empty the trash bin?	Please enter the status detail under the maintenance menu and tick the "I have cleaned the sensors" box. Please let LEGEE clean for 3 minutes, so the pump can detect the water flow and the vacuum motor can detect the suction change, the status light will then turn green.
Are the consuming parts and accessories sharable in between D8 and D7?	D8 and D7 cleaning methods are different; therefore, their partial consuming parts and accessories are not sharable. D8 cleaning cloth and screen filter are different from D7's; while their side brushes, spray nozzles, and water bottles are the same.
How to clean the caterpillar belt?	Please let the wheel operate through the remote control via the App while cleaning it with wet cloth in one hand. If something gets stuck between the wheel and the belt, please contact a local retailer or authorized dealer.
Why LEGEE's side brush only designed on one side?	Since LEGEE cleans against the wall on the right side and the side brush can be extended to reach into narrow spaces, even if only a single side brush can deeply clean the corners.

About APP Connection

Unable to add LEGEE to the App via Wi-Fi.	 Please turn off LEGEE ten turn on again. Check if the Wi-Fi signal is stable, and if LEGEE and your smartphone are under the same Wi-Fi network. Check if the App needs an update. Check if you have entered a wrong Wi-Fi password. 	
LEGEE is offline.	 Check if the Wi-Fi or Hotspot signal is stable. If LEGEE has been moved to a different wireless network, please re-establish the connection between LEGEE and the App before use by adding LEGEE again. 	
Can LEGEE work when offline?	LEGEE can work following the schedule queue even when it is offline, all the cleaning data will be stored in the device first, when it is connected again, the stored data will show up on the App.	