Golden Motor Technology Co. LTD. Regenerative Controller Self Calibration Procedure

Lift motor wheel up from the ground and attach it to a solid support stand. If the motor is attached to the bicycle, attach the bicycle to an appropriate support stand capable of solidly holding the bicycle with the powered wheel lifted at least 150mm (6") from the floor. Testing will be carried out at no load.

1 Make sure you have installed a heavy duty (30- 40 A) in-line power switch between the battery pack and the controller on the positive side of both units. The battery pack must have a nominal voltage of 24, 36 or 48 volts depending on your controller rating. **Controllers are voltage-specific, do not attempt to connect a controller to any other voltage than specified, it will damage it, create a hazard and void your warranty.**

2. Make sure power is off by detaching the battery pack connector. **Make sure all connections match the diagram on page 2**. Please check all connectors on both sides are properly seated. If you have a continuity tester (such as a multimeter) test every connection by touching the opposite sides of each connection pin to verify they are actually engaged. Verify the powerwheel is installed properly with the cable on the left hand side of the bicycle.

3. Make a jumper by cutting a thin piece of gauge 18 to 22 wire, approximately 50mm (2") in length. Strip both ends to expose 10mm (0.40") and bend it in a U shape.

4. On the controller box, find a 2 pin connector attached to **purple and black wires**. This is the motor phase recognition connector. Insert the jumper into the 2 pin connector so as to short it. This enables the controller to start automatic phase recognition settings.

5. Make sure the system power switch is toggled off. Reconnect battery pack leads. Toggle power switch on. If you have a multimeter, verify the correct voltage is being supplied to the controller connector.

6. Gently twist throttle halfway to run motor for 2-3 seconds ONLY. See if the motor runs smoothly, quietly, and in the correct direction (counter-clockwise observed from the cable side on the motor)

7. If yes, then remove jumper wire and toggle power switch off. The motor phase setting is completed, the controller will remember the setting.

8. If the motor still does not run smoothly, chokes, or spins in the wrong direction, repeat step 5 (The maximum number of settings is 12. The controller will find the right phase setting within 12 repetitions of step 5)

