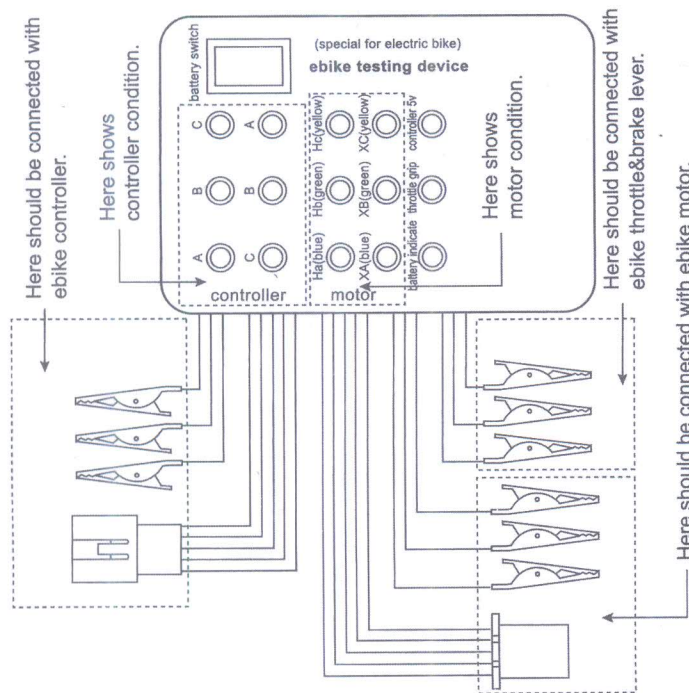
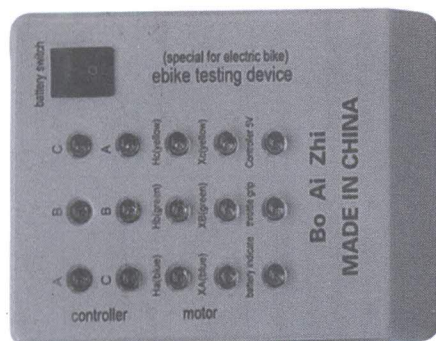


The manual guide book for ebike testing device



Brushless motor hall and brushless motor phase angle testing

Note: As shown in the picture ● : bright, ○ : dark.

1 Disconnect ebike motor and controller.

2 As shown in the picture, connect the ebike testing device with the motor. Please pay attention that red wire should be connected with red wire, and black wire will be with black wire.

3 Turn on battery switch, then its indicator will be light.

4 Rotate the motor slowly by hand. It will be angle of 60°, if the three indicators will be light or off at the same time, otherwise, it will be angle of 120°.

5 The above picture, it is the normal situation changes for the angle of 60 degrees of motor phase.

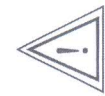
6 The above picture, it is the normal situation changes for the angle of 120 degrees of motor phase.

7 The hall is damaged or motor inner wires are in poor contact if there is only one or two or three indicators always do not work or do work.

Battery replacement

Open repair Po battery switch and found that the battery indicator lamps (LED) obviously not enough bright or not bright, power is insufficient, with outside diameter less than 5mm cross take four cover screws, replace 9V multimeter battery, and install the cover and tighten the screws can be.

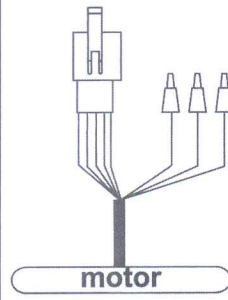
(Note: this car treasure low failure rate, there are problems please replace the internal battery).



Caution

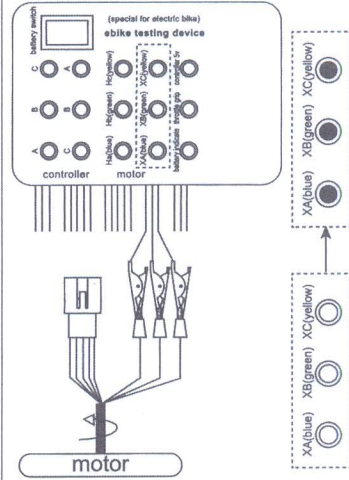
1. Please turn off device when you do not use it.
2. The ebike testing device should be kept in airy, dry and non-corrosive places for fear that shoe.
3. Please replace battery when its indicator turns dark or does not work, when you change the battery.

Brushless motor winding testing Note: As shown in the picture ● :twinkle, ○ :dark.



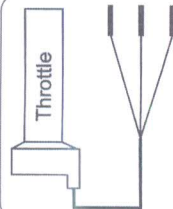
- 1 Disconnect ebike motor and controller.

- 2 As shown in the picture, connect the ebike testing device with motor main phases, then rotate the motor by hand. As shown left, if the three indicators lighten and twinkle, it shows the motor winding is in good condition. Otherwise, the motor winding has been fault.



Throttle testing

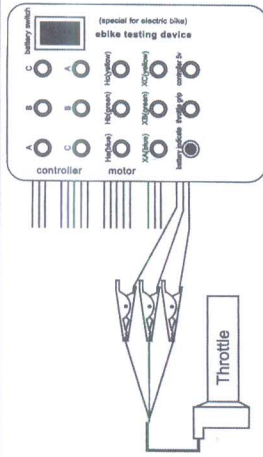
Note: As shown in the picture ● :bright, ○ :dim, ○ :dark.



- 1 Disconnect ebike and throttle.



- 3 Turn round throttle slowly to check that whether throttle grip indicator will change in light and shade.



- 2 As shown in the picture, connect the ebike testing device with the throttle, please pay attention that red wire should be connected with red wire, and black wire will be with black wire. Turn on the battery switch.



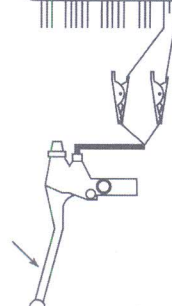
- 4 Two kinds of normal conditions.



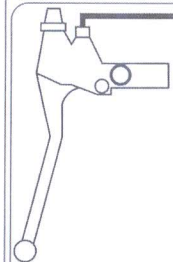
- 5 Two kinds of problem conditions.

Brake lever testing

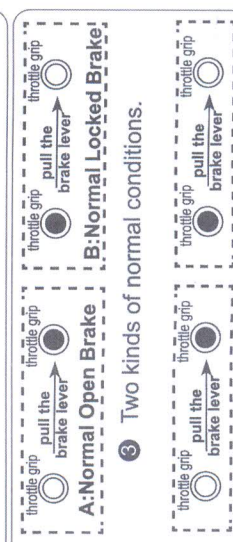
Note: As shown in the picture ● :bright, ○ :bark.



- 2 As shown in the picture, connect the ebike testing device with the brake (by the red and green line alligator clip at random). Turn on battery switch, pull the brake lever to check whether throttle grip indicator will turn on or off.

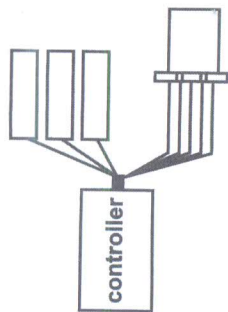


- 1 Disconnect ebike and brake.

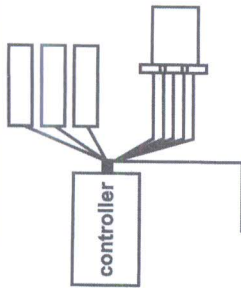


- 3 Two kinds of normal conditions.

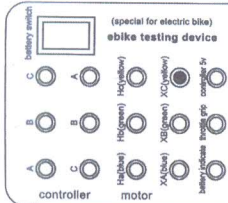
- 4 Two kinds of problem conditions.



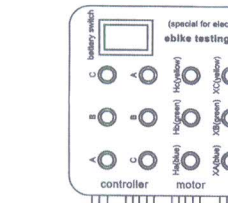
- 1 Disconnect controller and motor.



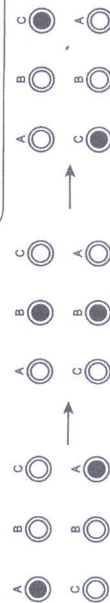
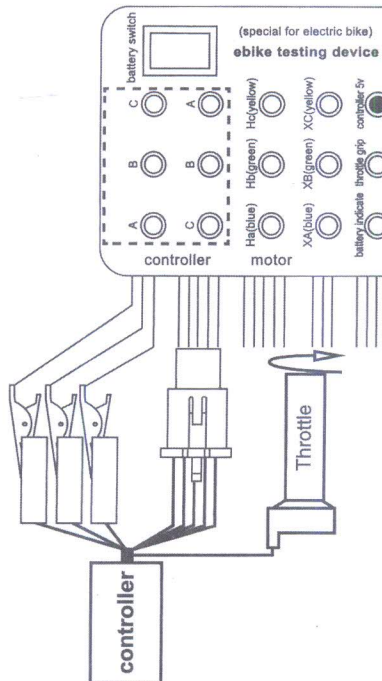
- 2 If there is speed meter for ebike, please disconnect its plug and controller signal wire, otherwise, it will effect testing results.



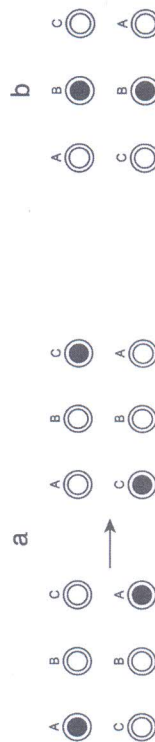
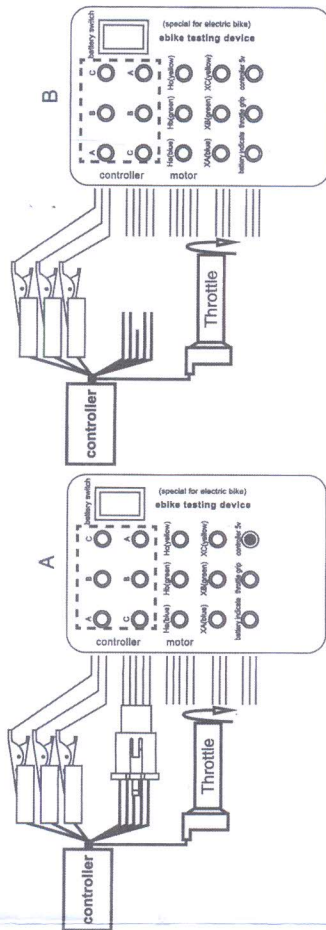
- 4 The ebike testing device controller 5V indicator will be light when turning on ebike. If it does not work, then the controller is in bad condition. (5V power output is in problem.)



- 3 As shown in the picture, connect the ebike testing device with the controller. Please pay attention that red wire should be connected with red wire, and black wire will be with black wire.



- 5 **Angle of 120°:** Turn round the throttle to check the change of device circular indicators. Indicators will twinkle regularly in 3 ways by pairs. The above picture is showing us the normal situation changes for the angle of 120° for controller. If indicators are in dark or do not be in regular, then it must be in problem.



- 6 **Angle of 60°:** Testing for angle of 60° for controller is divided in 2 parts. Firstly, look at drawing A, turn round the throttle to check the change of device circular indicators. Indicators will twinkle regularly in 2 ways by pairs, as shown in the picture a. Secondly, look at drawing B, cut out 5 pieces of signal wires, and return round throttle, the indicators will be light but they did not work before, as shown in the picture b. The picture (a) and the picture (b) are showing us the normal situation changes for the angle of 60° for controller. If indicators are in dark or do not be in regular, then it must be in problem.



NOTE:

Before testing controller, we'd better to test throttle & brake lever firstly, otherwise, there will be some wrong testing results. Meanwhile, this testing device can't be used for testing controller which is in dual-mode and sensor-less.