



## ERROR CODE TROUBLESHOOTING GUIDE (Updated July 6th, 2023)

Error Code	Fault Name	Protection	Troubleshooting	Reason
1	Software Overcurrent	Shutdown	<ol style="list-style-type: none"><li>1. Restart with the key</li><li>2. Replace the controller</li><li>3. Replace the motor</li></ol>	<ol style="list-style-type: none"><li>1. Motor angle signal is disturbed</li><li>2. Controller current sensor abnormal</li><li>3. Motor code plate failure</li></ol>
2	Motor over speed	Shutdown	<ol style="list-style-type: none"><li>1. Restart with the key</li><li>2. Change controller harness</li><li>3. Replace the controller</li><li>4. Replace the motor</li></ol>	<ol style="list-style-type: none"><li>1. Motor angle signal abnormal</li><li>2. Controller code plate signal circuit abnormal</li><li>3. Motor code plate failure</li></ol>
3	Battery over-voltage	Shutdown	<ol style="list-style-type: none"><li>1. Restart with the key</li><li>2. Check the controller power cord and air switch harness connection</li><li>3. Replace the battery</li></ol>	<ol style="list-style-type: none"><li>1. Main power supply cord loose</li><li>2. Battery power absorption abnormal</li></ol>
4	Ignition/key switch power abnormal	Shutdown	<ol style="list-style-type: none"><li>1. Restart with the key</li><li>2. Replacement the ignition</li><li>3. Replace the battery</li></ol>	<ol style="list-style-type: none"><li>1. Ignition/ignition harness loose</li><li>2. 2. Battery abnormal</li></ol>
5	Controller 12V power abnormality	Shutdown	<ol style="list-style-type: none"><li>1. Replace the controller</li></ol>	<ol style="list-style-type: none"><li>1. Controller internal power supply abnormal</li></ol>
6	Controller 5V power abnormal	Shutdown	<ol style="list-style-type: none"><li>1. Replacement the throttle</li><li>2. Replace the motor encoder</li><li>3. Replace the controller</li></ol>	<ol style="list-style-type: none"><li>1. Throttle 5V power supply short circuit</li><li>2. Encoder 5v power supply short circuit</li><li>3. Controller 5v power supply abnormal</li></ol>
7	Angle/tilt sensor disconnection	Shutdown	<ol style="list-style-type: none"><li>1. Replace the controller Hall harness</li><li>2. Replace the controller</li><li>3. Replace the motor</li></ol>	<ol style="list-style-type: none"><li>1. Encoder angel signal abnormal or missing</li></ol>



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8	Hardware overcurrent	Shutdown	<ol style="list-style-type: none"><li>1. Replace the throttle</li><li>2. Replace the controller</li><li>3. 2. Replace the motor</li></ol>	<ol style="list-style-type: none"><li>1. Throttle 5v wire short circuit</li><li>2. Encoder 5v wire short circuit</li><li>3. Controller current sensor abnormal</li><li>4. Motor insulation abnormal</li><li>5. Motor encoder signal abnormal</li></ol>
9	Current closed loop/phase wire failure	Shutdown	<ol style="list-style-type: none"><li>1. Replace the controller</li></ol>	<ol style="list-style-type: none"><li>1. Controller current sensor signal abnormal</li><li>2. Controller power MOS tube damage</li></ol>
10	Battery under voltage/low voltage	Derate	<ol style="list-style-type: none"><li>1. Charge the battery</li><li>2. Replace the battery</li></ol>	<ol style="list-style-type: none"><li>1. Battery voltage lower than protection voltage</li></ol>
11	Controller overheated/temperature	Derate	<ol style="list-style-type: none"><li>1. Turn off the power. Let the controller cool down</li><li>2. Replace the controller</li></ol>	<ol style="list-style-type: none"><li>1. Controller temperature higher than protection temperature</li></ol>
12	Motor overheated/temperature	Derate	<ol style="list-style-type: none"><li>1. Turn off the power. Let the motor cool down</li><li>2. Replace the controller harness</li><li>3. Replace the motor harness</li></ol>	<ol style="list-style-type: none"><li>1. Motor temperature signal wire disconnected</li><li>2. Controller temperature higher than protection temperature</li></ol>
13	Current sensor abnormal	Shutdown	<ol style="list-style-type: none"><li>1. Replace the controller</li></ol>	<ol style="list-style-type: none"><li>1. Controller current sensor abnormal</li></ol>
14	Motor signal interference	Shutdown	<ol style="list-style-type: none"><li>1. Replace the controller harness</li><li>2. Replace the motor</li></ol>	<ol style="list-style-type: none"><li>1. Angel signal is interrupted</li><li>2. Angel signal connection abnormal</li><li>3. Motor encoder is damaged</li></ol>
15	Throttle no signal	Shutdown	<ol style="list-style-type: none"><li>1. Check the throttle harness for loose connections</li><li>2. Replace the throttle</li><li>3. Replace the main harness</li></ol>	<ol style="list-style-type: none"><li>1. Throttle wire is broken</li><li>2. Throttle is damaged</li><li>3. Main harness is damaged</li></ol>
16	Throttle position sensor not reset	Shutdown	<ol style="list-style-type: none"><li>1. Release the throttle and restart with key</li><li>2. Replace the throttle</li></ol>	<ol style="list-style-type: none"><li>1. Throttle not reset before starting</li><li>2. Throttle is damaged</li></ol>



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17	Motor blocked	Derate	<ol style="list-style-type: none"><li>1. Check the controller wiring harness for loose connections</li><li>2. Check the driving wheel</li><li>3. Replace the motor</li></ol>	<ol style="list-style-type: none"><li>1. Motor output is blocked</li><li>2. Motor phase wire position is wrong</li></ol>
18	Battery communication/BMS disconnect	Shutdown	<ol style="list-style-type: none"><li>1. Check the wiring harness for loose connections</li><li>2. Replace the controller harness</li><li>3. Replace the power cord</li><li>4. Replace the battery</li></ol>	<ol style="list-style-type: none"><li>1. Controller failed to receive the signal from battery</li></ol>
19	Battery Communication/BMS Failure	Shutdown	<ol style="list-style-type: none"><li>1. Replace the battery</li></ol>	<ol style="list-style-type: none"><li>1. Battery internal communication abnormal</li></ol>
21	Brake failure	Shutdown	<ol style="list-style-type: none"><li>1. Release the brake and restart with key</li><li>2. Replace the brake power off switch</li></ol>	<ol style="list-style-type: none"><li>1. Brake is on working status when starting the ignition</li></ol>
Parking gear cannot be released	Power off switch signal abnormal	Shutdown	<ol style="list-style-type: none"><li>1. Hold brakes and D key for 10 seconds to unlock parking gear</li><li>2. Replace the kickstand switch</li><li>3. Replace the main harness</li></ol>	<ol style="list-style-type: none"><li>1. Parking gear switch abnormal</li></ol>