

REPAIR GUIDELINE

Blower _ LBX6000



*Version: 1
Issue Date: 02/15/2019*

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Problem	Possible Cause	Fault Position	Test & Solution
Fail to start	PCBA is damaged.	PCBA in Handle	Replace PCBA in the handle.
	Motor is damaged.	Motor in Ducted Assembly	Measure the resistance between any two of the three cables in the motor and ducted assembly by using a multimeter. If the resistance is infinite, replace the motor and duct assembly.
Press the boost button/air velocity adjusting knob when the blower runs, the air velocity and the volume doesn't change.	PCBA is broken	PCBA in Handle	Replace PCBA in the handle.
The air velocity and the volume are decreased compared with normal use.	The fan in the duct is over-worn	Fan in Ducted assembly	Open the handle housing , take off the fan baffle and check the fan. If the fan is over-worn, replace the motor and duct assembly.

Tool List For Repair

LBX6000 Blower

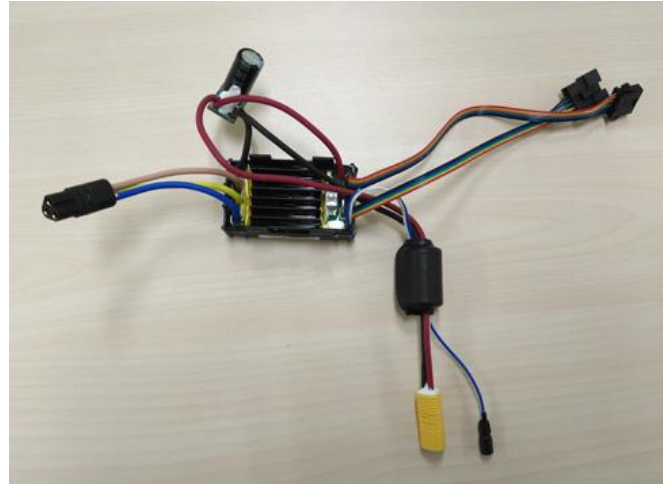
NO.	Tool List	SPEC	Remark
1	Magnetic bits		
2	Utility knife		To remove the label
3	Heat gun		
4	Heat -shrinkable sleeves	Φ7 mm	
5	Scissors		To remove the shrinkable sleeve
6	Multimeter		
7	Capacitor discharging fixture		

Part 1: Measure the PCBA, Motor and Internal Wire Assembly

Measure the PCBA, Motor and Internal Wire Assembly

LBX6000 Blower

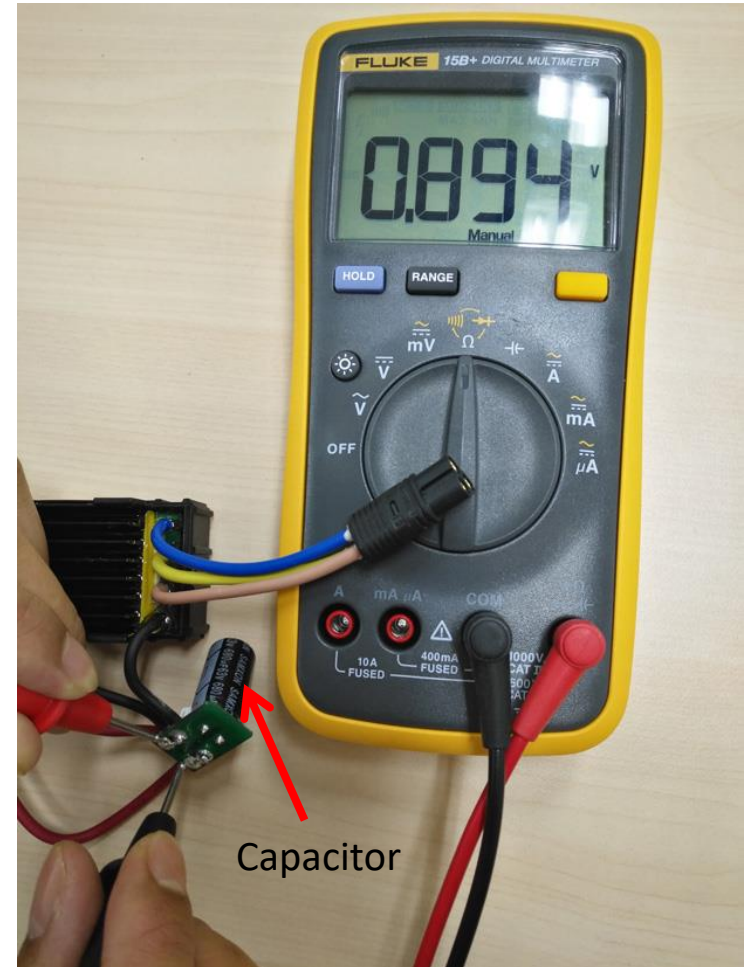
1. Following the instructions for **“How to Replace the Ducted Set and PCBA”** to Separate the PCBA from the blower.



PCBA Measurement

2. Find the capacitor in the PCBA and set the multimeter function to “Diode measuring”.
3. Contact the red pen pin to the negative electric contact (the joint that connects to black wire). Contact the black pen pin to the positive electric contact (red wire).

Notice: When the voltage is below 1V and buzzing sound stops, the discharging has finished.



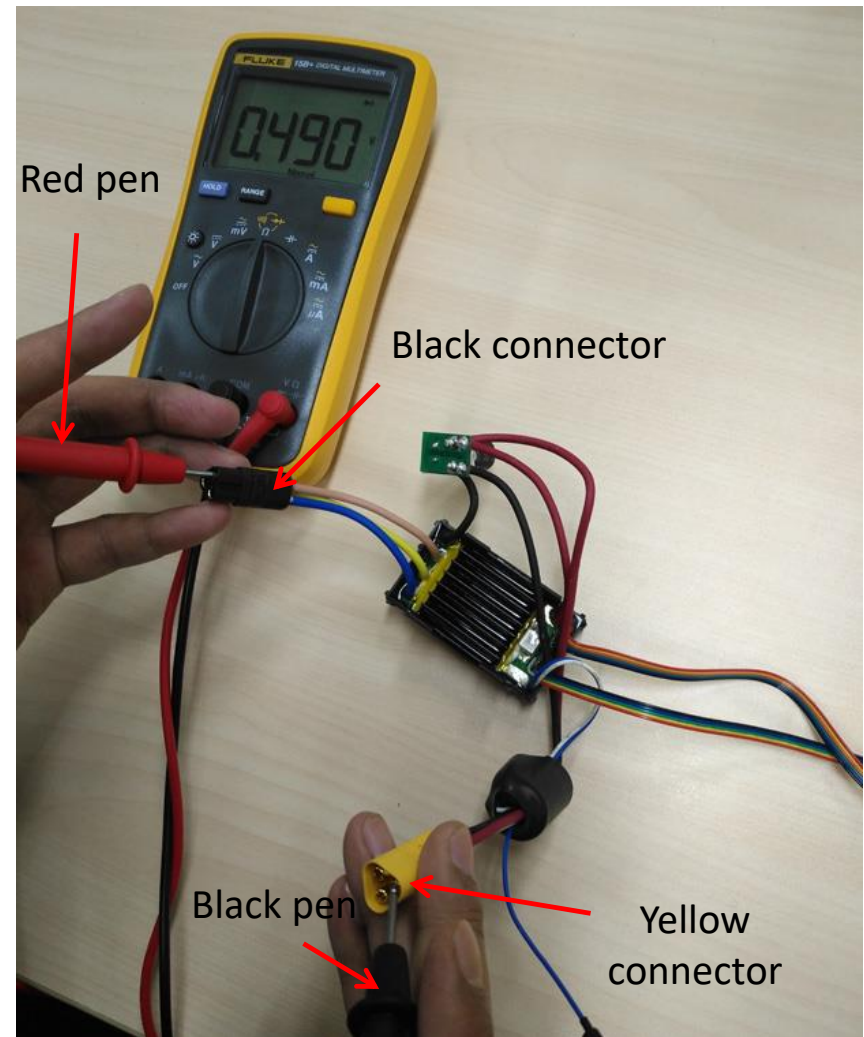
4. Set the multimeter function to “Diode measuring”.
5. Connect the black pen pin and red pen pin to the both side of the fuse.

Notice: If the voltage is not exceed 0.05V, means a good fuse, go to the next testing step; otherwise means a broken fuse, replace a new PCBA.



6. Contact the black pen pin to the contact (connect to the red line) of the yellow connector and red pen pin to the three contacts of the black connector (connect to the motor).

Notice : If the LCD displays 0.45~0.55V for each measurement, means a good upper MOSFET, go to the next testing step; otherwise means a broken PCBA, replace a new PCBA.

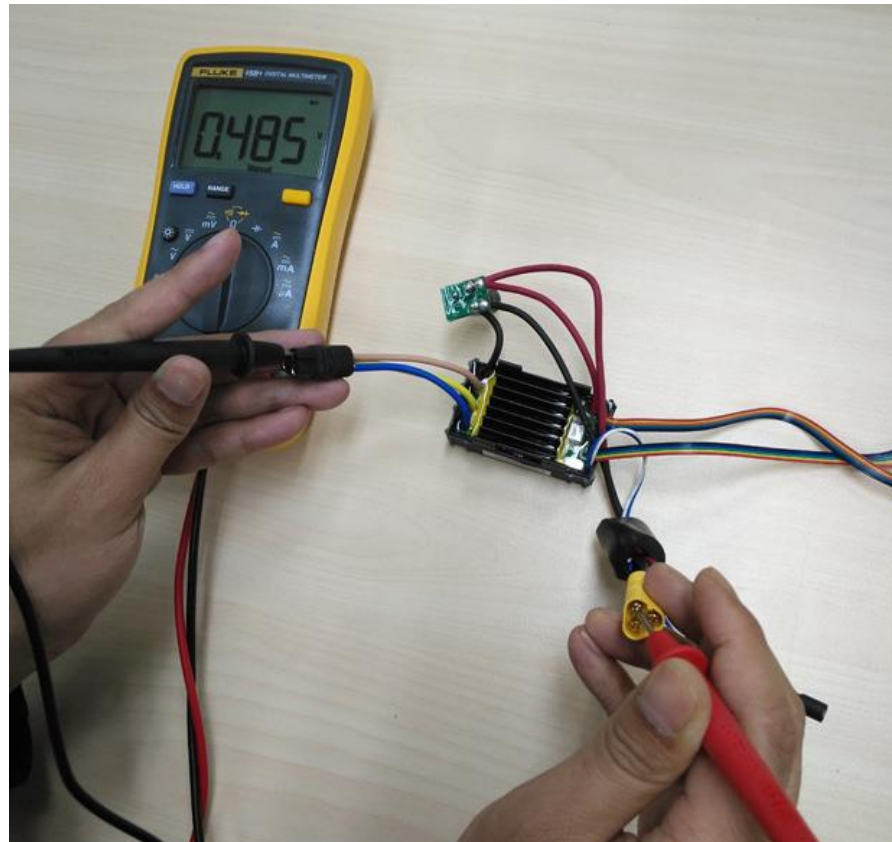


Measure the PCBA, Motor and Internal Wire Assembly

LBX6000 Blower

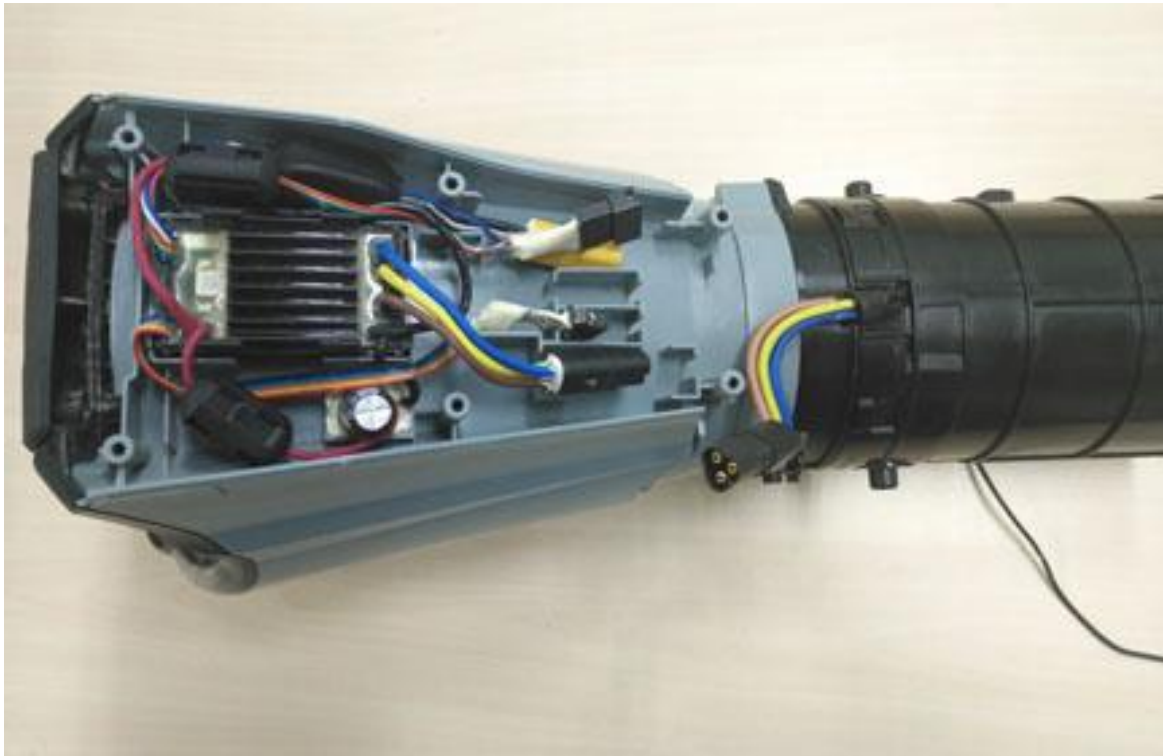
7. Contact the red pen pin to the contact with black wire of the yellow connector (connect to the internal wire assembly) and the black pen pin to the three contactors of the black connector (connect to the motor).

Notice: If the LCD displays 0.45~0.55V for each measurement, means a good PCBA; otherwise means a broken PCBA, replace a new PCBA.



PCBA Measurement

1. Following the instructions for “**How to Replace the Ducted Set and PCBA**” to disconnect the connector (Connect the motor with PCBA).



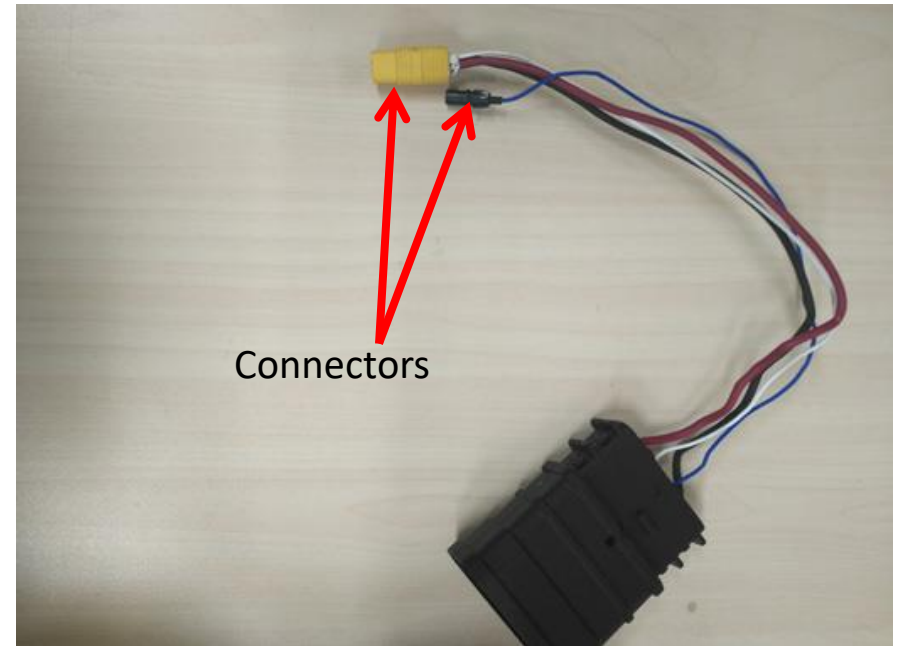
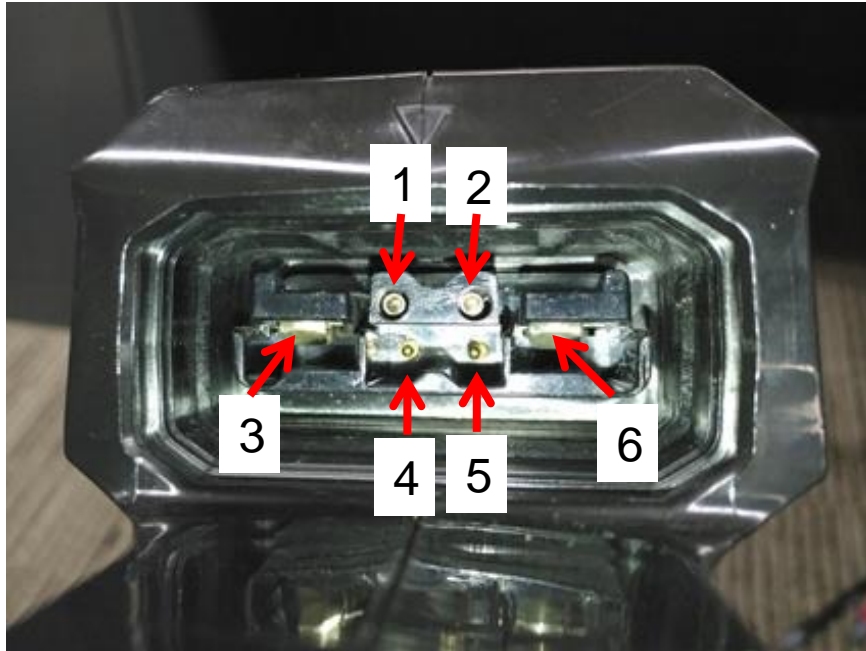
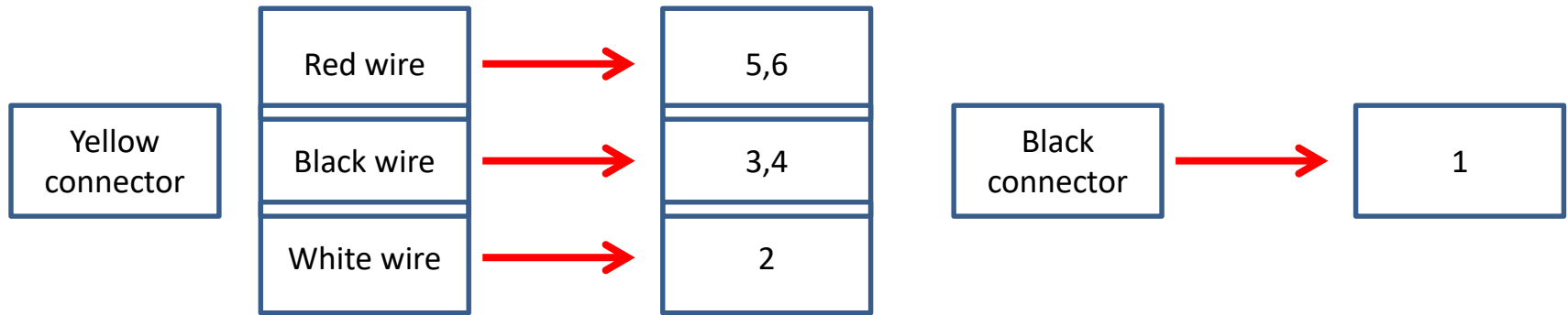
2. Set the multimeter function to “Resistance measuring”.
3. Measure the resistance between any of the two contactors.

Notice: If the resistance is not infinite, means a good motor. Otherwise, replace the damaged motor.



Measure the PCBA, Motor and Internal Wire Assembly

1. There is 6 contactors in the socket. Contact the black pen pin to the 6 contactors and the red pen pin to their corresponding contactors of the two connectors.



Internal Wire Assembly Measurement

2. Set the multimeter function to “Resistance measuring”.
3. If the resistance is infinite, the internal wire assembly is damaged and replace with a new one.



Internal Wire Assembly Measurement

Part 2: How to Replace the Ducted Set and PCBA

How to Replace the Ducted Set and PCBA

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1. Remove the 7 screws to separate the left handle set from the blower.



How to Replace the Ducted Set and PCBA

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2. Remove the parts list below and if any part is damaged, replace it.

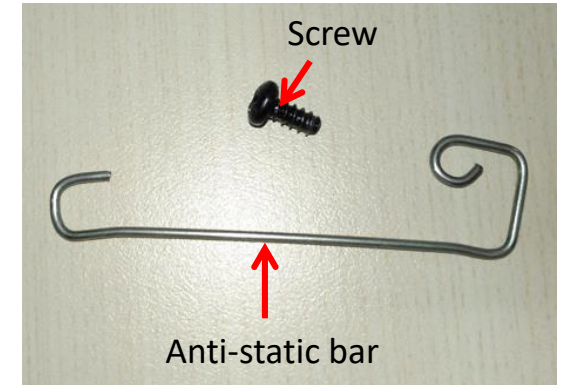


Description	Part Number	QTY.	Description	Part Number	Description	Part Number
Screw	5620479001	7	Connecting Lever	3129028001	Washer	3706657001
Spring	3660010001	1	Boost Button	3129029001	Lock Button	3129030001
Trigger	3129031001	1	Light Guide Pole	3128931001	Switch Cover	3125792001

How to Replace the Ducted Set and PCBA

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3. Remove the anti-static bar and separate right handle set from the blower.



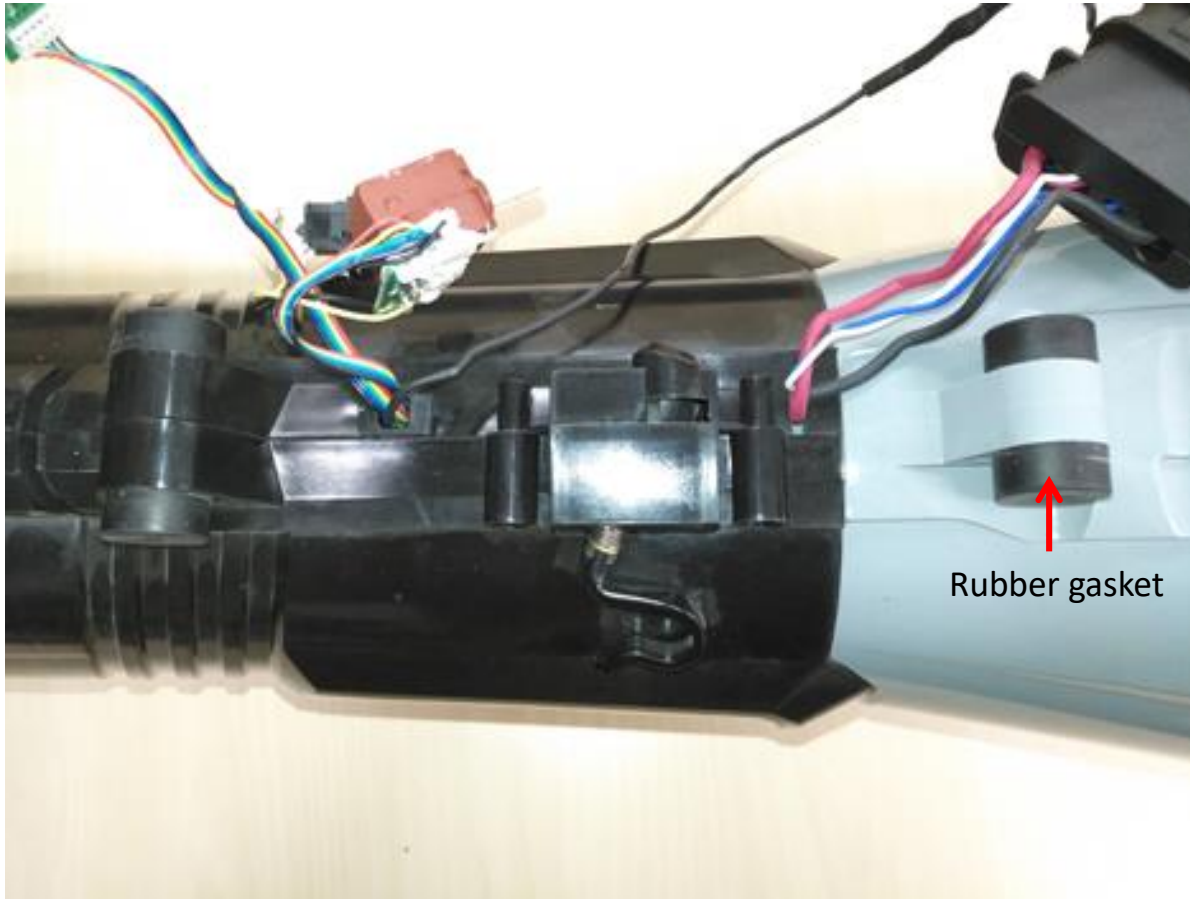
Description	Part Number	QTY.	Description	Part Number	QTY.
Screw	5610021004	1	Handle Set	3900006001	1
Anti-static Bar	3650201001	1			

Handle set

How to Replace the Ducted Set and PCBA

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4. Remove the four circular rubber gaskets.

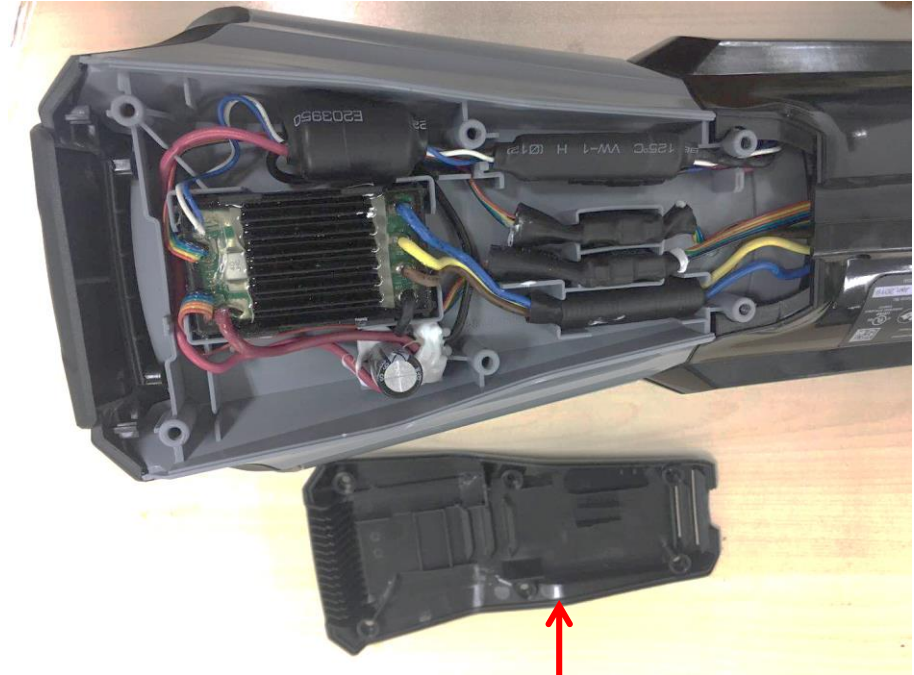


Description	Part Number	QTY.
Circular Rubber Gasket	5650519001	4

How to Replace the Ducted Set and PCBA

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5. Remove the lower housing by loosening the 6 screws.



Lower housing

Description	Part Number	QTY.
Lower Housing	3322284001	1

How to Replace the Ducted Set and PCBA

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6. Remove the 8 tapping screws and separate the housing set.

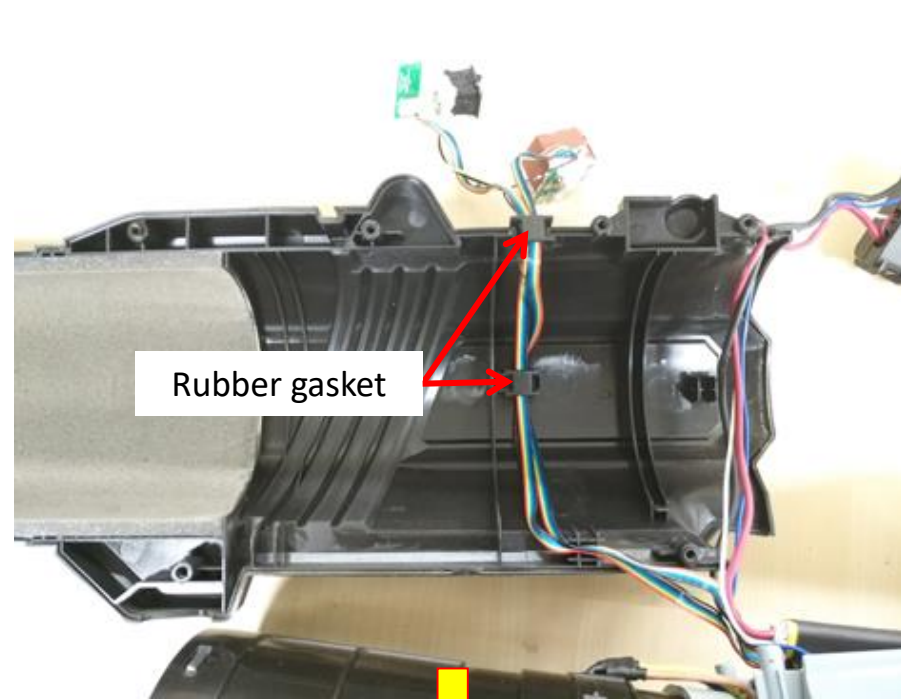
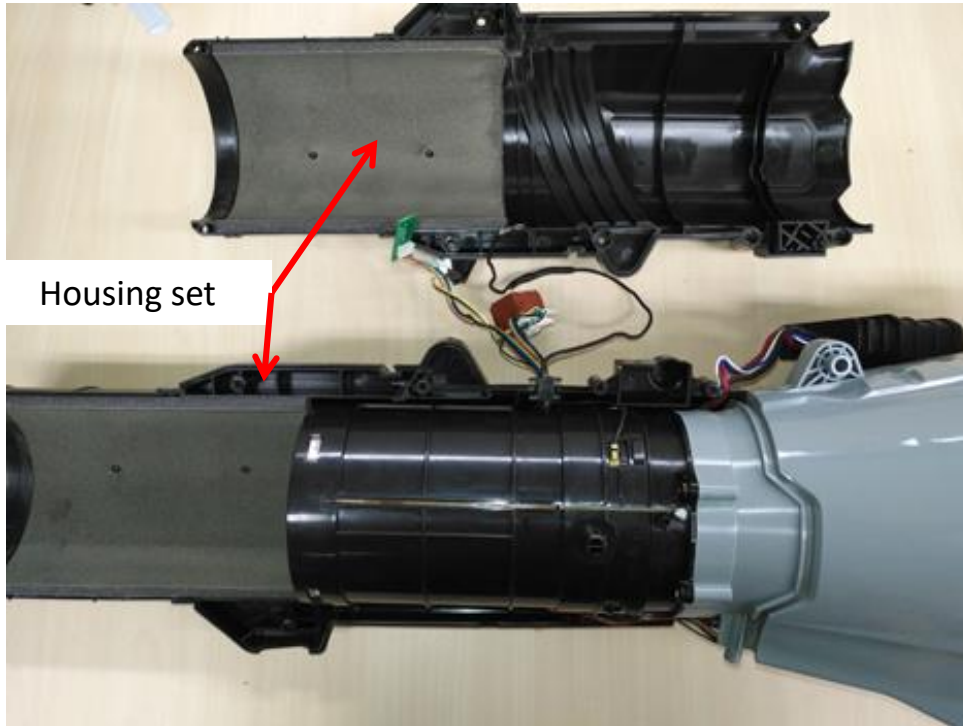


Description	Part Number	QTY.	Description	Part Number	QTY.
Tapping Screw	5620479001	8	Housing Set	2825868001	1

How to Replace the Ducted Set and PCBA

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7. Disassemble the housing set and remove the 2 rubber gaskets.

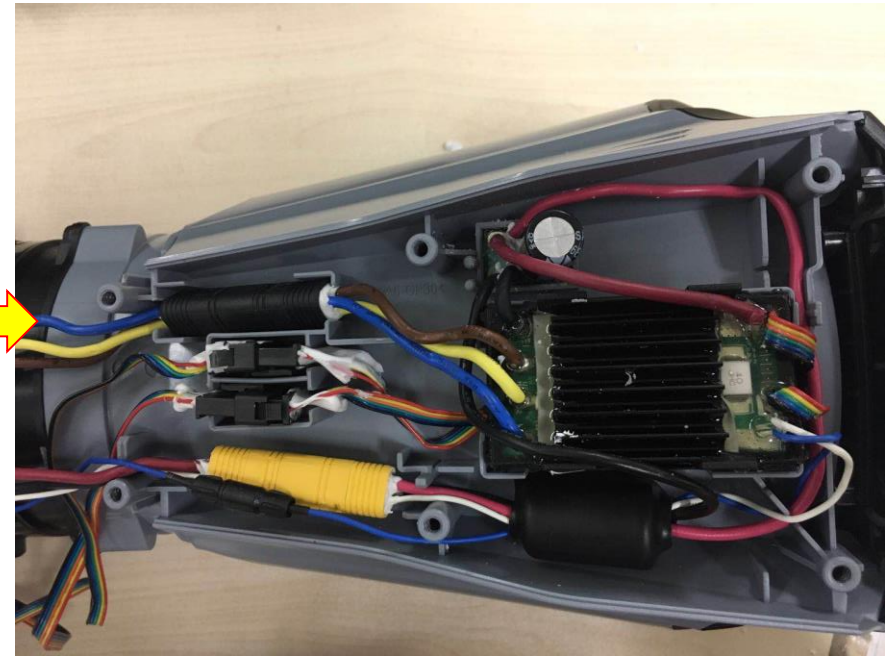
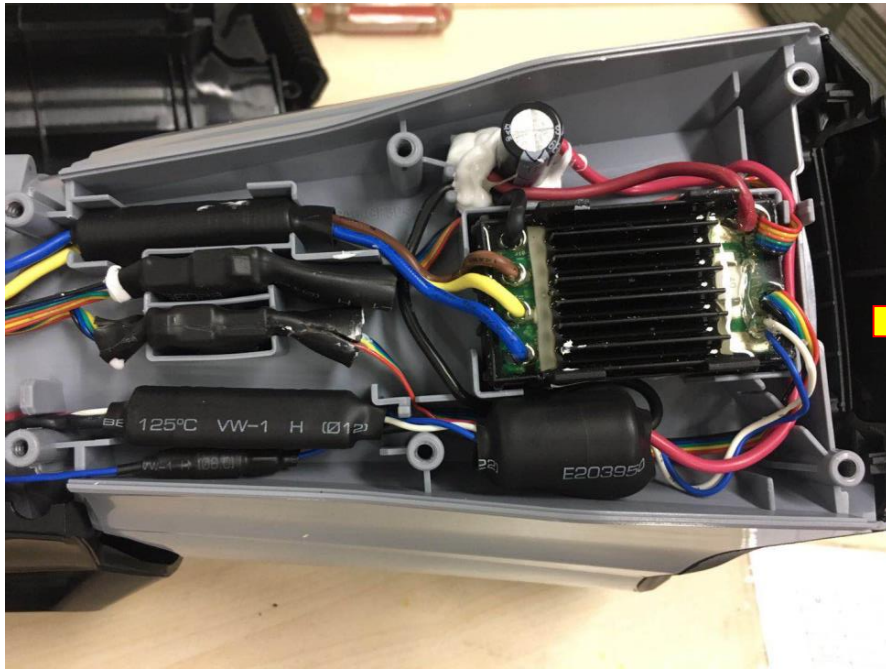


Description	Part Number	QTY.
Rubber gasket	5650604001	2

How to Replace the Ducted Set and PCBA

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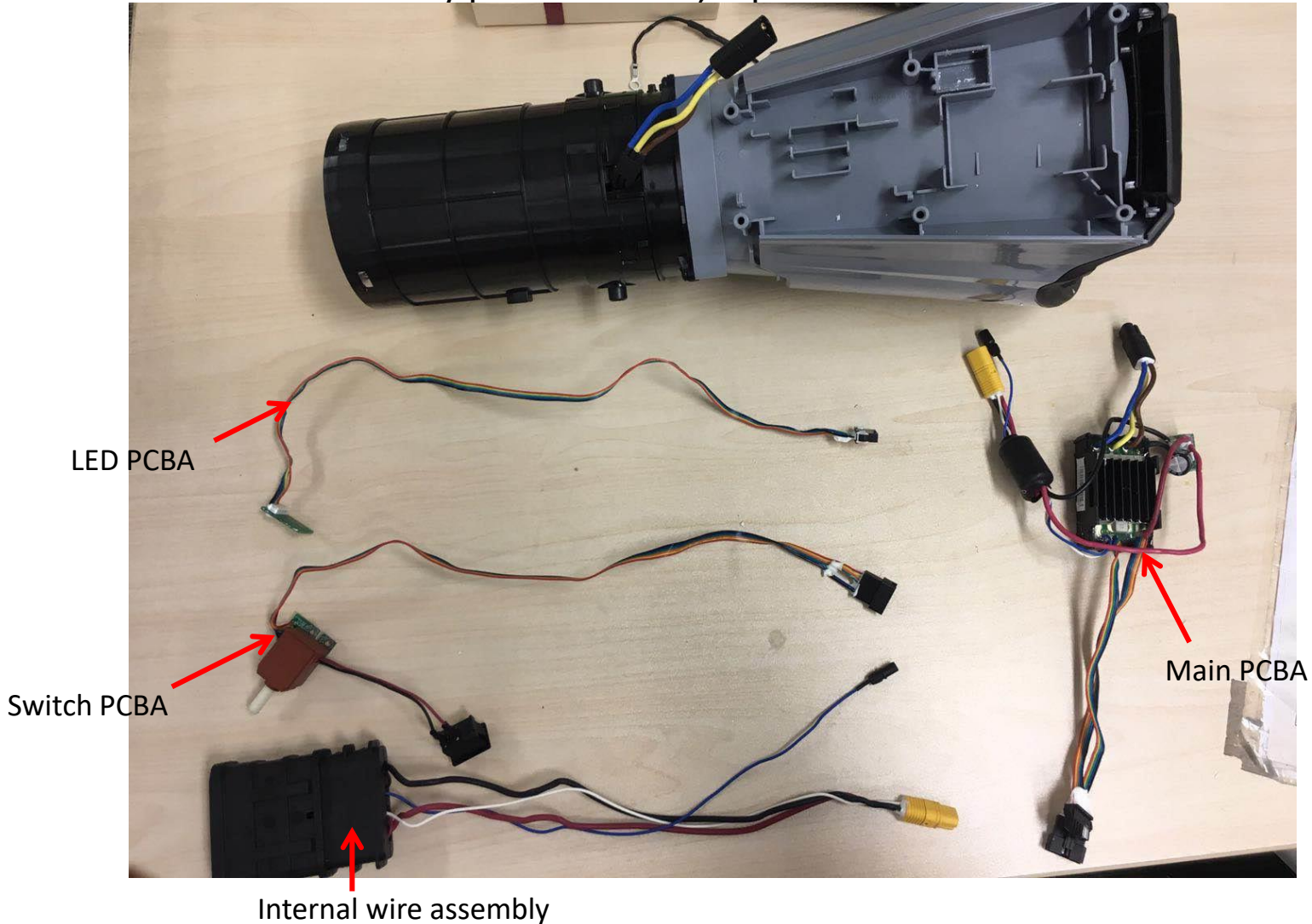
8. Remove the 5 heat-shrinkable tube and disconnect the 5 connectors.



How to Replace the Ducted Set and PCBA

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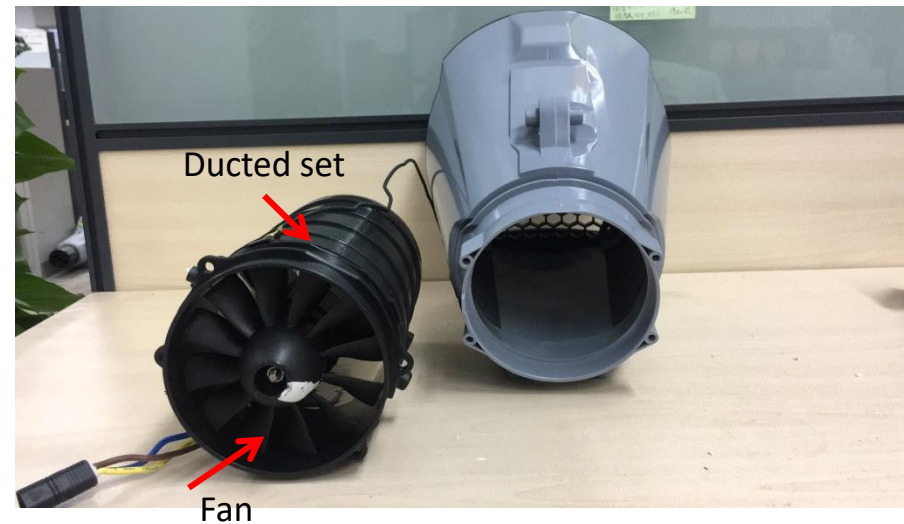
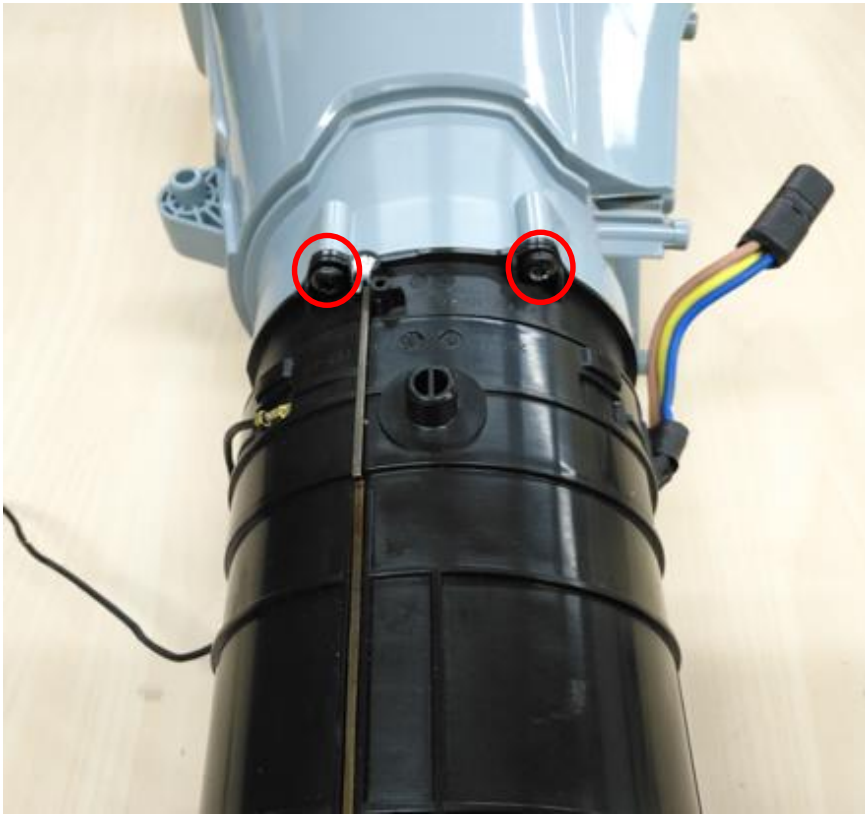
9. Take out the main PCBA, switch PCBA, LED PCBA and internal wire assembly from the blower. If any part is broken, replace with a new one.



How to Replace the Ducted Set and PCBA

LBX6000 Blower

10. Remove the four screws to disassemble the ducted set from the blower (Two screws on the back). If the motor or the fan is damaged, replace the ducted set.



How to Replace the Ducted Set and PCBA

Description	Part Number	QTY.
Switch PCBA	2830326001	1
LED PCBA	2830325001	1
Internal Wire Assembly	4860518001	1
Main PCBA	2830304001	1
Screw	5620479001	4
Ducted Set	2825874001	1
Fan Baffle	2825905001	1
Air Collector	3128926001	1
Screw	5620479001	4
Backboard ASSY #1	2825578001	1
Backboard ASSY #2	2825580001	1
Backboard ASSY #3	2825579001	1
Ducted Set	2825874001	1

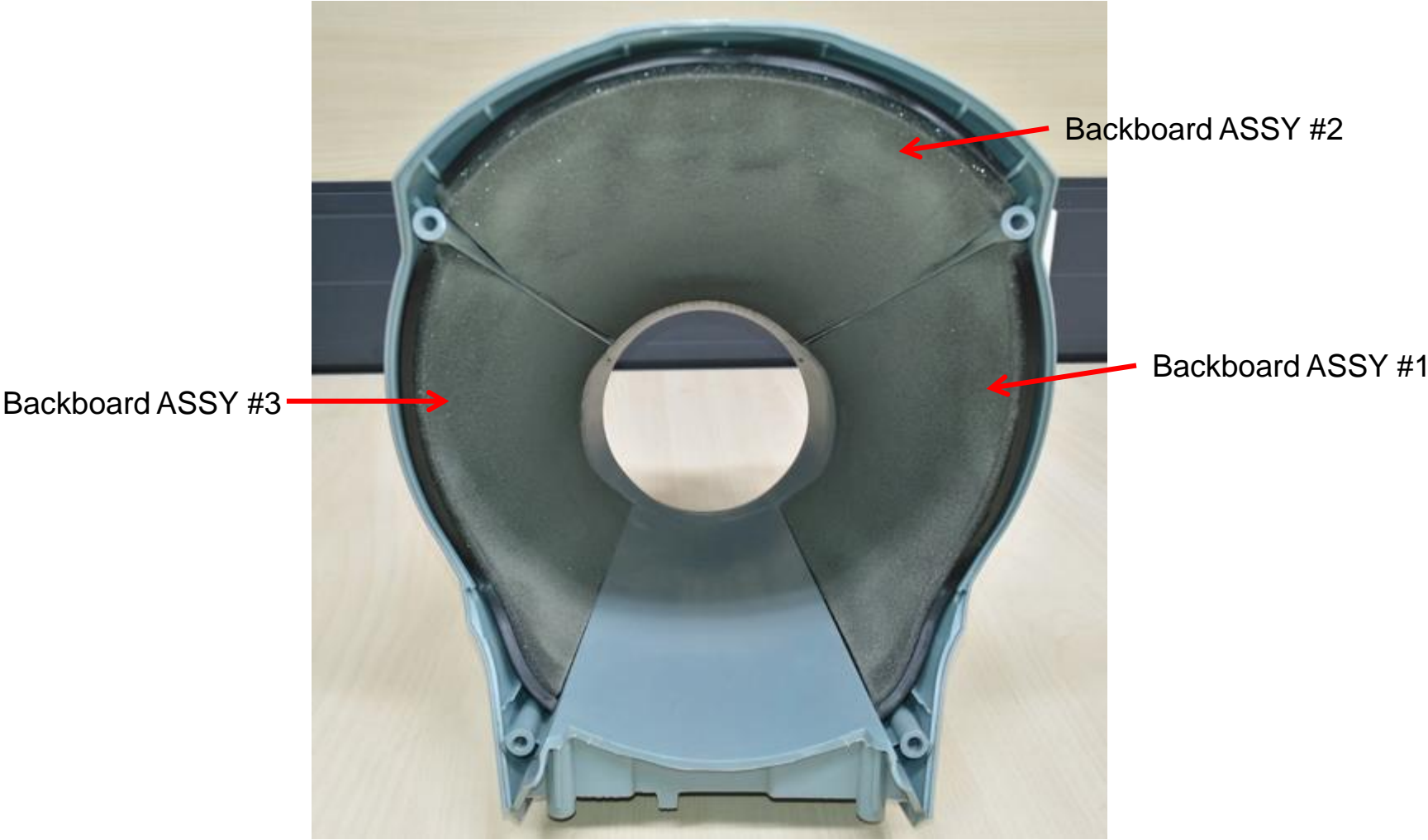
How to Replace the Ducted Set and PCBA

11. Remove the four screws to separate the fan baffle from air collector.



How to Replace the Ducted Set and PCBA

12. If the backboard ASSY is damaged, replace with a new one.



Part 1: How to Assemble the Blower

How to Assemble the Blower

According the pictures in this chapter to assemble the blower.

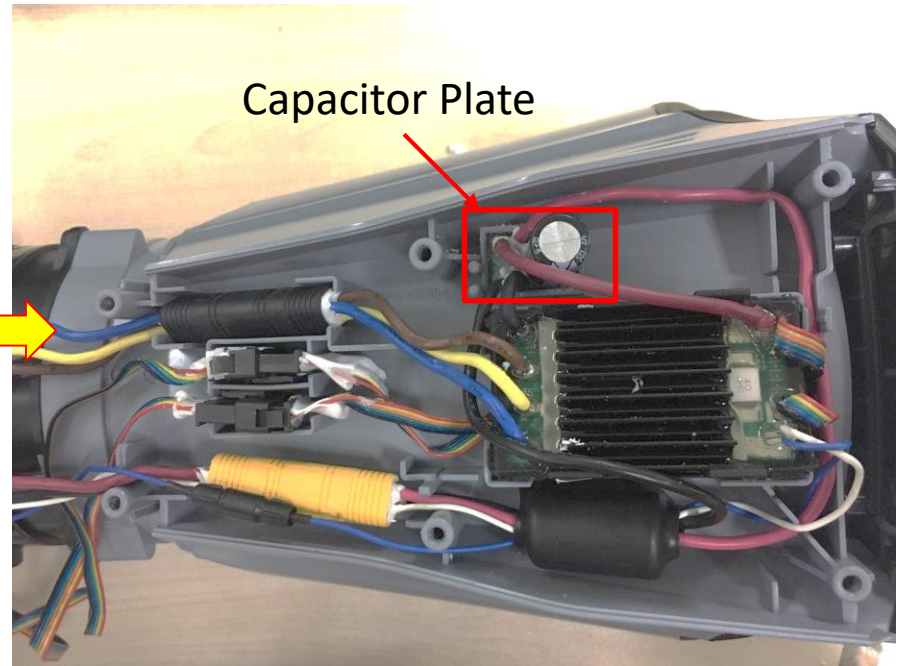
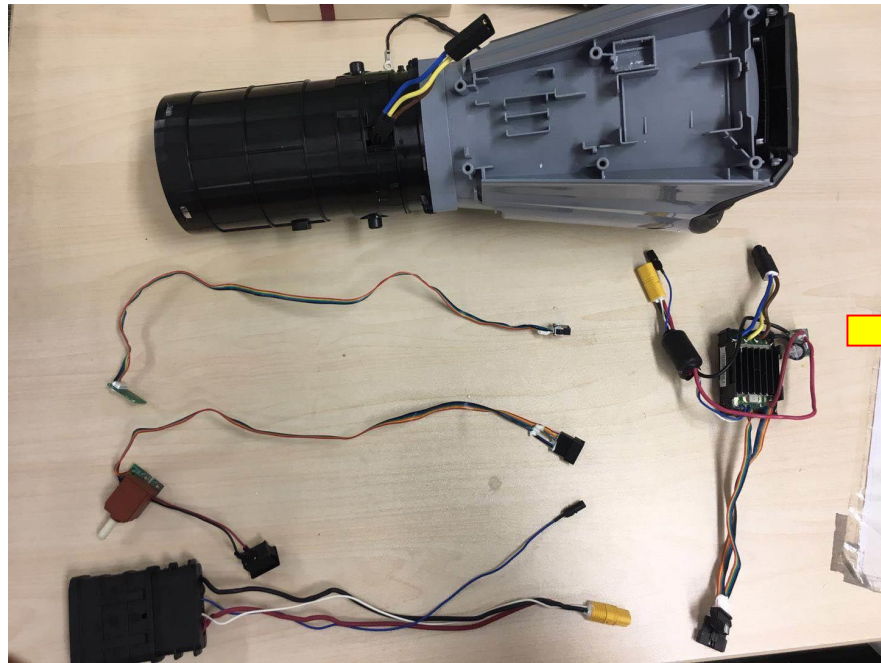


How to Assemble the Blower



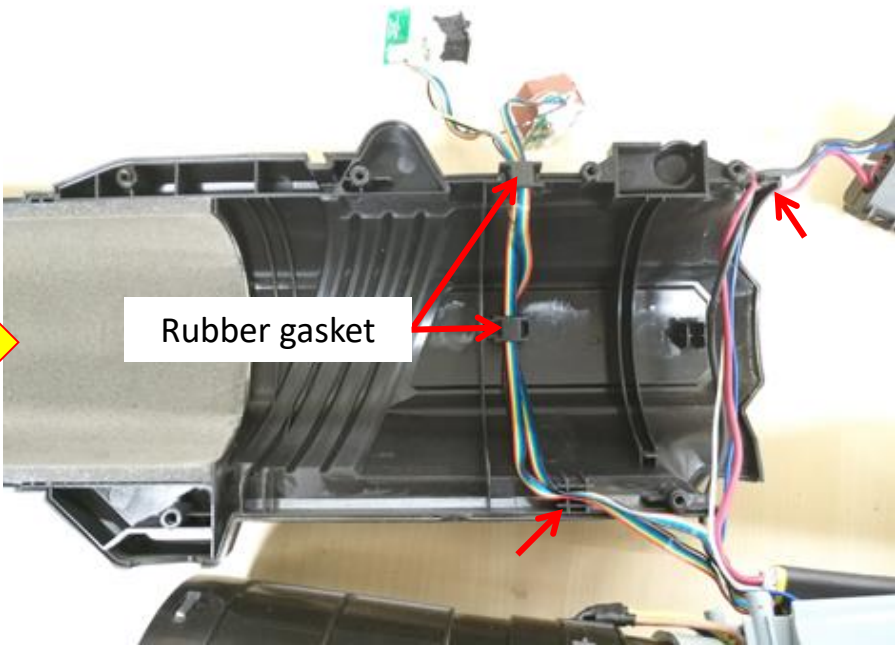
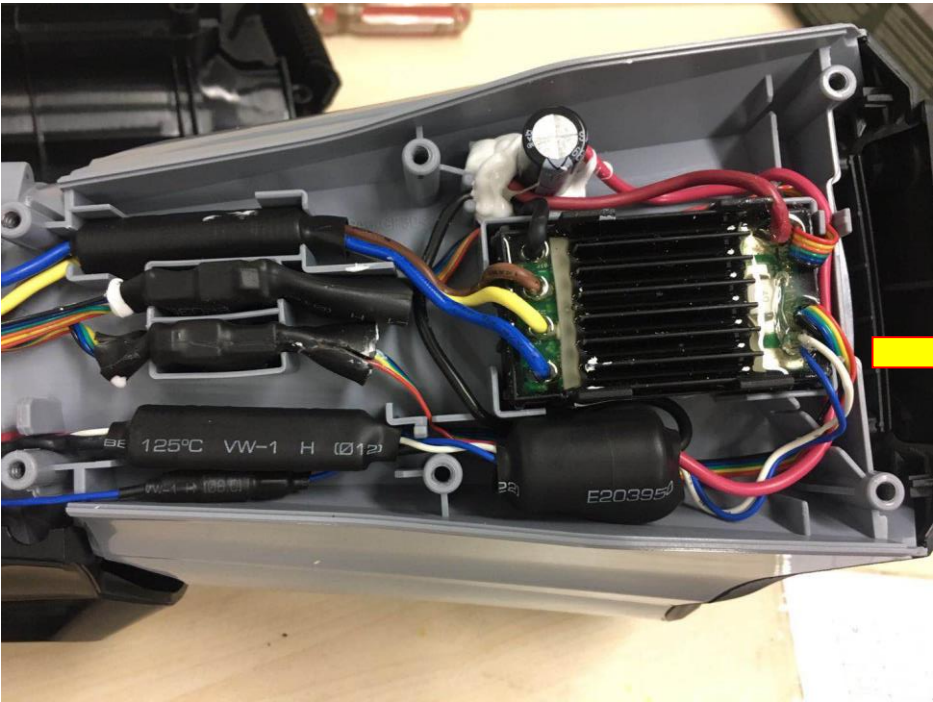
How to Assemble the Blower

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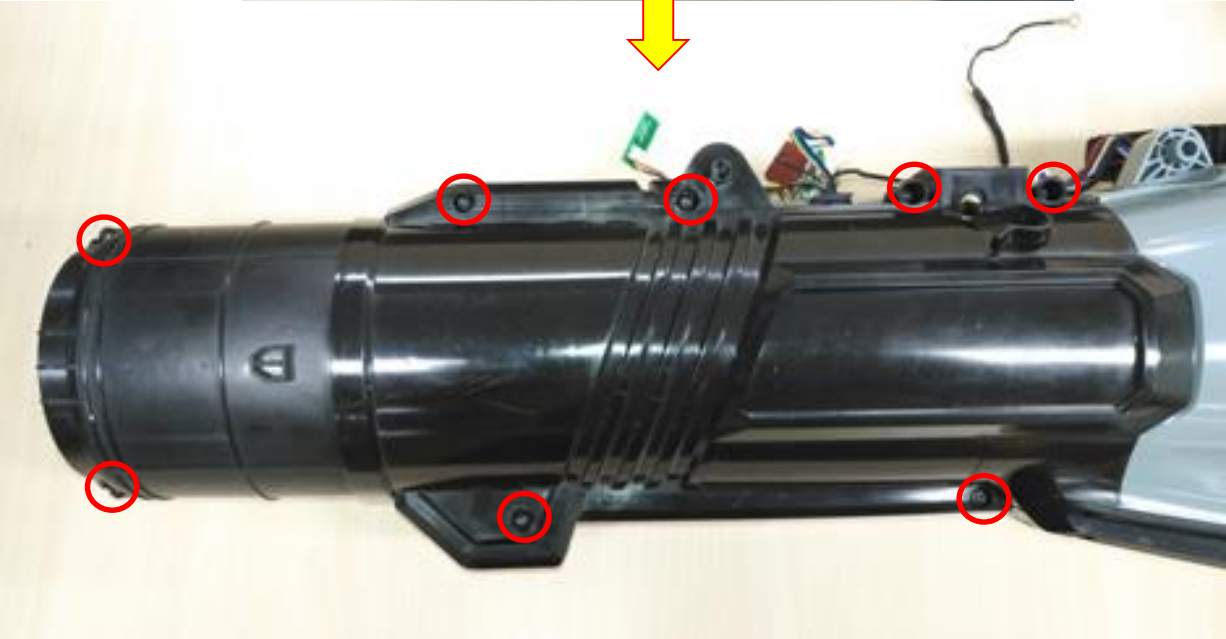


Notice: Before connect the 5 connectors, don't forget to add the 5 heat-shrinkable tube and using the fixed capacitor plate with glue.

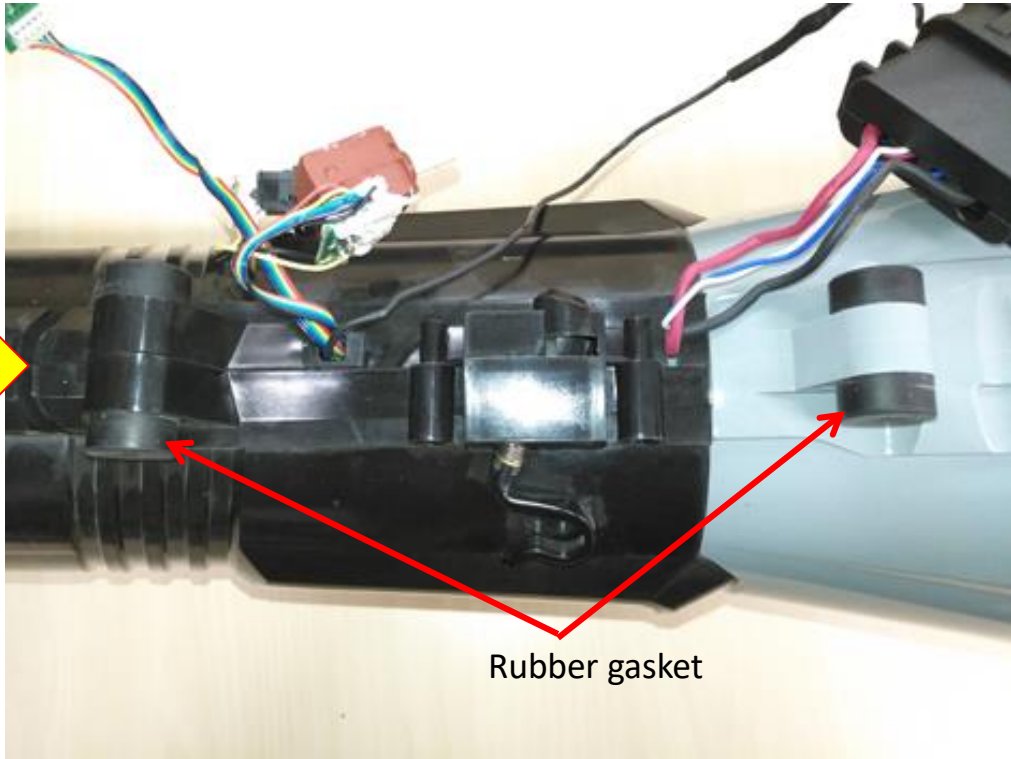
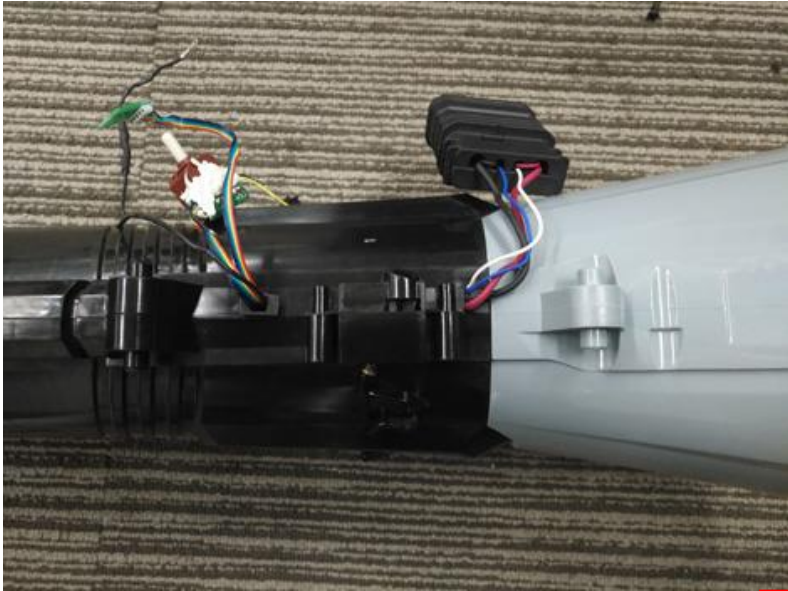
How to Assemble the Blower



How to Assemble the Blower

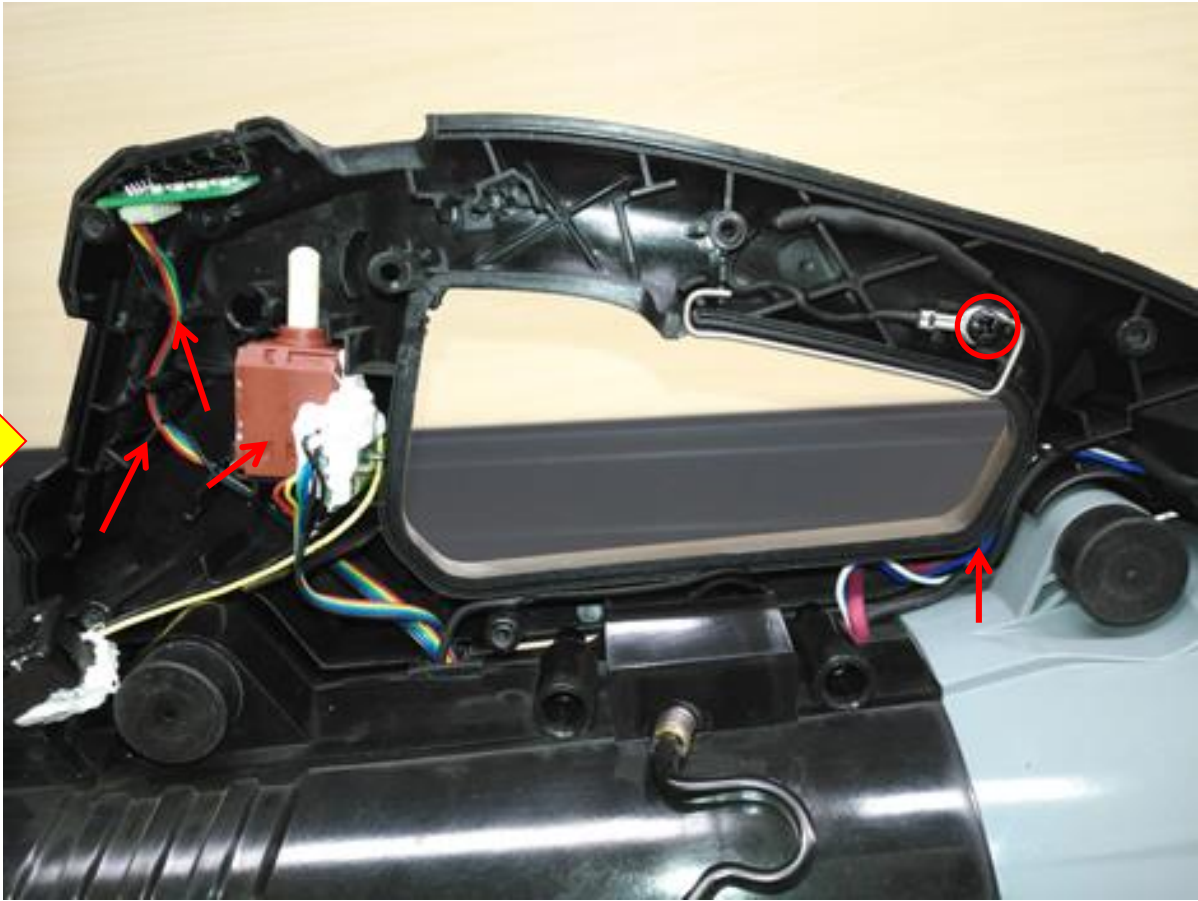
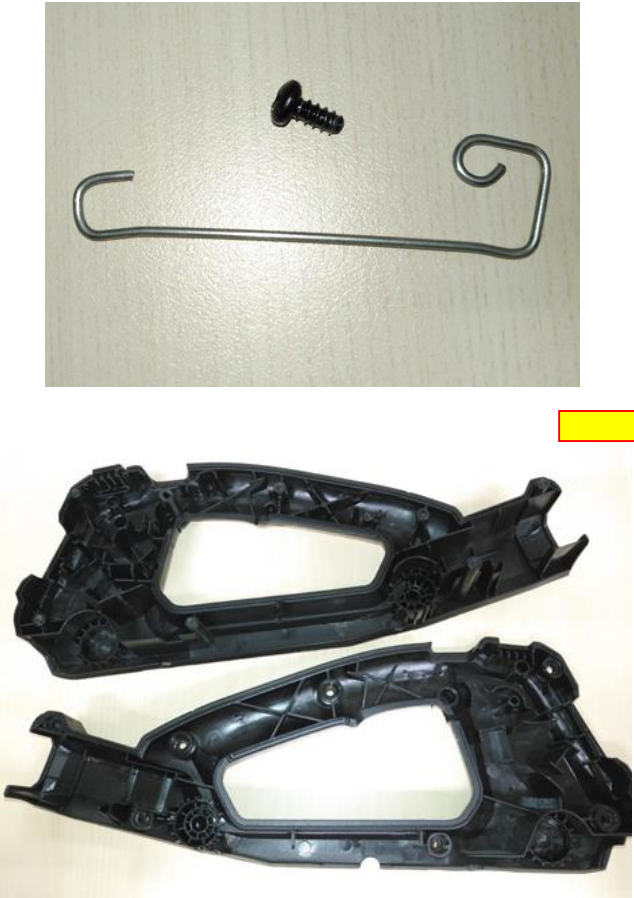


How to Assemble the Blower

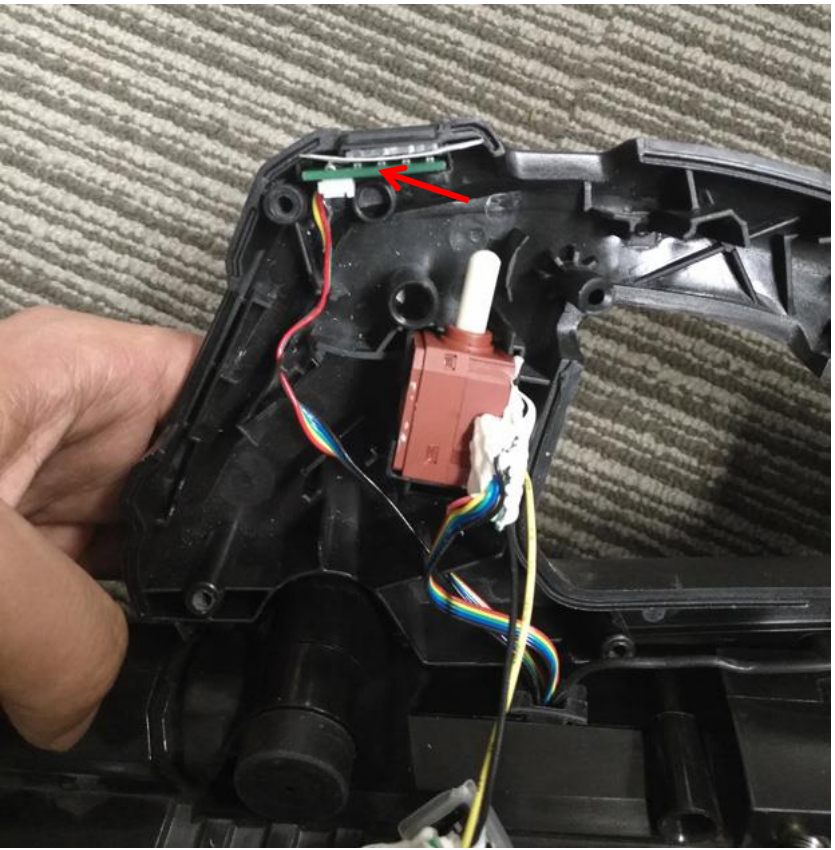
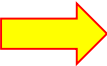
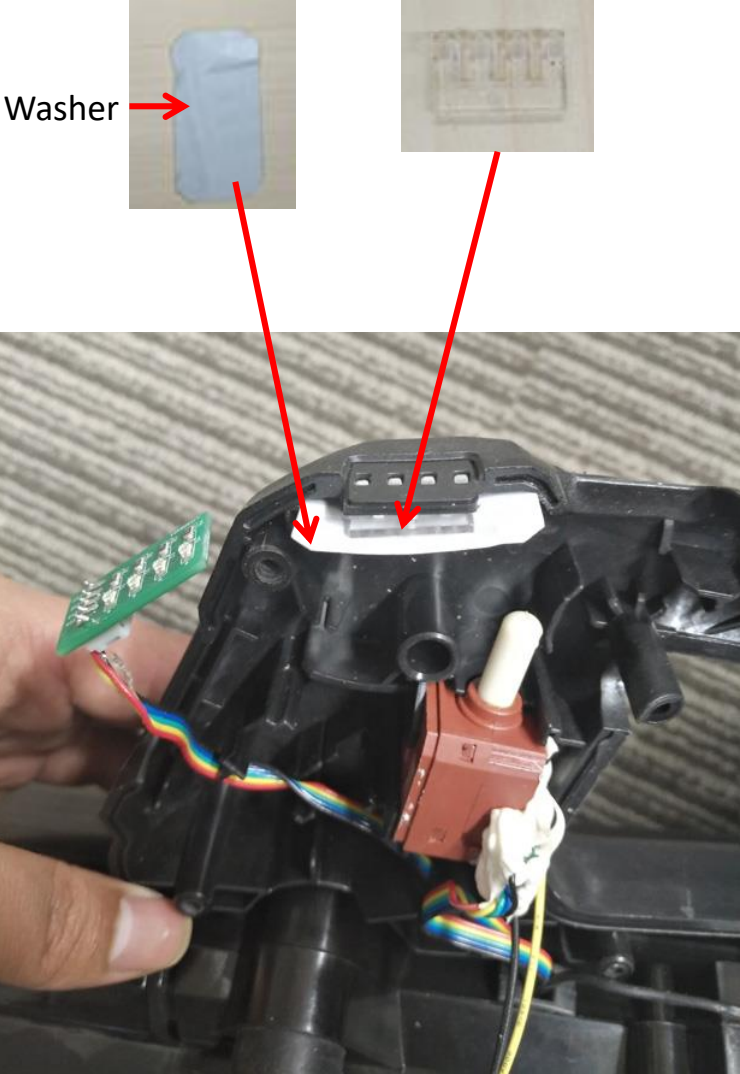


How to Assemble the Blower

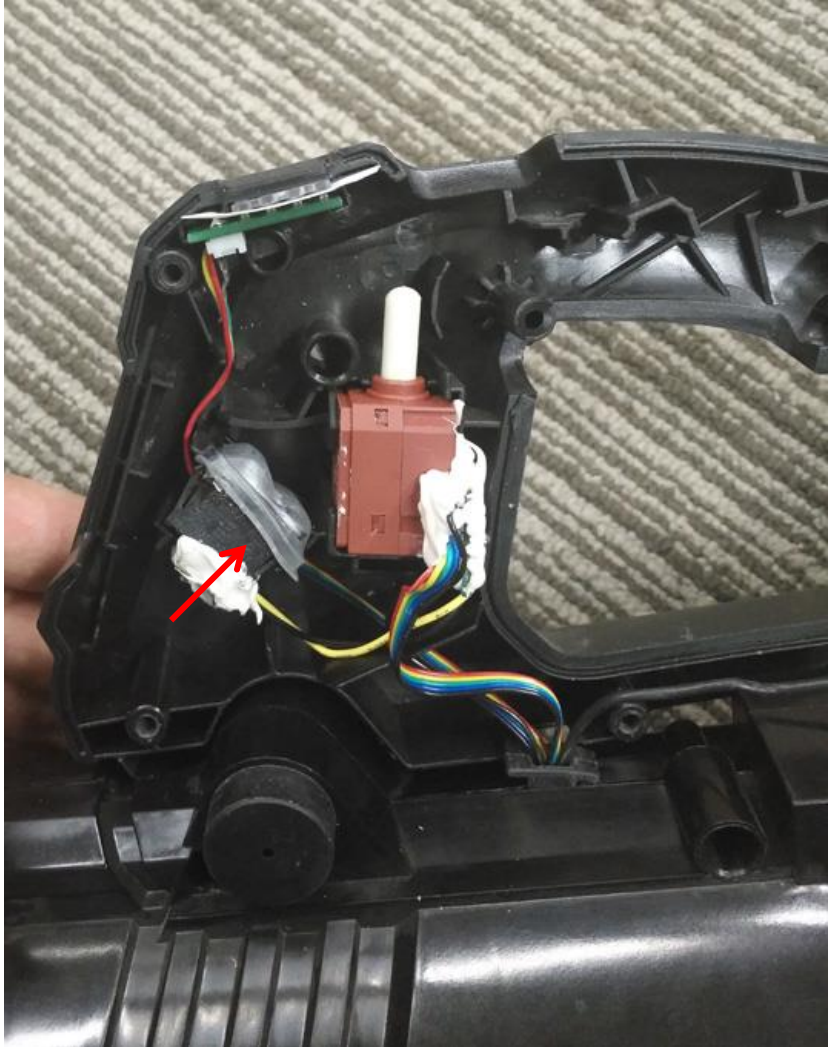
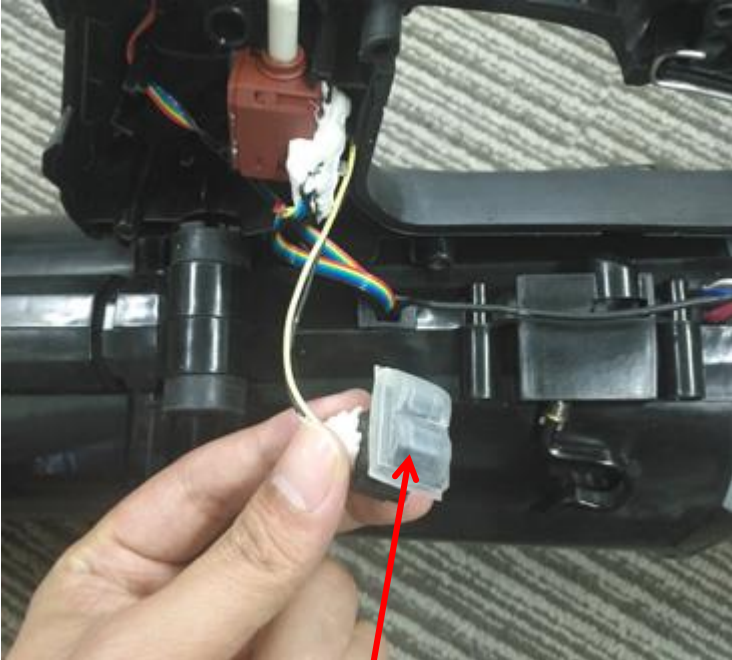
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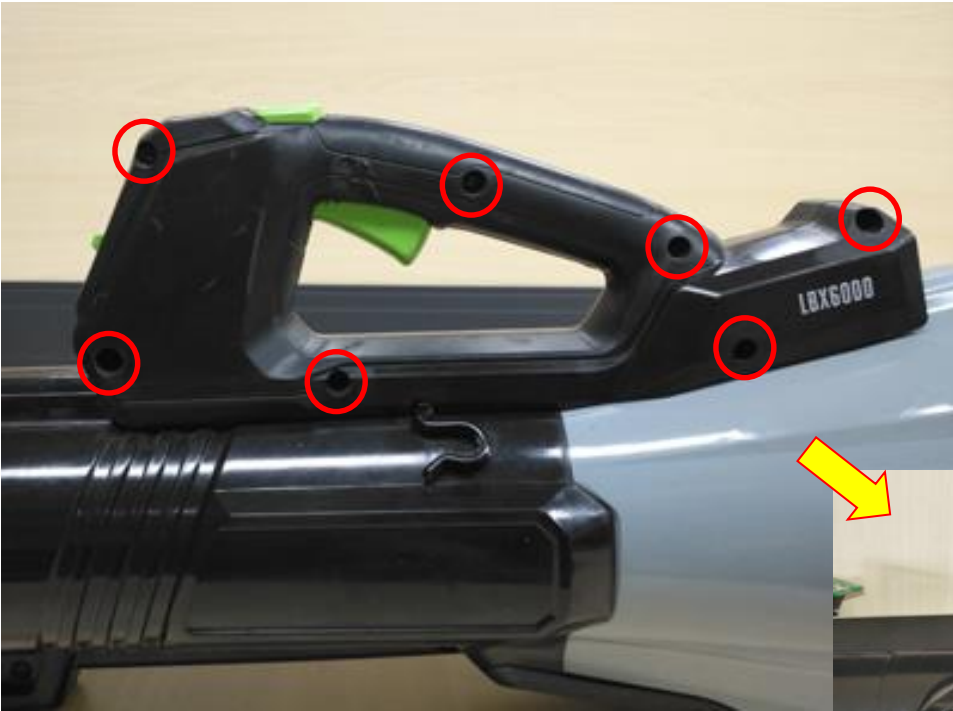
How to Assemble the Blower



How to Assemble the Blower



How to Assemble the Blower



THE END