

REPAIR GUIDELINE

Brush Cutter _ BC3800E



Issue Date: 08/10/2017

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Troubleshooting

Problem	Possible Cause	Fault Position	Test & Solution
The battery pack is not locked on the brush cutter properly; or hard to remove from the brush cutter.	The locking mechanism is worn.	Rear housing	Replace the rear housing set.
The motor speed varies up and down when the brush cutter works.	Motor was burned due to overload	Motor	Replace the motor
Not working	The fuse is broken	Fuse in PCBA assembly	Replace the PCBA with a new one
	PCBA is broken	PCBA in the housing assembly	Replace the PCBA with a new one
	Motor is burned	Motor	If the cables are well connected, check the motor and test with a new motor
Noise	Lack of grease in gearbox	Gear case	Add grease
Excessive vibration	Unbalanced/ Eccentric blade	Blade	Replace or fit blade correctly.

Troubleshooting

Problem	Possible Cause	Fault Position	Test & Solution
With Trimmer Line			
Not feeding line	Poor cutting line	Trimmer line	Replace the cutting line. (e.g. 2.4mm nylon line)
Hard to wind up line	Support of the lower housing assembly is worn	Lower housing assembly	Replace the lower housing assembly
Not cutting the line	Blade on the guard assembly is worn	Guard assembly	Replace the guard assembly
With 3-teeth Blade			
Blade worn	Overload or wear and tear	Blade	Replace it with a new one
Excessive vibration	Unbalanced/ Eccentric blade	Blade	Replace or fit blade correctly.

Tool List For Repair

NO.	Tool List	SPEC	Remark
1	Socket wrench	14mm	
2	Phillips	PH2	
3	Torx screwdriver	T-15	
4	Hex wrench	5mm, 4mm	
5	Circlip plier		

Part 1: Replace the Trimmer Head and Gear Case

1. Replace the Trimmer Head and Gear Case

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1. Loosen 2 screws to disassemble the guard assembly, if the guard assembly is broken, replace it with a new one.



Description	Part Number	Qty.
Tapping screw	5620216003	2
Guard assembly	2824957002	1

1. Replace the Trimmer Head and Gear Case

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2. Press the release tabs to remove the lower housing assembly.



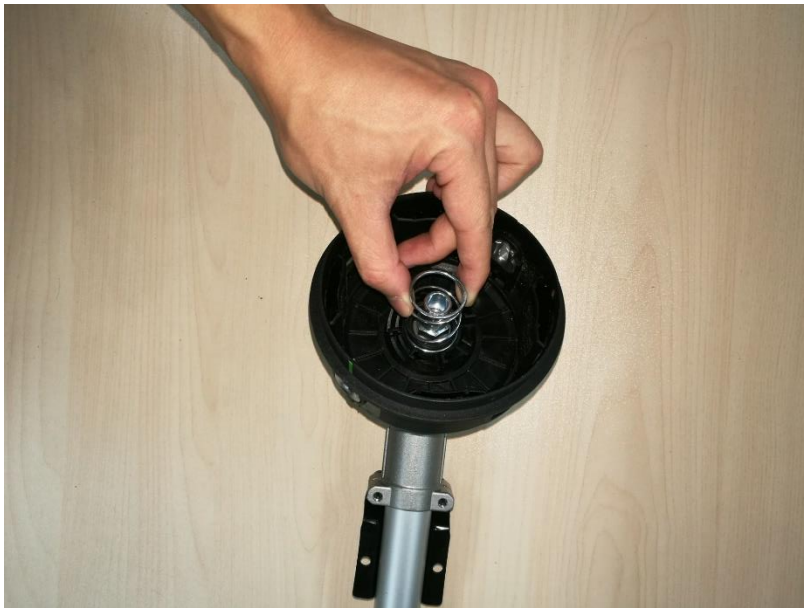
Description	Part Number	Qty.
Lower housing assembly	2824946001	1
Cutting head ASSY	2823354002	1



1. Replace the Trimmer Head and Gear Case

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3. Take the spring out of the upper housing assembly.



1. Replace the Trimmer Head and Gear Case

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4. Rotate the upper housing assembly to align the slot in the flange with the hole in the gear case.
5. Insert the hex wrench into the aligned holes to act as a stabilizer.



1. Replace the Trimmer Head and Gear Case

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6. Loosen the nut with socket wrench clockwise to remove it from the shaft.



1. Replace the Trimmer Head and Gear Case

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7. Take the plain washer out of the shaft.



1. Replace the Trimmer Head and Gear Case

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8. Take the upper housing assembly out of the shaft.



Description	Part Number	Qty.
Upper housing assembly	2824947001	1

1. Replace the Trimmer Head and Gear Case

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9. Take the flange cover out of the shaft.

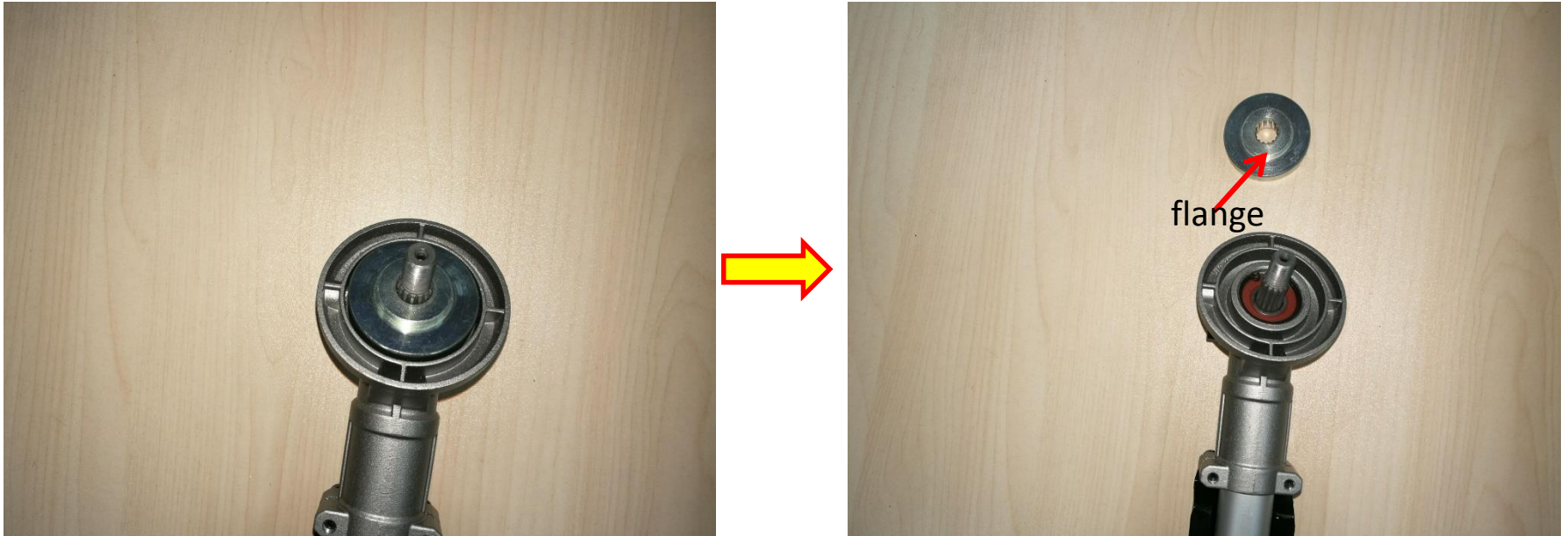


Description	Part Number	Qty.
Flange cover	3706103001	1

1. Replace the Trimmer Head and Gear Case

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10. Take the flange out of the shaft.

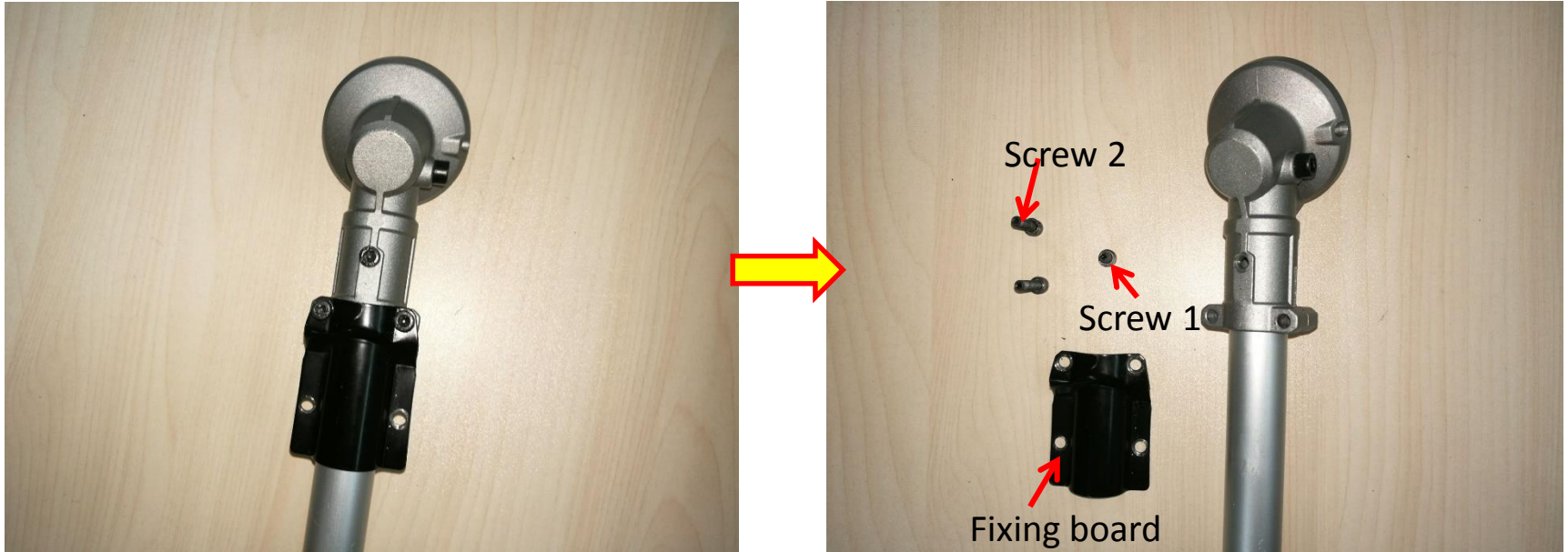


Description	Part Number	Qty.
Inner flange	3552509001	1

1. Replace the Trimmer Head and Gear Case

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11. Loosen 3 screws to remove the fixing board.



Description	Part Number	Qty.
Screw 1	5620213003	1
Screw 2	5620216003	2
Fixing board	3705417001	1

1. Replace the Trimmer Head and Gear Case

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12. Pull the connecting tube with one hand and pull the gear case with the other hand to separate them from each other. If the gear case is damaged, replace with a new one.

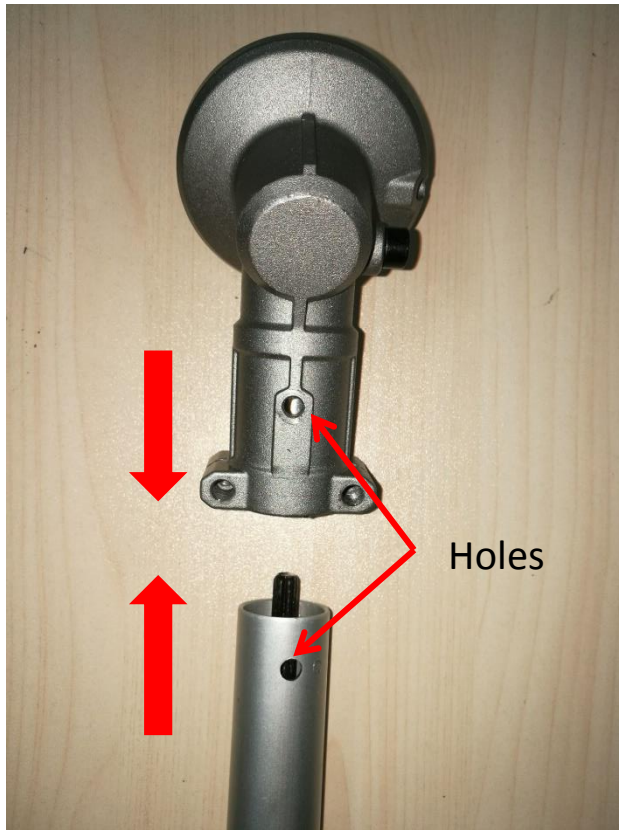


Description	Part Number	Qty.
Gear case	2824954002	1

1. Replace the Trimmer Head and Gear Case

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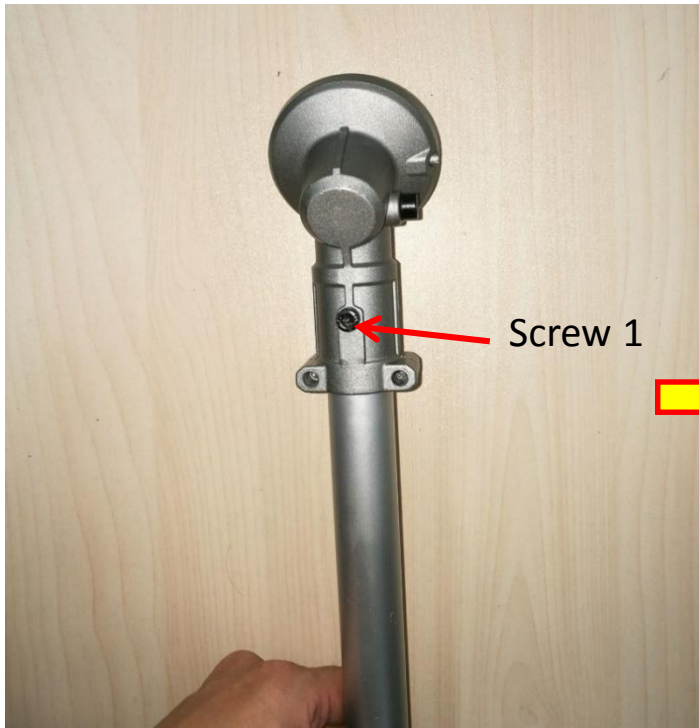
13. With the hole in the gear case aligned with the hole in the tube, reassemble them into place.



1. Replace the Trimmer Head and Gear Case

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14. Tighten the gear case with the connecting tube with screw.
15. Tighten the fixing board with the gear case with screws.



1. Replace the Trimmer Head and Gear Case

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16. Mount the flange onto the shaft.



1. Replace the Trimmer Head and Gear Case

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17. Mount the flange cover onto the shaft.



1. Replace the Trimmer Head and Gear Case

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18. Mount the upper housing assembly onto the shaft.



1. Replace the Trimmer Head and Gear Case

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19. Mount the plain washer onto the shaft.



Description	Part Number	Qty.
Plain washer	5650577001	1

1. Replace the Trimmer Head and Gear Case

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20. Rotate the upper housing assembly to align the slot in the flange with the hole in the gear case.
21. Insert the hex wrench into the aligned holes to act as a stabilizer.



1. Replace the Trimmer Head and Gear Case

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22. Mount the nut onto the shaft and tighten it with multifunction wrench anticlockwise.



Description	Part Number	Qty.
Nut	5630303001	1

1. Replace the Trimmer Head and Gear Case

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23. Mount the spring onto the upper housing assembly.



1. Replace the Trimmer Head and Gear Case

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24. Align the release tabs on the lower housing assembly with the holes on the upper housing assembly to assemble them together.



1. Replace the Trimmer Head and Gear Case

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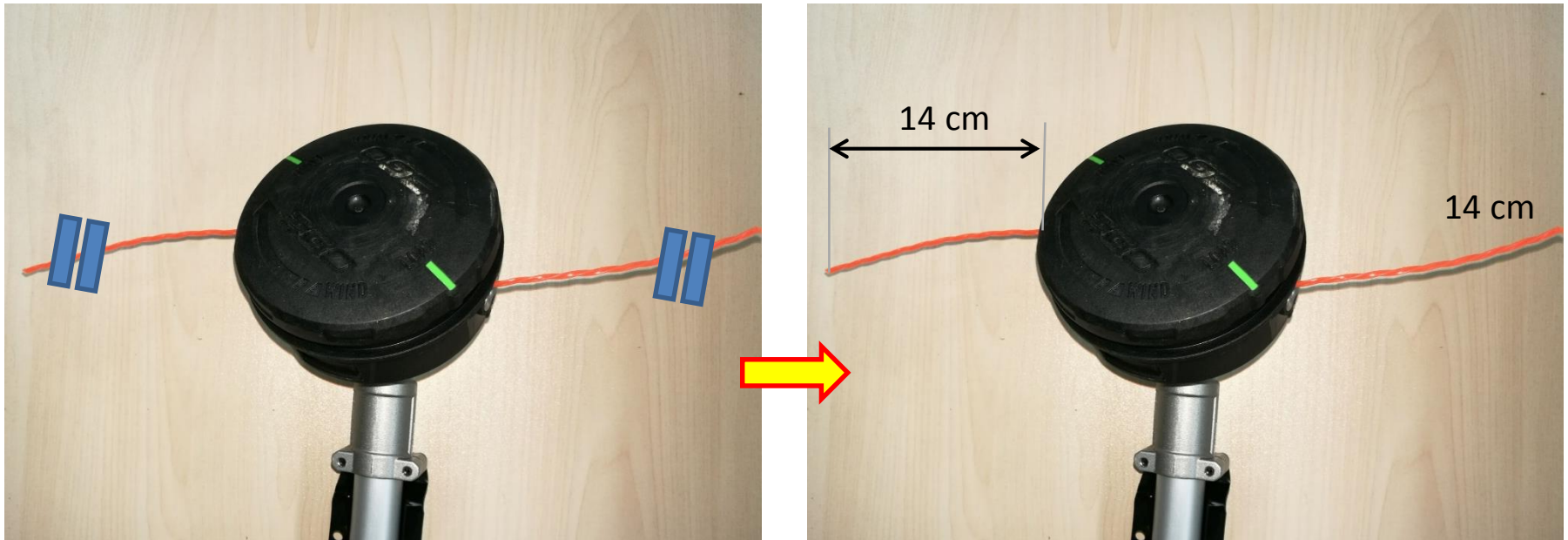
25. Rotate the lower housing assembly, if necessary, in the direction indicated by the arrow, to align the mark "LOAD" on the lower housing assembly with the eyelets in the upper housing assembly.



1. Replace the Trimmer Head and Gear Case

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26. Cut one piece of trimmer line 5m long. Insert the line into the mounting hole inside the eyelet. Push until the end of the line comes out of the other side of the upper housing assembly. Pull the line from the other side until equal amounts of line appear on both sides of the spool.
27. Rotate the lower housing assembly clockwise to wind the line on the spool until approximately 14cm of line is showing on each side.



1. Replace the Trimmer Head and Gear Case

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28. Assemble the guard assembly with screws.

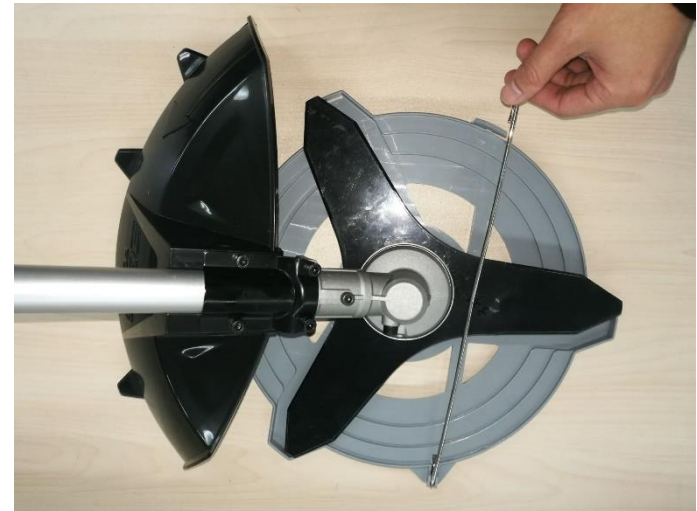
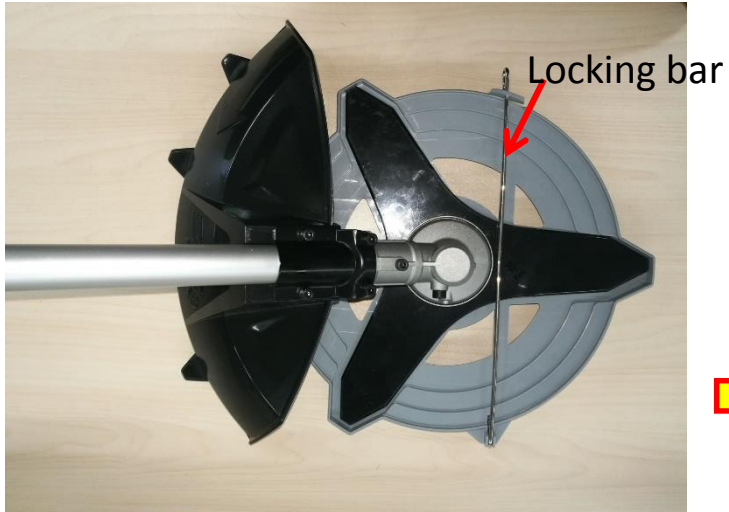


Part 2: Replace the Blade (With 3-teeth blade)

2. Replace the Blade

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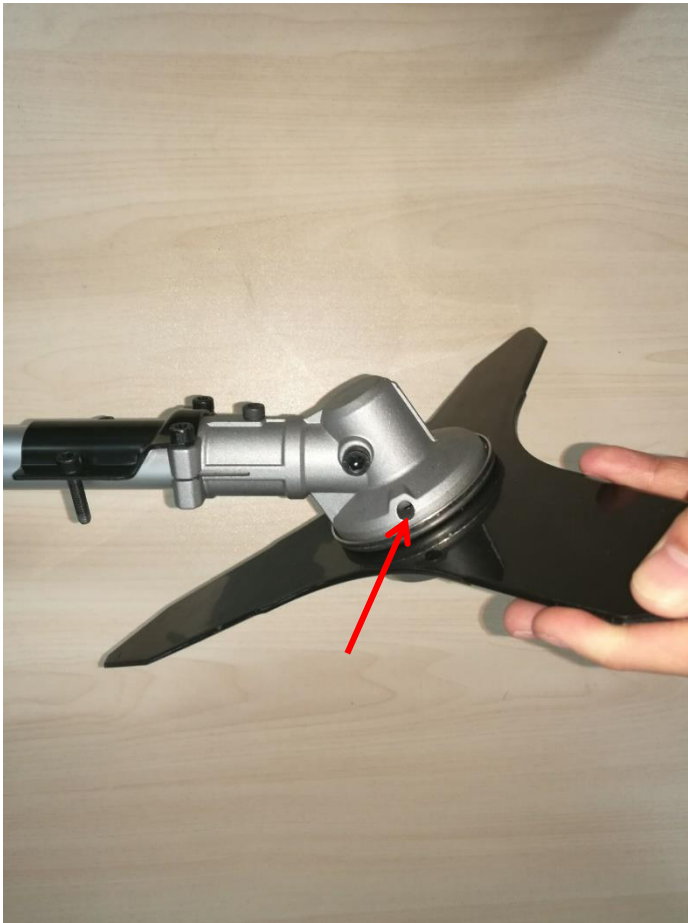
1. Press the locking bar to remove the blade cover.



2. Replace the Blade

BC3800E Brush Cutter

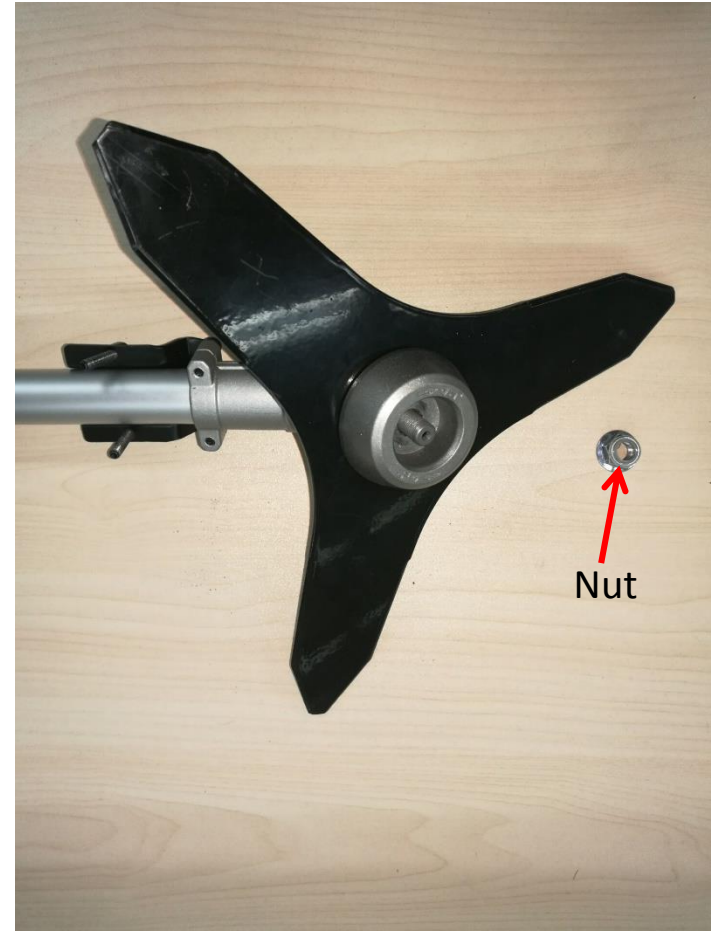
2. Rotate the blade to align the slot in the flange with the hole in the gear case.
3. Insert the hex wrench into the aligned holes to act as a stabilizer.



2. Replace the Blade

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4. Loosen the nut with socket wrench clockwise to remove the nut from the shaft.

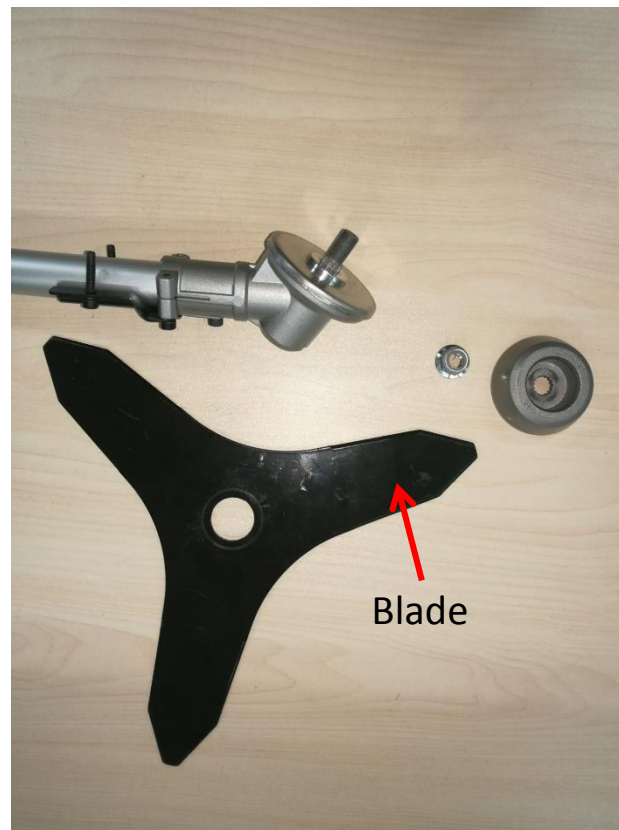


Description	Part Number	Qty.
Nut	5630292001	1

2. Replace the Blade

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5. Take the outer flange out of the shaft.
6. Take the blade out of the shaft and replace with a new one.



Description	Part Number	Qty.
Outer flange	3421864001	1
Blade	3706105001	1

2. Replace the Blade

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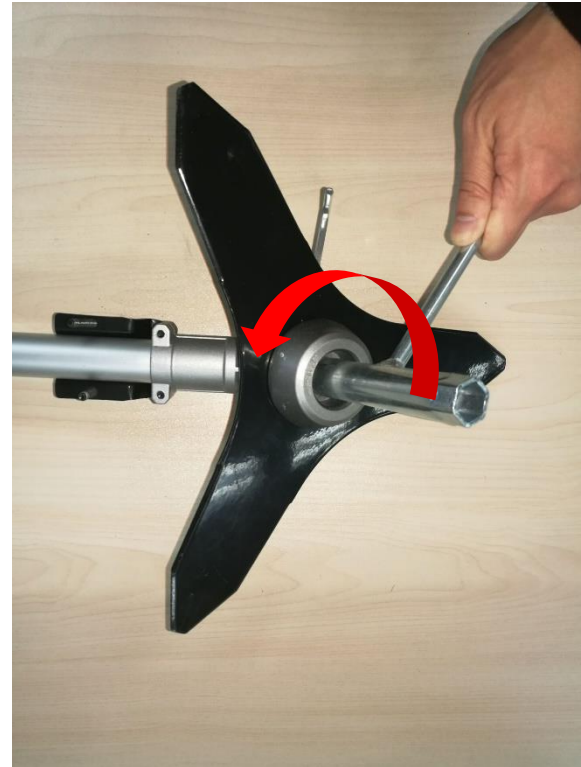
7. Mount the blade onto the shaft.
8. Mount the outer flange onto the shaft.
9. Mount the nut onto the shaft and pre-tighten it anticlockwise.



2. Replace the Blade

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10. Rotate the blade to align the slot in the flange with the hole in the gear case.
11. Insert the hex wrench into the aligned holes to act as a stabilizer.
12. Tighten the nut anticlockwise with socket wrench.



2. Replace the Blade

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13. Mount the blade cover into its place.

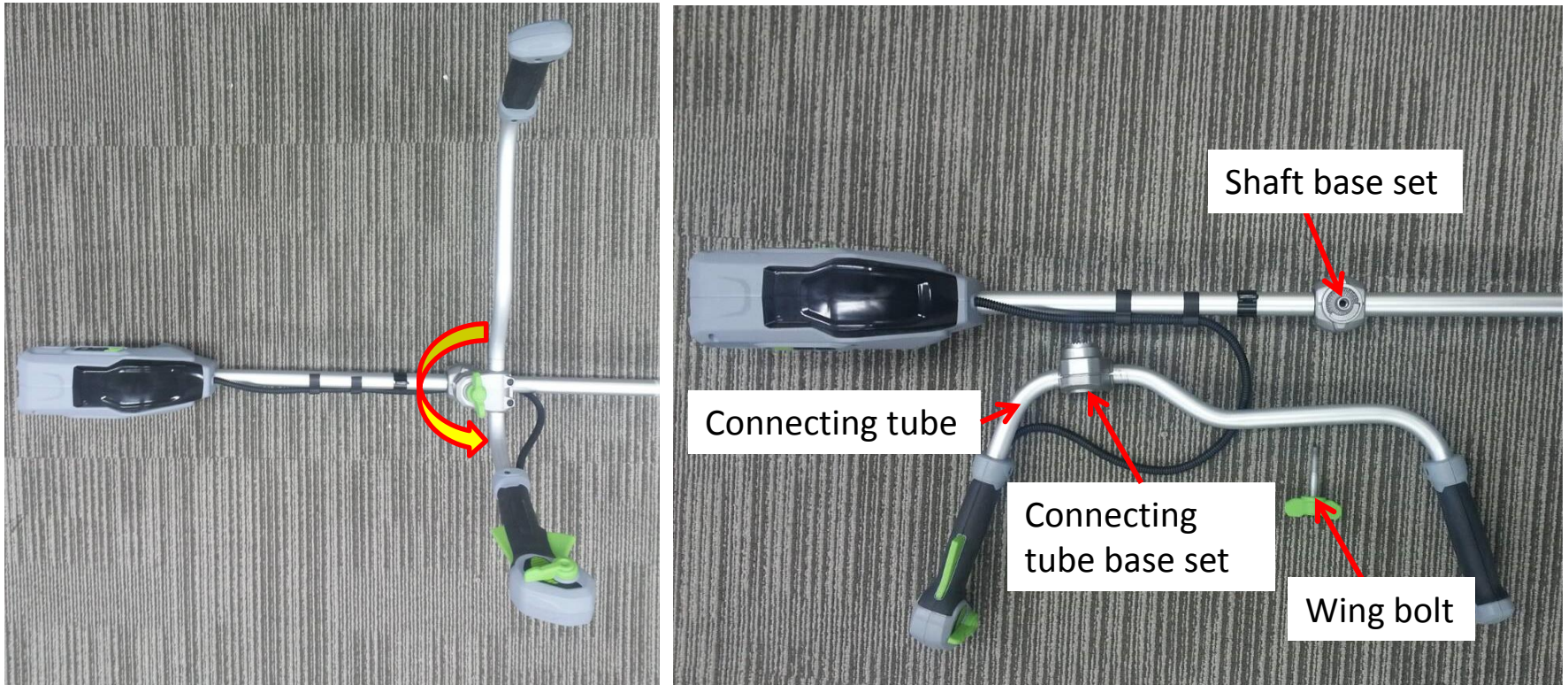


Part 3: Replacing the Connecting Tube

3. Replacing the Connecting Tube

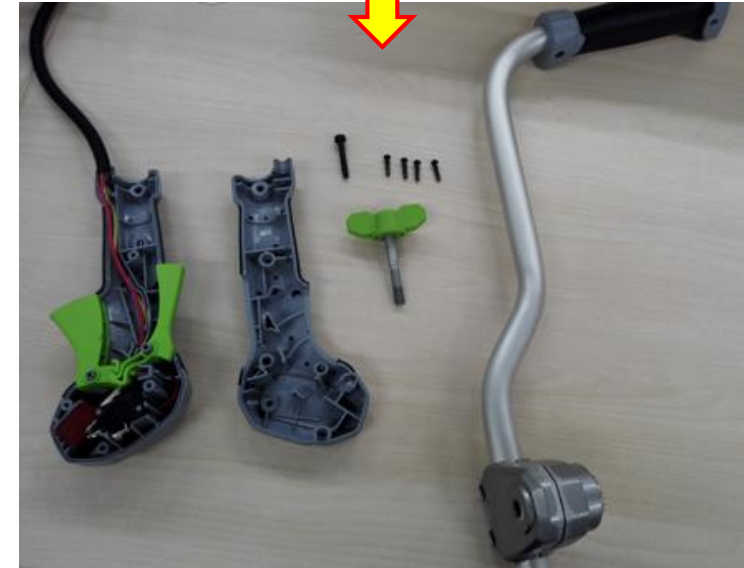
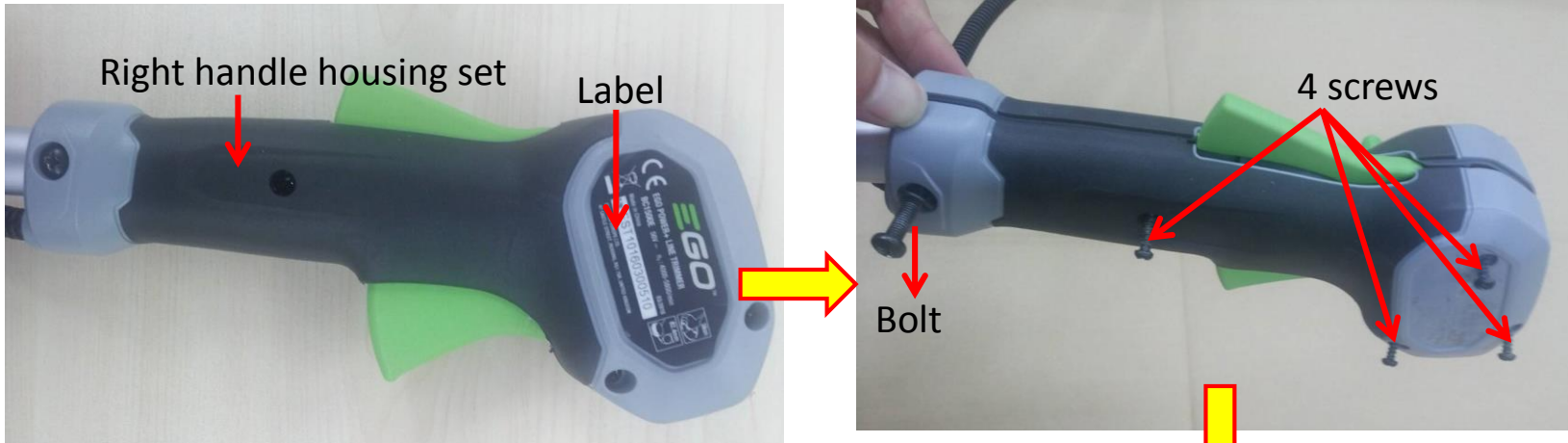
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1. Stop the motor and remove the battery pack from the line trimmer.
2. Rotate the wing bolt counterclockwise to separate the connecting tube base set from the shaft base set and put the connecting tube aside.



3. Replacing the Connecting Tube

- 3. Remove the label on the right handle housing to expose the screw which is beneath it and continue to loosen the 4 screws and 1 bolt on the right handle housing to open it.



Description	Part number	Qty.
Right handle housing set	2825297001	1

3. Replacing the Connecting Tube

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- Loosen the two screws on the left handle housing set to separate it from the connecting tube.

NOTICE: if the left handle housing set is broken or worn replace it with a new one.

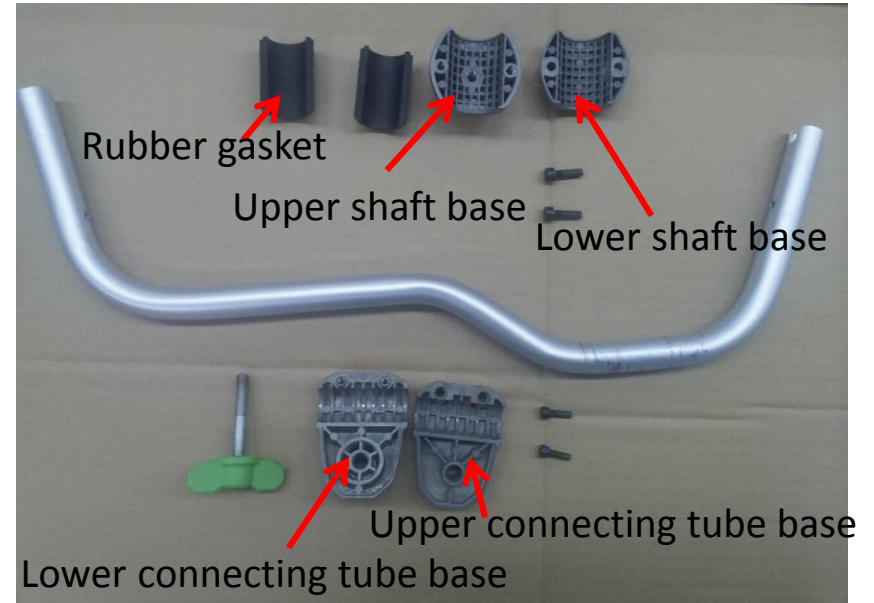
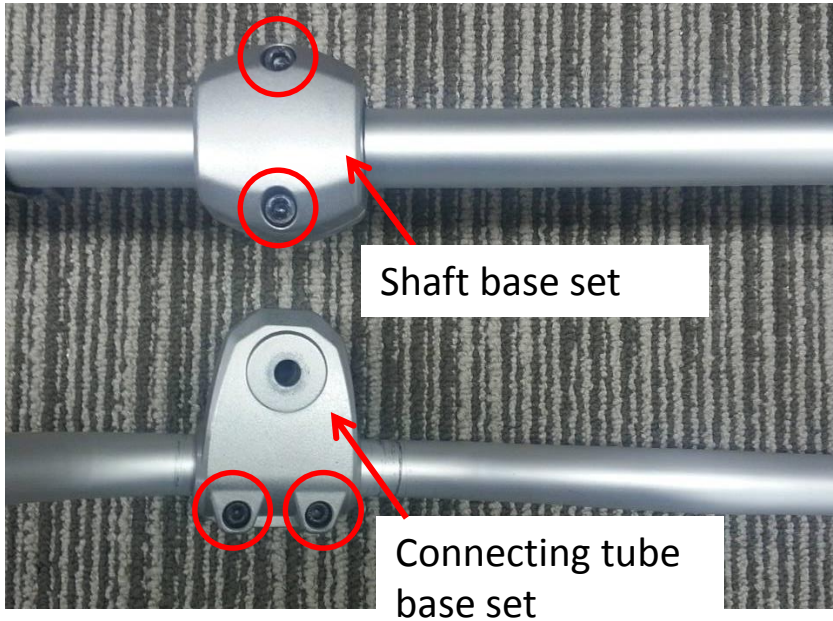


Description	Part Number	Qty.
Left handle housing set	2825296001	1

3. Replacing the Connecting Tube

- Loosen screws on the shaft base set and connecting tube base set and disassemble them. Replace the connecting tube with a new one.

NOTICE: If the connecting tube base set or the shaft base set is worn or broken replace it with a new one.



Description	Part Number	Qty.	Description	Part Number	Qty.
Upper connecting tube base	3421812001	1	Upper shaft base	3421813001	1
Lower connecting tube base	3421811001	1	Lower shaft base	3421810001	1
Rubber gasket	3128392001				

3. Replacing the Connecting Tube

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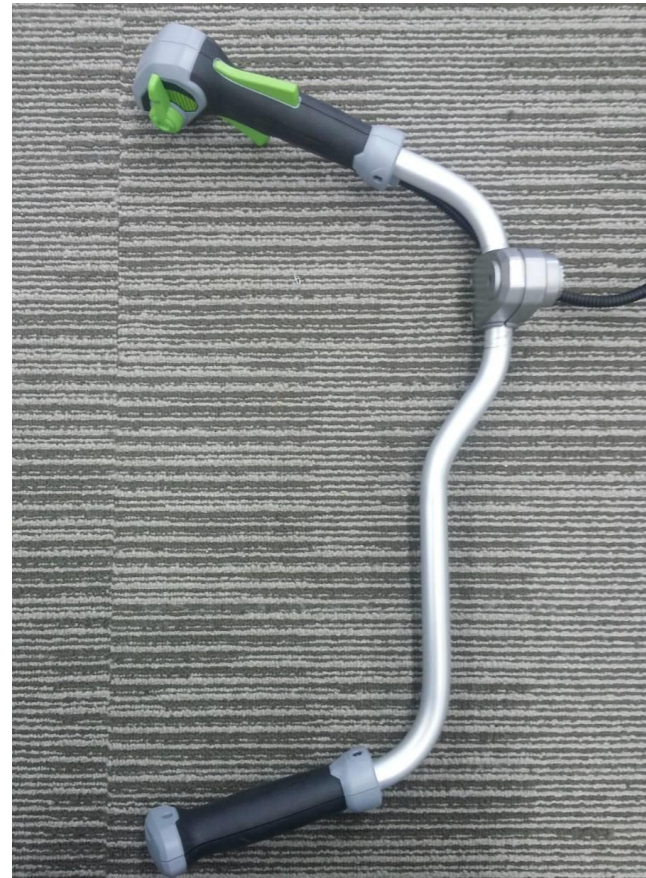
6. Assemble the connecting tube base set and connecting tube as well as assembling the shaft base set and shaft with screws.
7. Align the slot on the connecting tube with the rib on the left handle housing as well as aligning the hole on the connecting tube with the pole on the left handle housing. Fix the left handle housing set with screws.



3. Replacing the Connecting Tube

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8. Align the slot on the connecting tube with the rib on the housing, as well as aligning the location pole on the housing with the hole on the connecting tube to mount the right handle housing set onto the connecting tube.
9. Lock the right handle housing set with 4 screws and 1 bolt with its washer and nut.



3. Replacing the Connecting Tube

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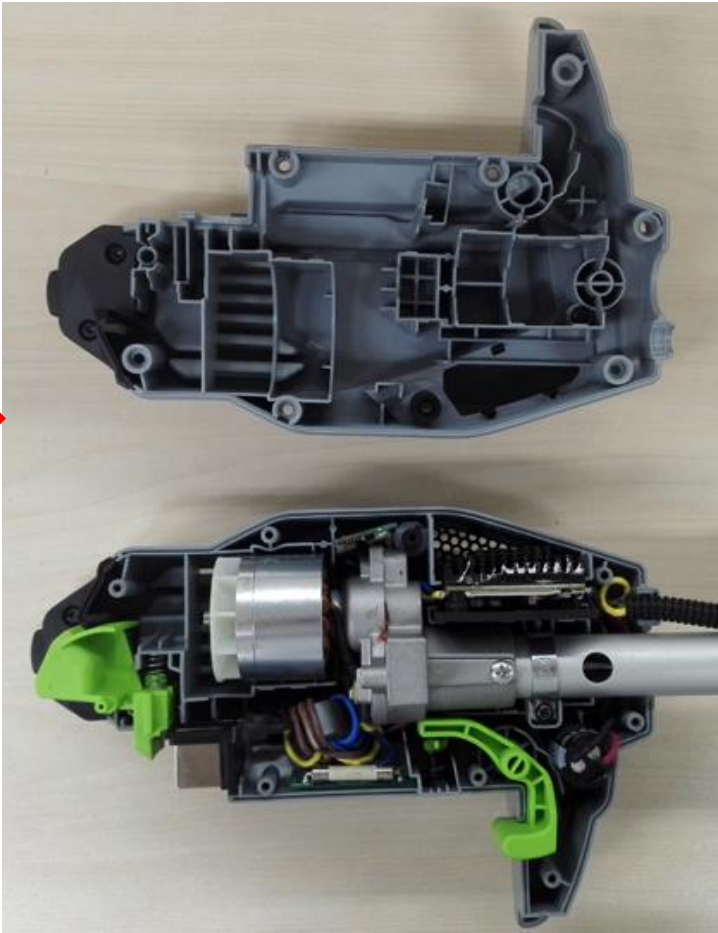
10. Rotate the wing bolt to connect the shaft base set with the connecting tube base set.



Part 4: Replacing the Motor Assembly and PCBA

4. Replace the Motor Assembly and PCBA

1. Loosen 8 screws to disassemble the housing assembly.

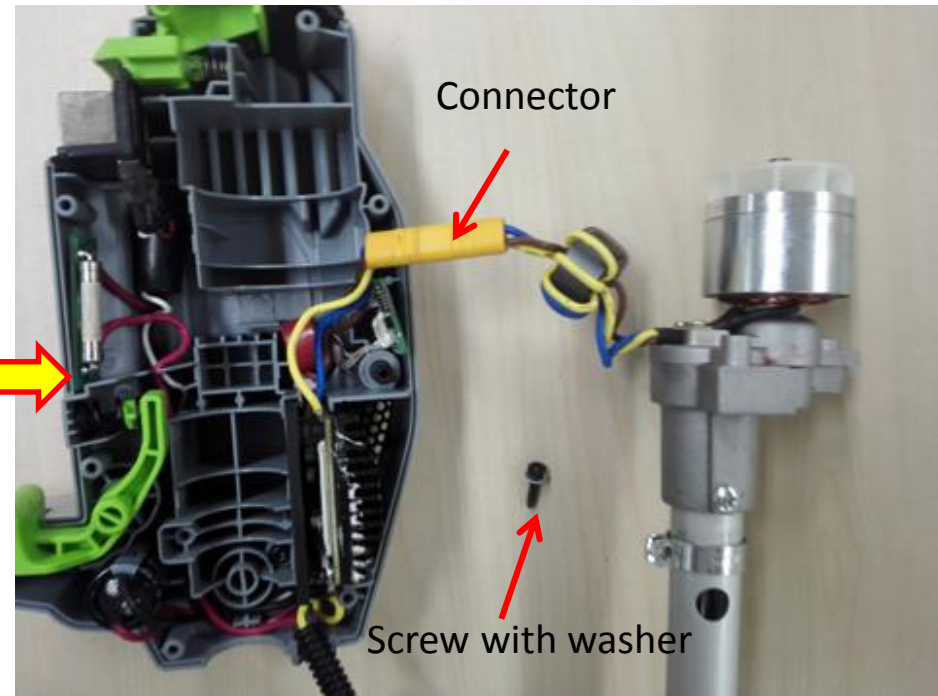
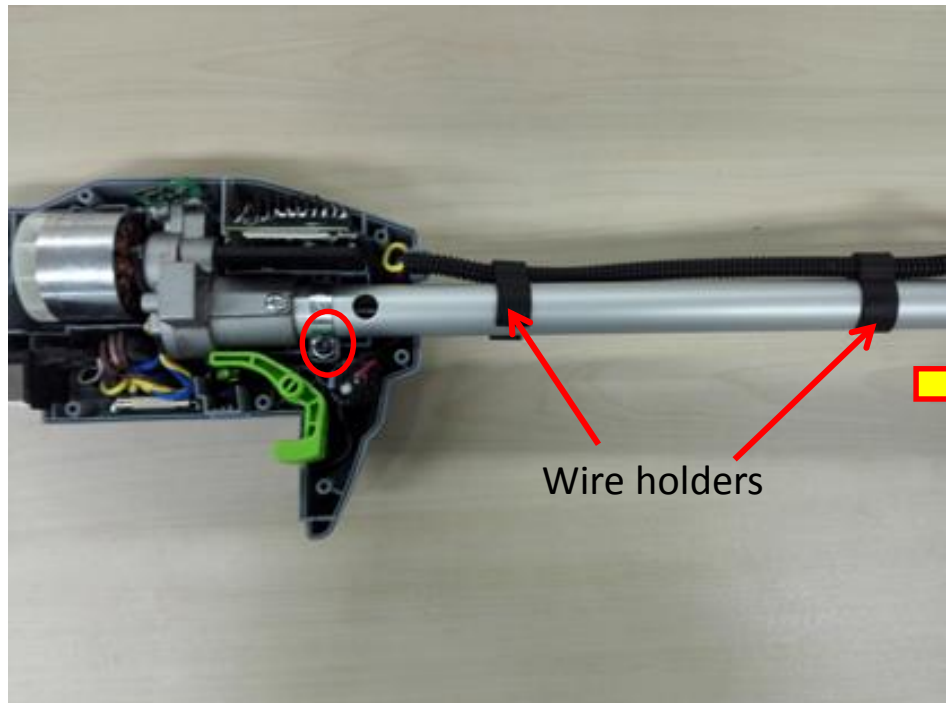


Description	Part Number	Quantity
Tapping screw	5620479001	8

4. Replace the Motor Assembly and PCBA

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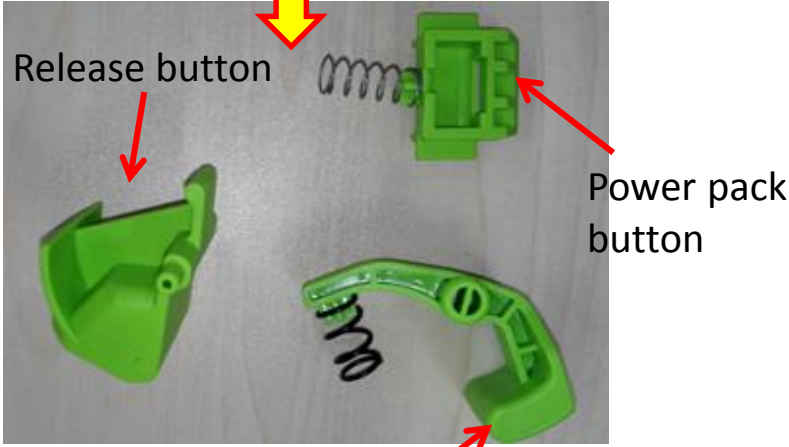
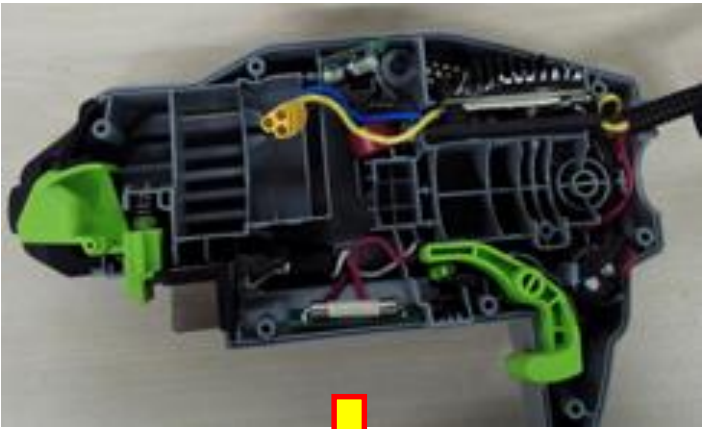
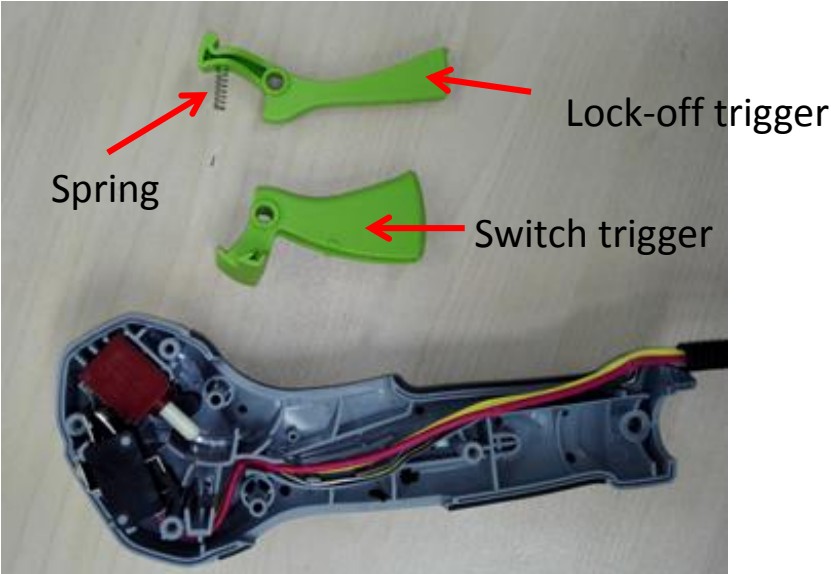
2. Remove the two wire holders from the shaft and loosen the screw with washer on the fixed ring.
3. Take the shaft and motor out of its groove and disconnect the connector.



Description	Part Number	Quantity
Tapping screw	5620479001	1
Washer	5650005001	1

4. Replace the Motor Assembly and PCBA

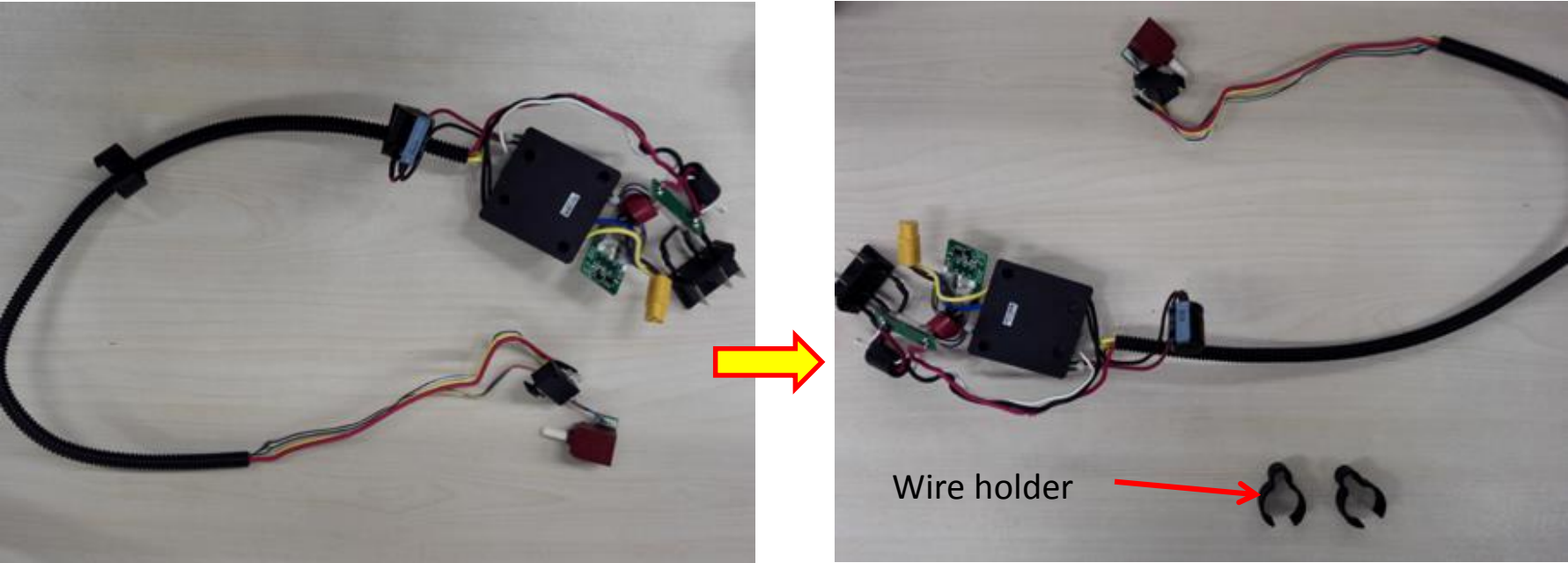
- 4. Disassemble the right handle ASSY referring to "Part 3" and remove the switch trigger, lock-off trigger and spring. If any part is damaged, replace it.
- 5. Remove the power pack button, release button and level from the housing as well as the springs.



Description	Part Number	Qty.
Spring	3660030005	1
Lock-off trigger	3128372001	1
Switch trigger	3128373001	1

4. Replace the Motor Assembly and PCBA

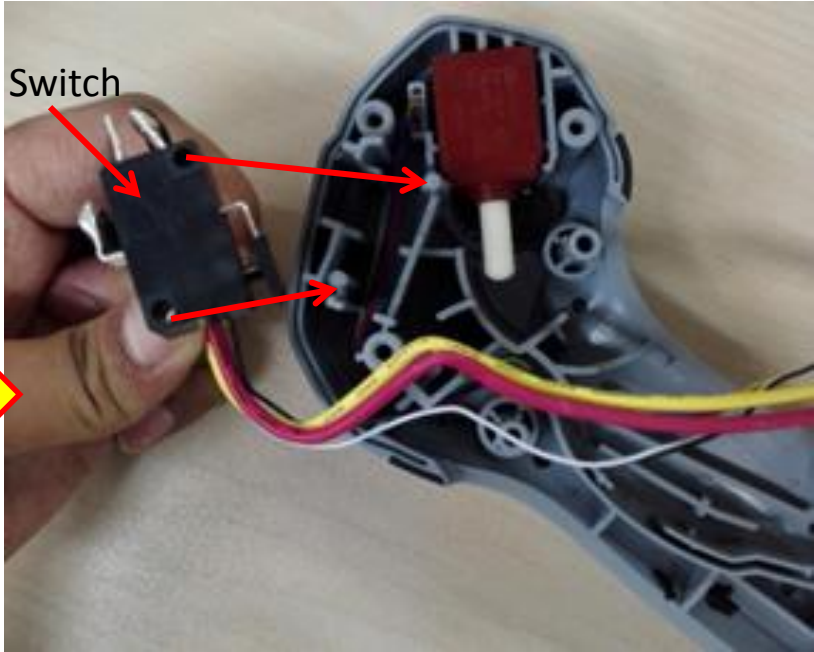
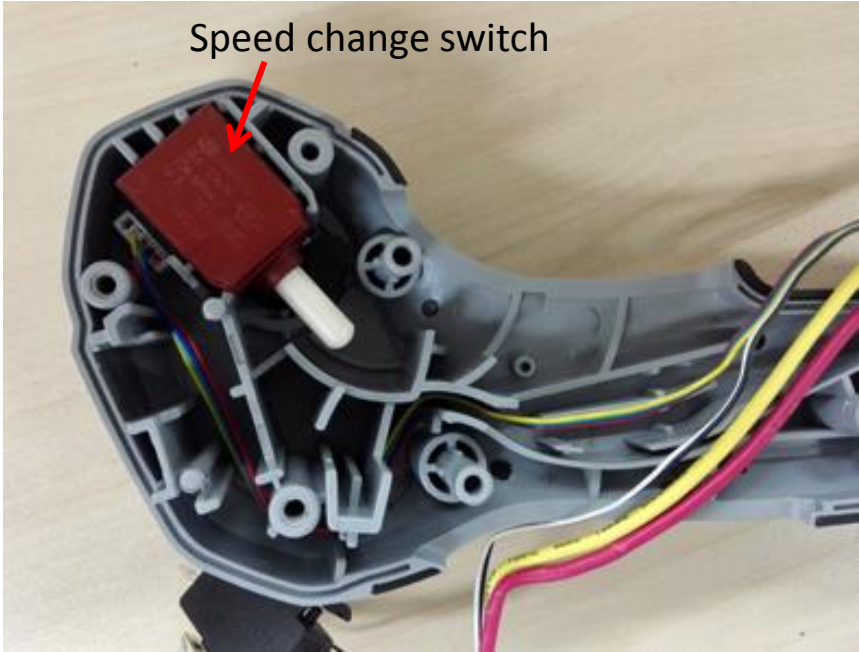
- 6. Take the PCBA away and separate the wire holders from PCBA. If PCBA is damaged, replace it with a new one.



Description	Part Number	Qty.
PCB assembly	2830218001	1

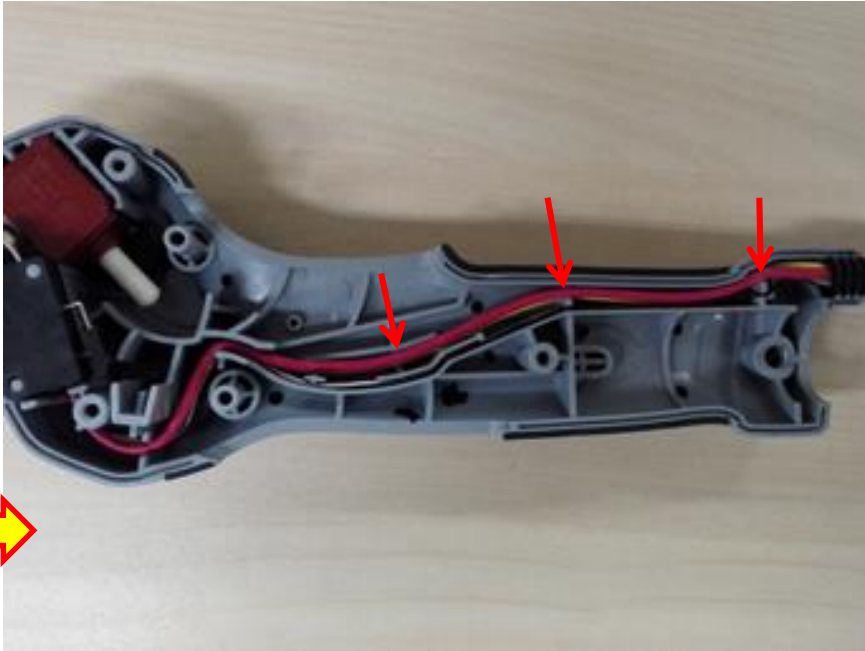
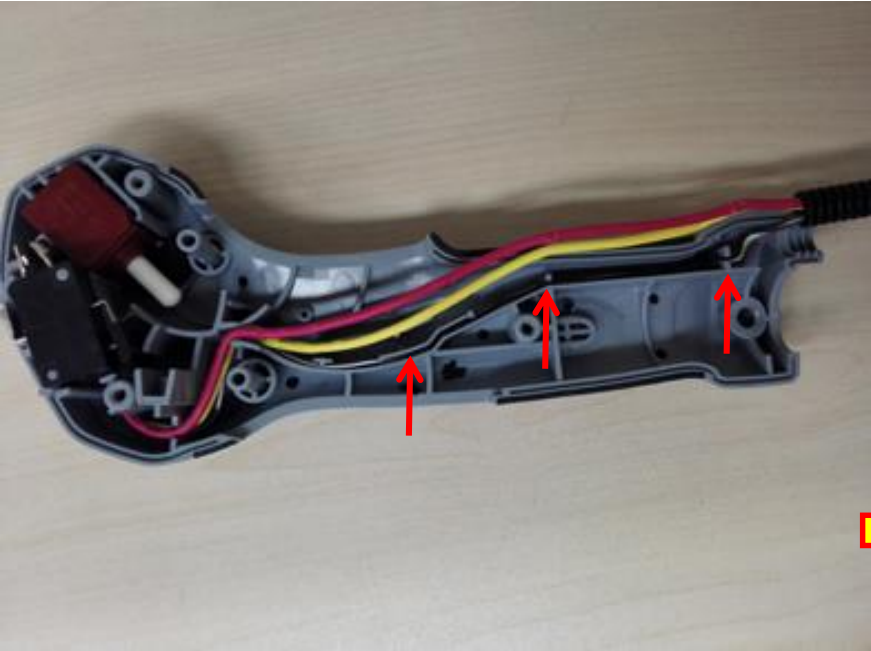
4. Replace the Motor Assembly and PCBA

7. Mount the switch and speed change switch into the grooves respectively.



4. Replace the Motor Assembly and PCBA

8. Align the wire loom, yellow cable and red cable in sequence.



4. Replace the Motor Assembly and PCBA

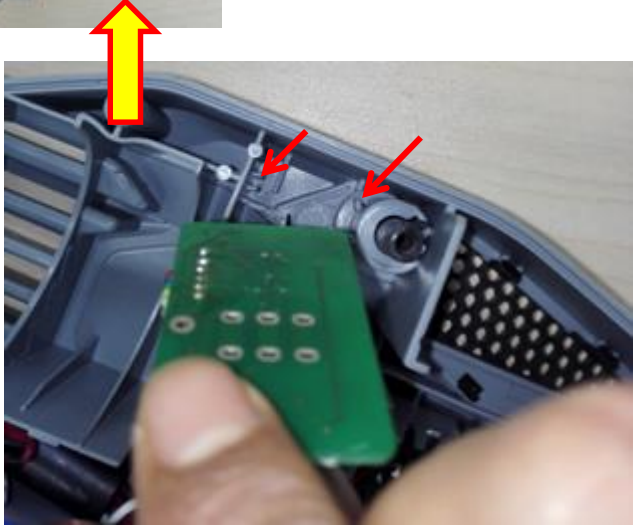
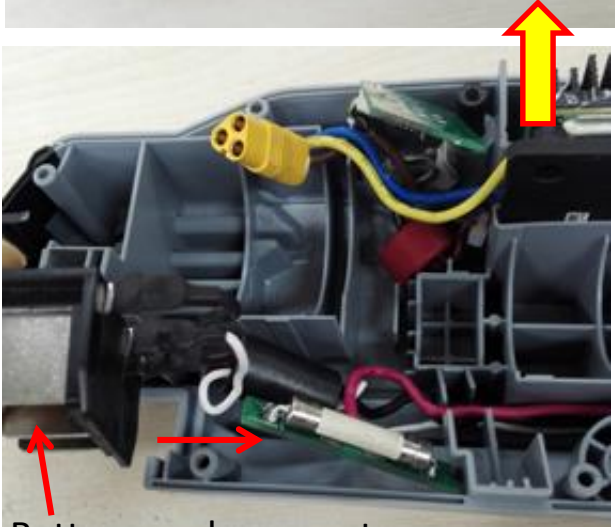
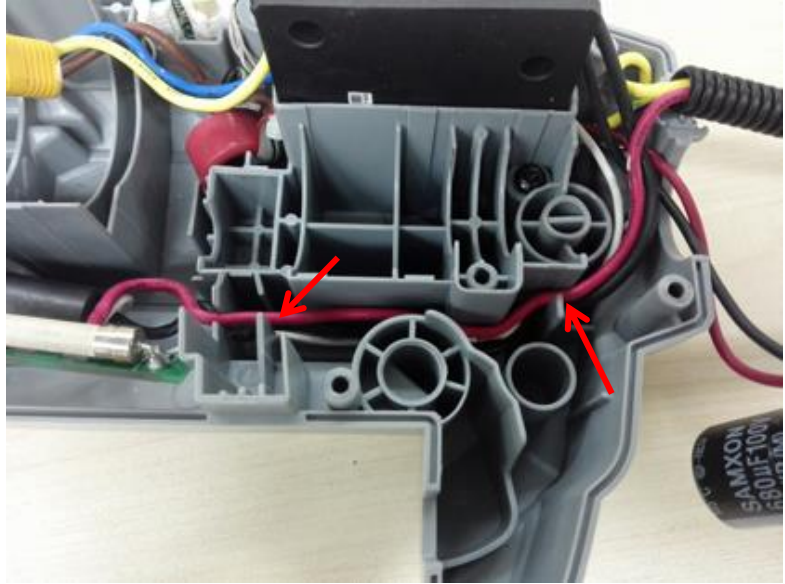
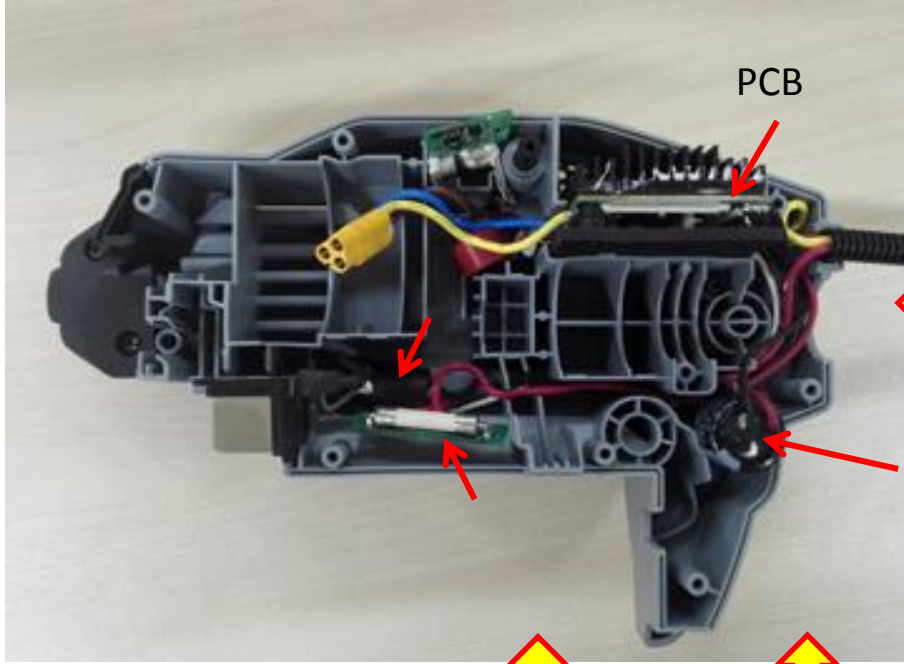
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9. Mount the switch trigger, lock-off trigger and spring into the groove.



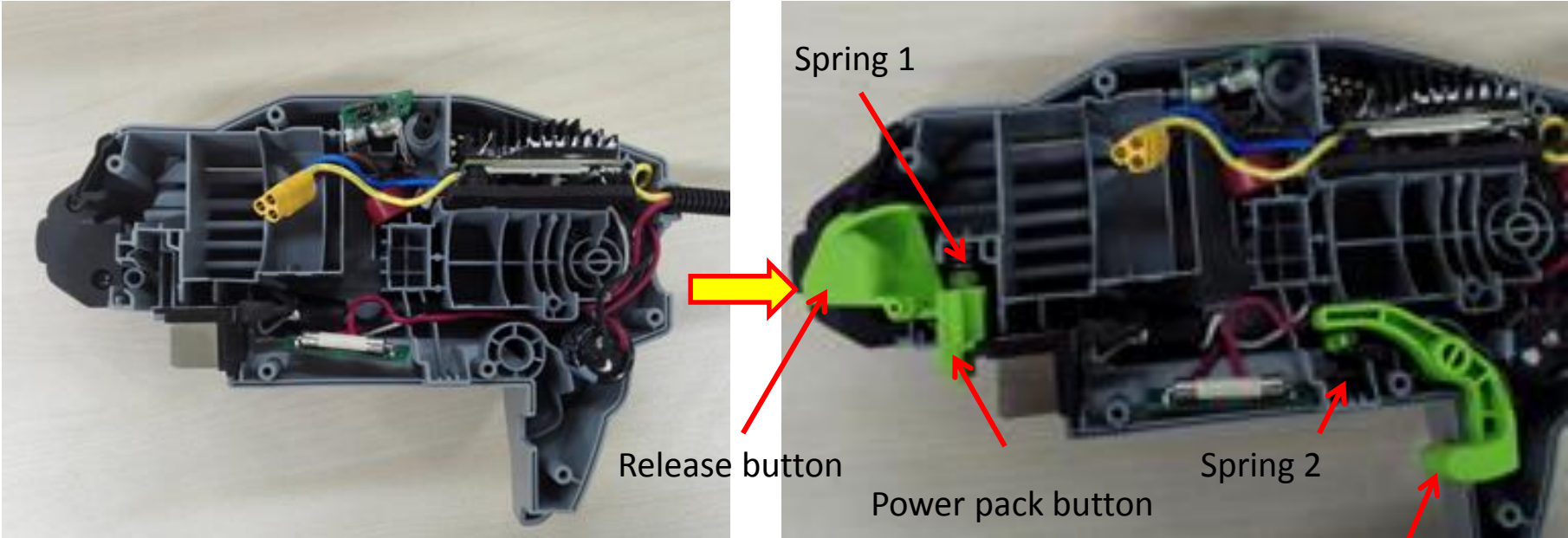
4. Replace the Motor Assembly and PCBA

10. Align the wires into its groove and mount the PCBA into the housing.



4. Replace the Motor Assembly and PCBA

11. Mount the power pack button together with the release button into the groove and then put the lever into its position.

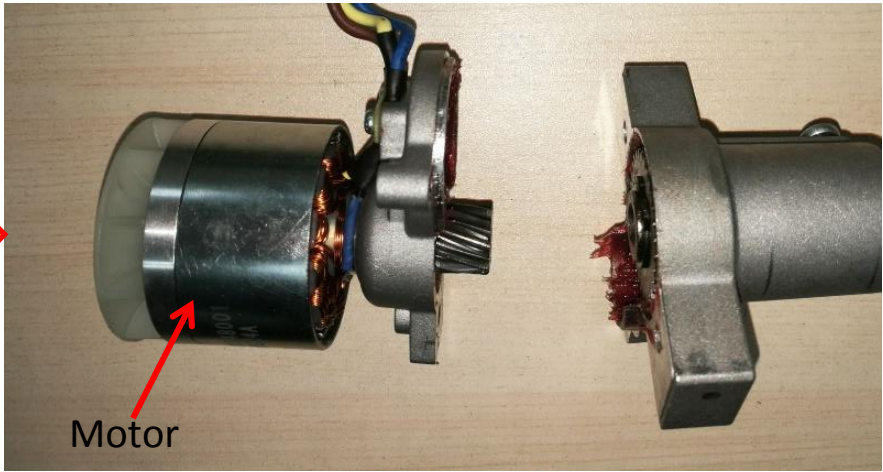


Description	Part Number	Qty.
Spring 1	3660013003	1
Spring 2	3660614001	1
Power pack button	3127202001	1
Release button	3127201001	1
Level	3128266001	1

Level

4. Replace the Motor Assembly and PCBA

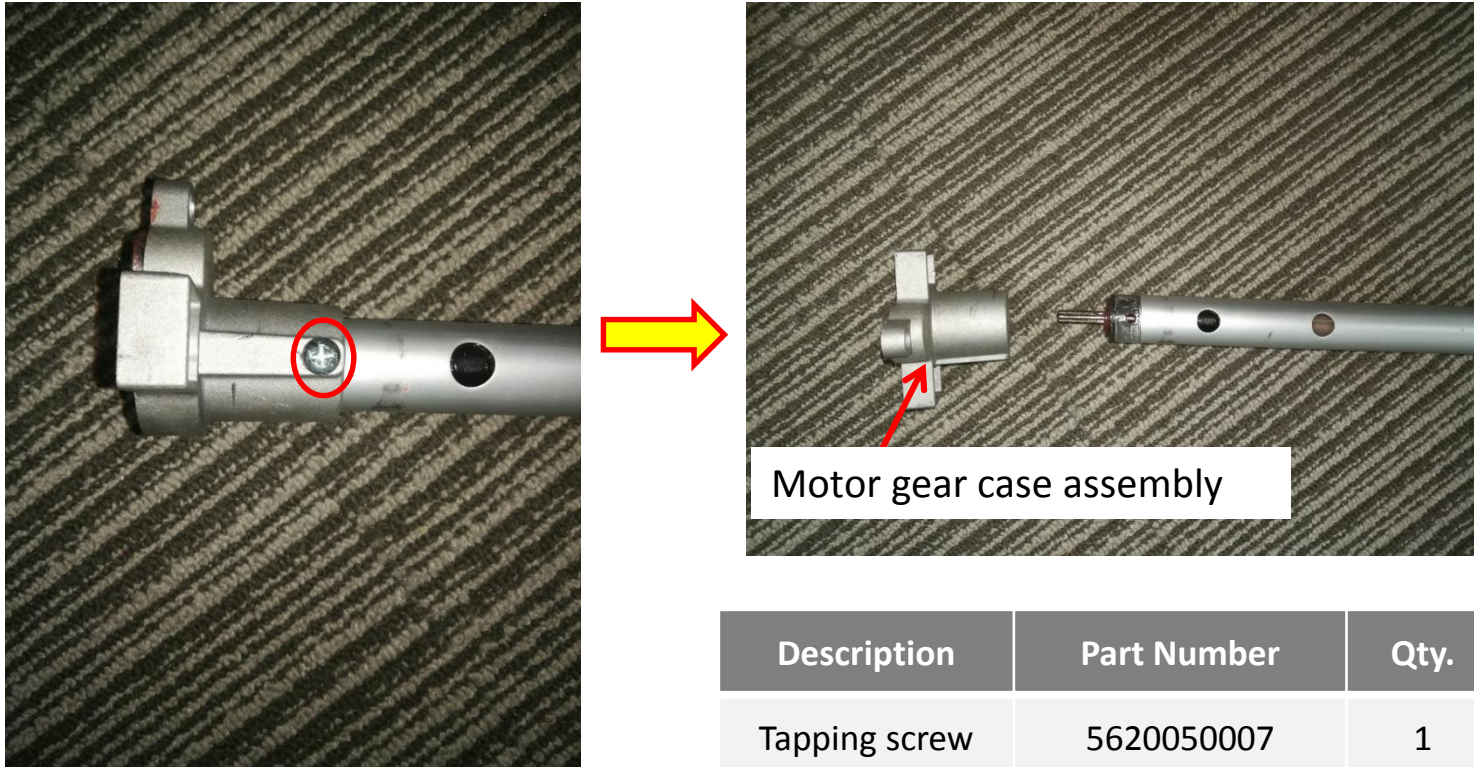
12. Loosen 3 screws to separate the motor from the shaft assembly.



Description	Part Number	Qty.
Tapping screw	5620050007	3
Motor	2824757002	1

4. Replace the Motor Assembly and PCBA

13. If the motor gear case assembly is broken, then loosen the screw to separate the motor gear case assembly from the shaft.



Description	Part Number	Qty.
Tapping screw	5620050007	1
Motor gear case assembly	2824761002	1

4. Replace the Motor Assembly and PCBA

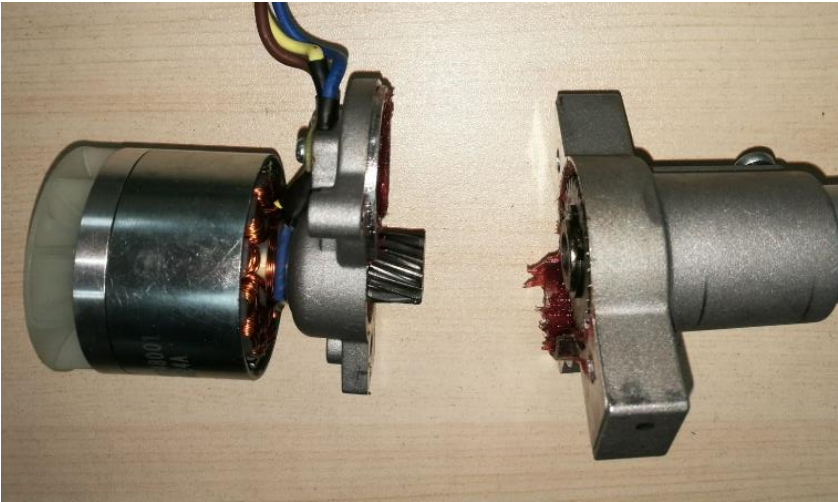
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14. Replace the motor gear case assembly with a new one and assemble it onto the shaft assembly with screw.



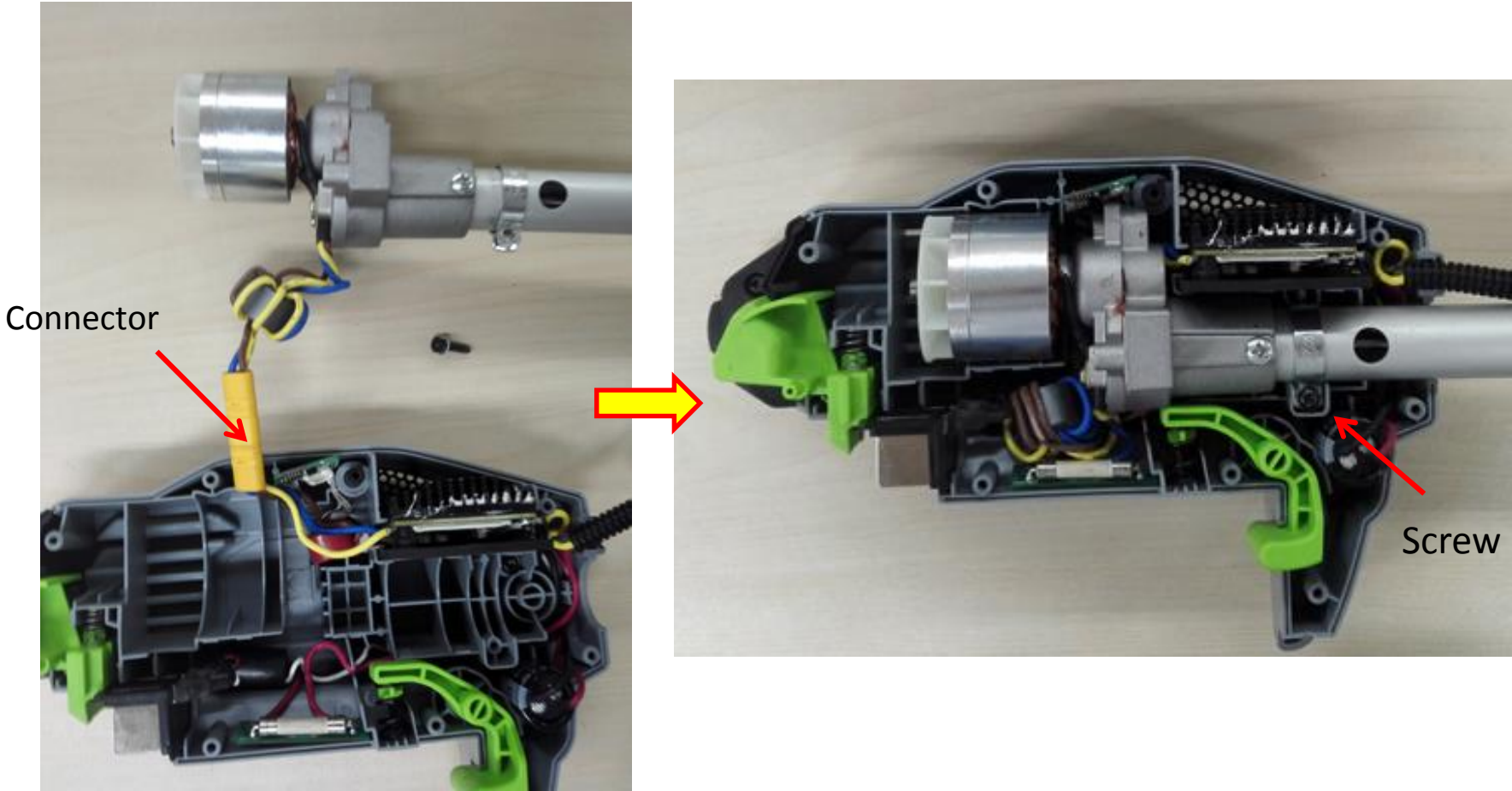
4. Replace the Motor Assembly and PCBA

- 15. Replace the motor with a new one and then assemble the motor with the gear case assembly with screws.



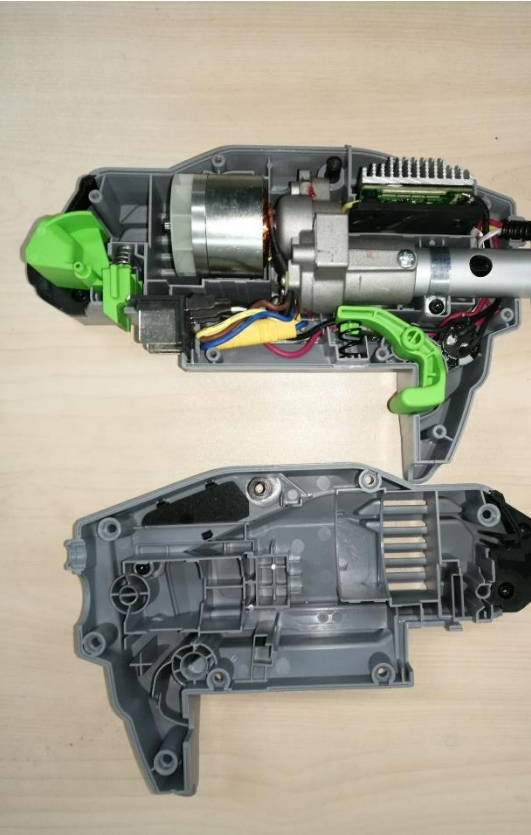
4. Replace the Motor Assembly and PCBA

16. Connect the connector and put the shaft with motor into the housing, then tighten the screw.



4. Replace the Motor Assembly and PCBA

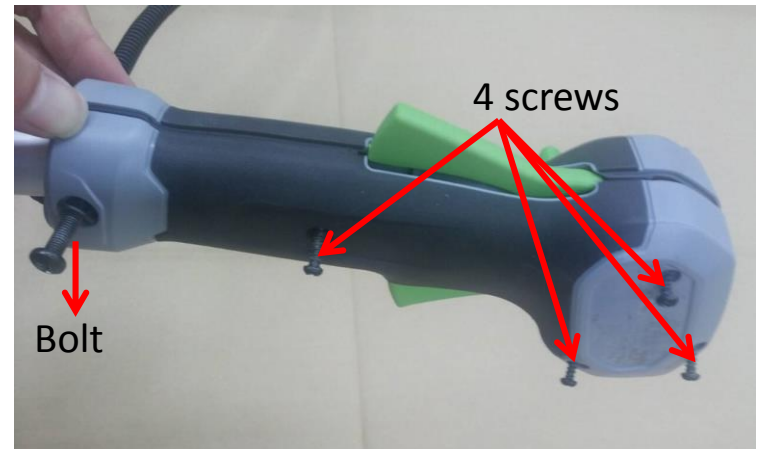
17. Assemble the housing assembly with 8 screws.



4. Replace the Motor Assembly and PCBA

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- Align the slot on the connecting tube with the rib on the housing, as well as aligning the location pole on the housing with the hole on the connecting tube to mount the right handle housing set onto the connecting tube.
- Lock the right handle housing set with 4 screws and 1 bolt with its washer and nut.



4. Replace the Motor Assembly and PCBA

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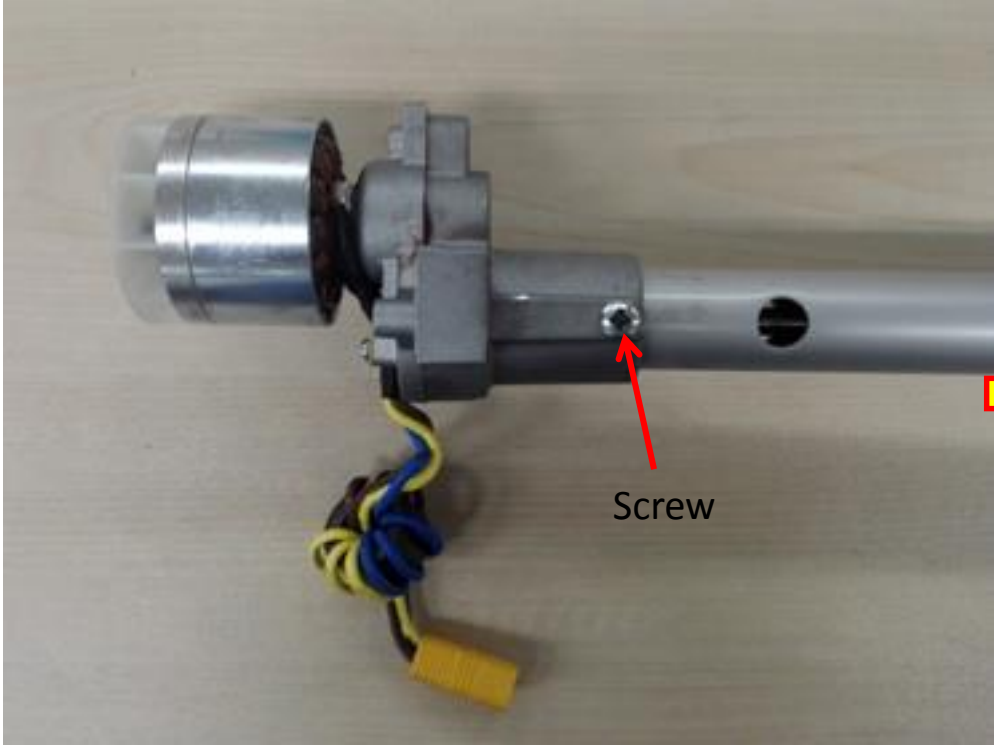
20. Lock wire loom with two wire holders.



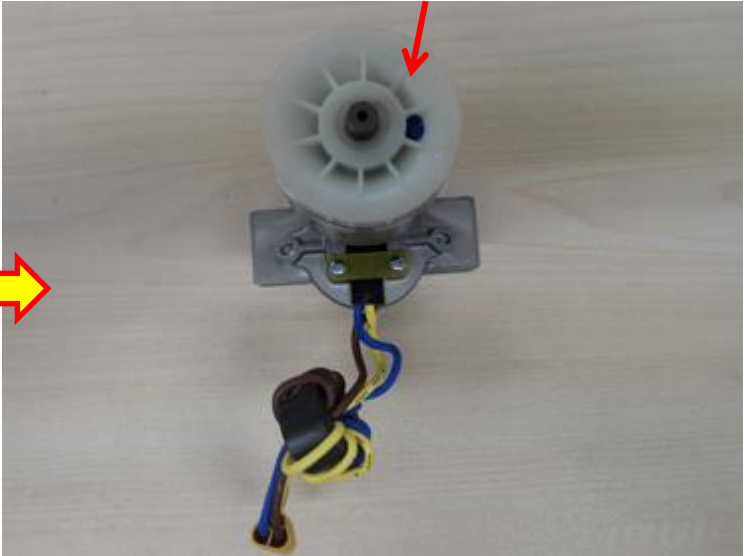
Part 5: Replacing the Shaft Assembly

5. Replace the Shaft Assembly

- 1. Separate the motor with gear case and rear housing from the shaft as “part 4” shown .



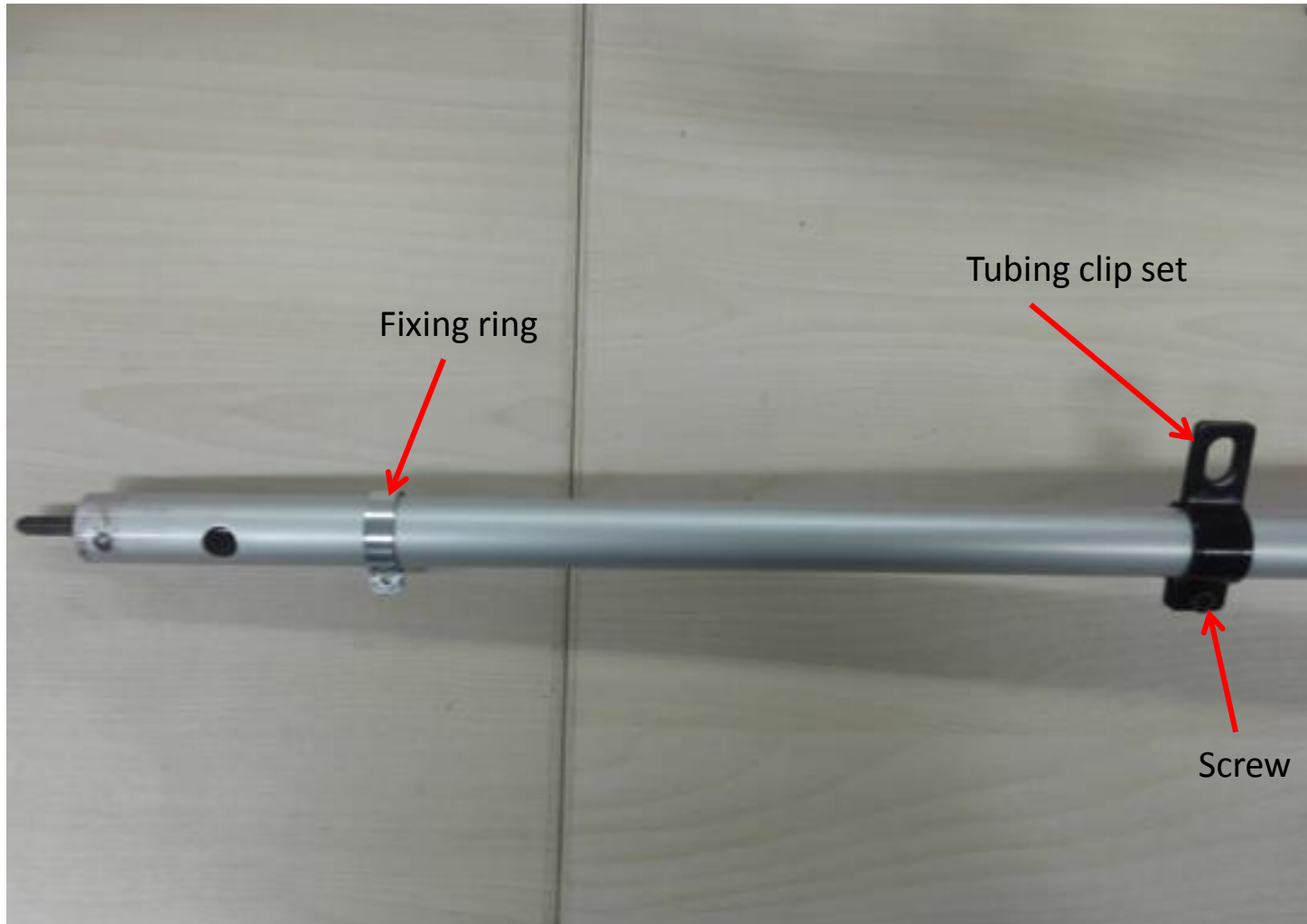
Motor with gear case



5. Replace the Shaft Assembly

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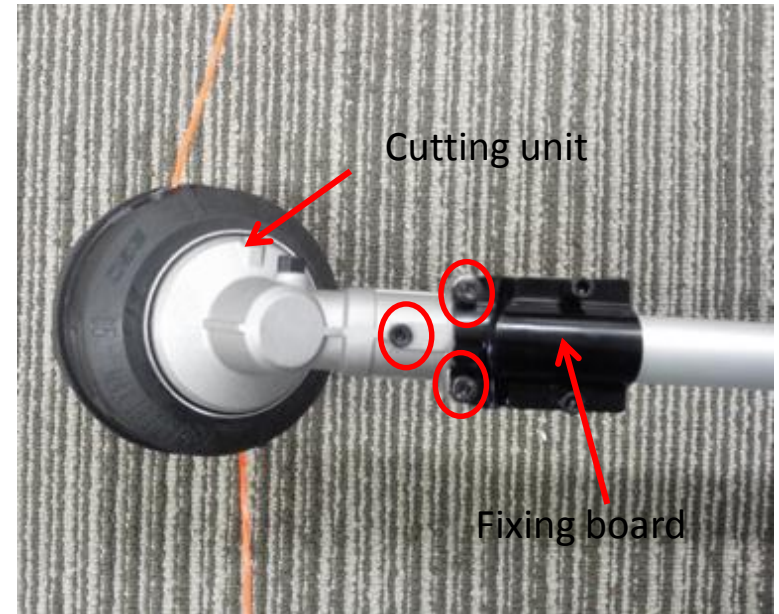
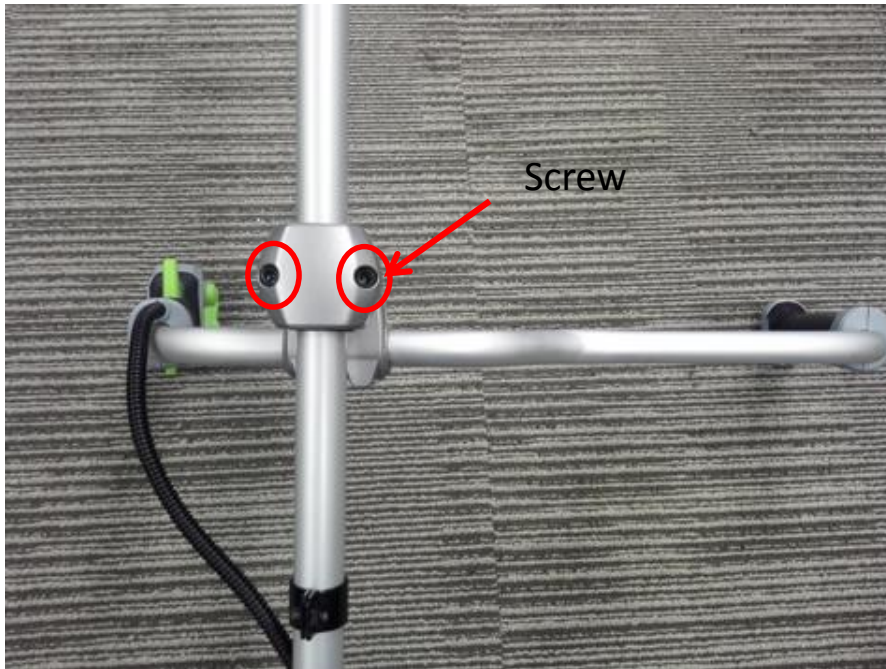
2. Remove the screw and take the tubing clip set and fixing ring from the shaft .



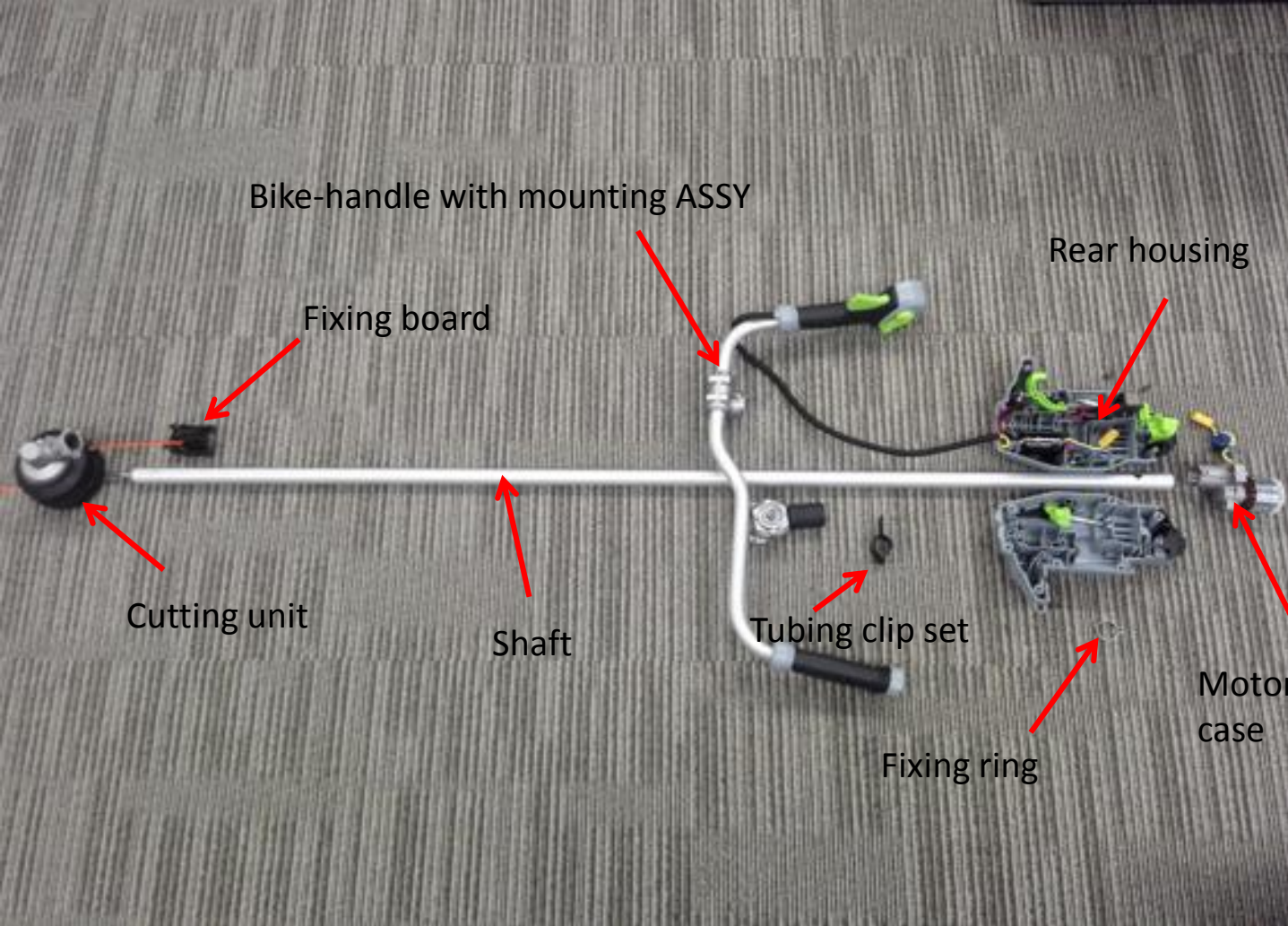
5. Replace the Shaft Assembly

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3. Remove two screws on the connecting tube base set take the bike-handle with mounting ASSY from the shaft .
4. Loosen the three screws to separate cutting unit fixing board from the shaft.

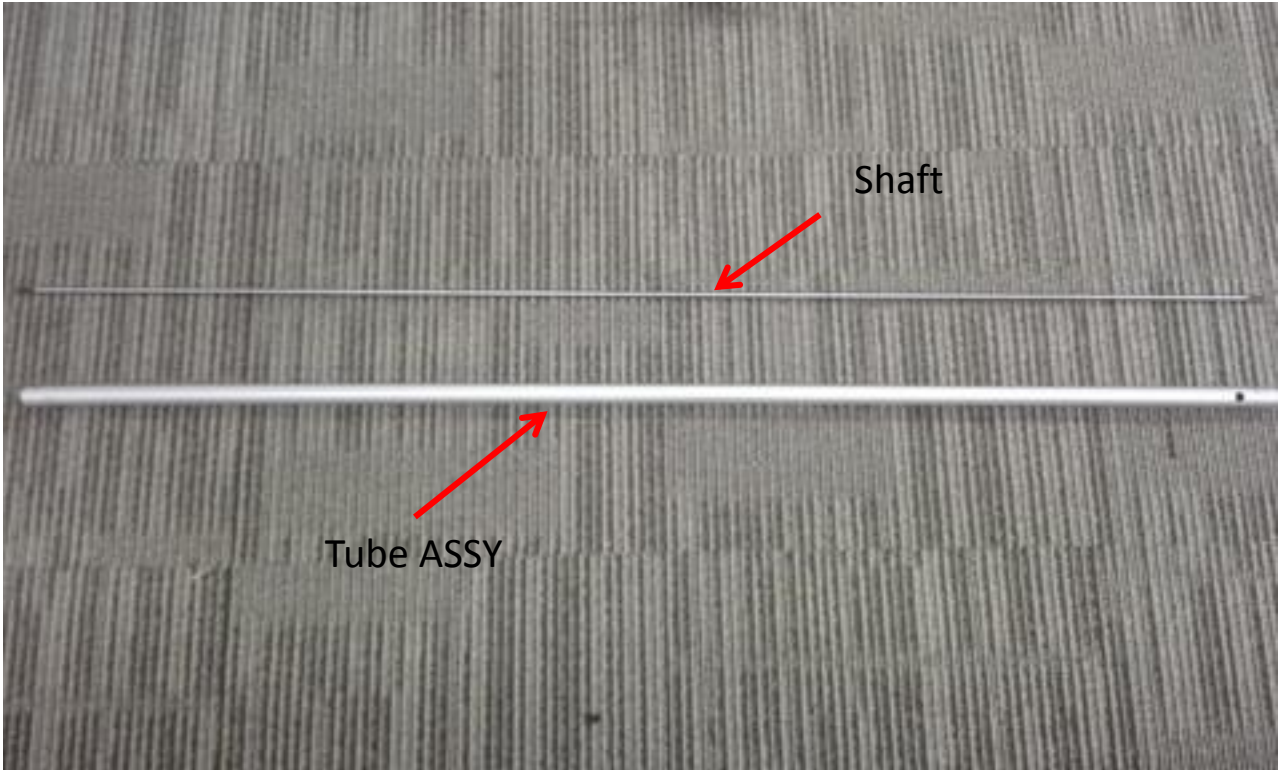


5. Replace the Shaft Assembly



5. Replace the Shaft Assembly

5. Pull out the shaft from the tube ASSY and replace the shaft or the tube ASSY with a new one.



Description	Part Number	Qty.
Shaft	3552666001	1
Tube ASSY	2825232002	1

5. Replace the Shaft Assembly

BC3800E Brush Cutter

6. Insert the shaft into the tube ASSY, then assemble the cutting unit, fixing board, tubing clip set, fixing ring, motor with gear case, rear housing and bike-handle with mounting ASSY in sequence .