

### REPAIR GUIDELINE

#### **EGO BCX4500 Commercial Bike Handle Brush Cutter Tool**



Version: A

Issue Date: 5/8/2023



NO.	Contents	Page
1	Troubleshooting	3
2	Tool List	4
3	Replace the PCBA	5
4	Replace the Motor	8
5	Replace the Gear Case	9
6	Replace the LCD Assembly	16
7	Replace the Bike Handle Assembly	18



# **Troubleshooting**

Problem	Possible cause	Fault Position	Test & Solution	Page
Not working	Faulty battery or faulty battery contacts	Battery	Test with a healthy battery.	
	The cables that connect to motor are loose or disconnected from motor.	Cables	check the cable connection with Motor & PCBA	7
	Only running for a few seconds at a time, can get to restart but only runs for a few seconds.	PCBA	Replace the <b>PCBA</b> .	4
	Did not start. when trigger pulled only a metallic click sound	Motor	Replace the <b>Motor</b> .	7
	Pull the trigger, speed change will be displayed on the speed indicator, but the motor does not work	Motor	Replace the <b>Motor</b> .	7
	Speed indicator flashing orange light	Motor / Gear case	Run the tool with the gearbox removed first, if the tool works properly. Replace the <b>Gear case</b> , otherwise replace the <b>Motor</b> .	8/7
	The machine does not respond and the indicator light is off	PCBA	Replace the <b>PCBA</b> .	4
Low speed	keep running at low speed	Motor	Replace the Motor.	7
Noise	Noise form the gearbox	Gear case	Add grease, otherwise replace the <b>Gearbox</b> .	8
	Making a really loud abnormal noise from the motor	Motor	Replace the <b>Motor</b> .	7
Indicator	The machine is running normally, but the speed indicator is abnormal	Handle Assembly	Replace the <b>Handle Assembly</b> .	16



# **Tool List for Repair**

NO.	Tool list	SPEC	Remark
1	Socket wrench	15mm	
2	Torx screwdriver	T15&T20	
3	Hex wrench	5mm	



### Replace the PCBA

Loosen the screws of the middle case, and then loosen the screws of the rear case







#### Replace the PCBA

Open the middle case first, and then open the rear housing. When opening the rear housing, press the battery pack lock with your fingers to prevent the spring from popping out.



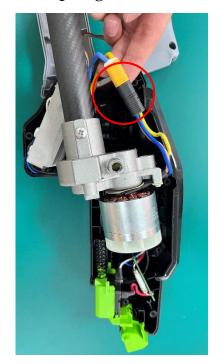




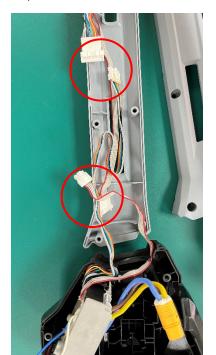


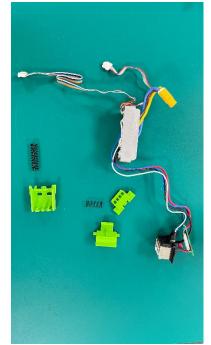
#### Replace the PCBA

Disconnect the three-phase terminal connected to the motor, remove the motor and the shaft, disconnect the white terminal in the middle housing, and take out the PCBA. (Note that the rear battery pack lock and spring can be removed in advance to prevent loss.)





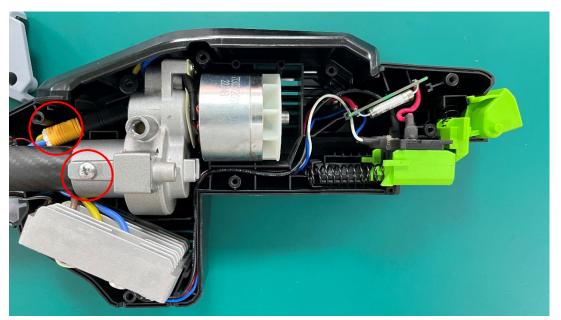






#### **Replace the Motor**

Please refer to Page. 4~5 for the steps to open the case, disconnect the terminals connected to the PCB and loosen the screws circled in red to replace the motor







Loosen the four screws on the cover to remove the cover, then remove the guard.



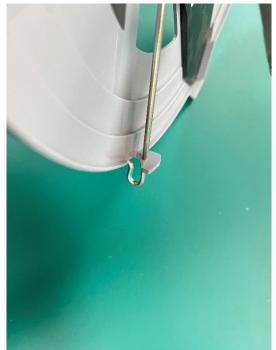






Loosen the steel wire along the slot and remove the blade cover









Rotate the blade until the notch can be seen







Use the provided wrench to fix the card slot, and use the wrench to turn the nut clockwise until it is loose









Remove the nut, outer flange, blade, cover plate, inner flange, and oil hole nut in sequence











Loosen the screws fixed on the pole and take off the gear box (the holes on the gear box and the pole should be aligned when installing)









Remove the screw from the oil hole of the gearbox and replace the gearbox

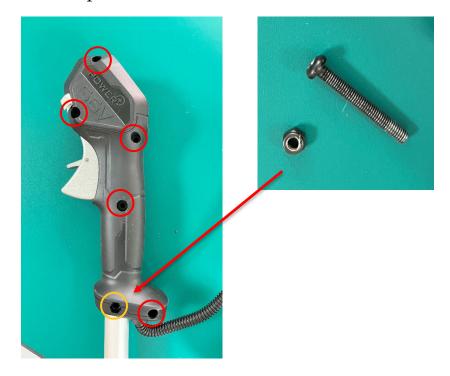


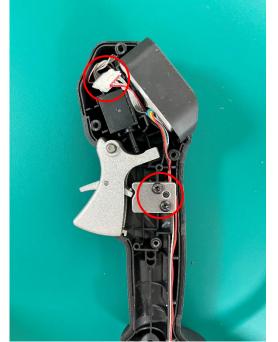




## Replace the LCD Assembly

Loosen the screw on the handle, loosen the screw marked with a yellow circle from the other side, and pull out the switch and block in the handle



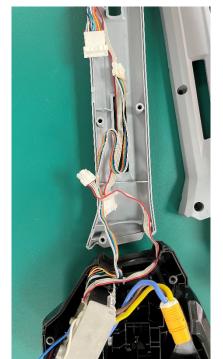




#### Replace the LCD Assembly

Please refer to Page. 4~5 for the steps to open the housing, unplug the two terminals in the middle case to replace the LCD assembly. (The arc must be aligned and embedded during installation)







### Replace the Bike handle

Turn the knob counterclockwise as shown in the figure until the handle can be pulled out, pull out the knob, and loosen the screw at the bottom











#### Replace the Bike handle

Loosen the screws under the base to remove the base (note that the spring at the upper end of the base pops out)













