



Code	Source	Description of Fault	Customer Action	Possible Reason for Fault	Dealer Action(s)
1	Controller	Low battery voltage	Charge battery to 100%. If problem continues, please contact dealer	Low SOC or low battery from climbing long hill	(1)Export BMS data (storage data)
2	Controller	Motor over temperature	Stop vehicle and let motor cool down		
3	Controller	Controller over temperature	Stop vehicle and let controller cool down		
4	Controller	Forward and backward switches activated simultaneously	Please contact dealer	Short circuit in FNR wire harness	(1)Replace harness
5	Controller	Accelerator SRO activation	Release accelerator and recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Check accelerator harness connection.	(1)Replace harness
6	Controller	Accelerator start switch SRO active	Release accelerator and recycle keyswitch (power OFF and ON). If problem continues, please contact dealer		(1)Reinstall controller HEX file
7	Controller	Direction switch SRO active	Please contact dealer		(1)Reinstall controller HEX file
8	Controller	Charge status warning	Check charging plug ends. Replace if worn or damaged	Should not happen with LiON	Not applicable
11	Controller	BMS communication error	Please contact dealer	CAN BUS harness loose or BMS failure	(1) Check CAN bus communication harness connection (2) Replace BMS
13	Controller	BMS fault	Please contact dealer	BMS failure	(1)Export BMS data (storage data) (2)Likely replace BMS
15	Controller	Programmable parameter check error	Please contact dealer	Controller parameter issue	(1)Reinstall controller HEX file
16	Controller	Current sensor calibration error	Please contact dealer	Controller failure	(1)Replace controller
20	Controller	Low battery startup voltage	Charge battery to 100%. If problem continues, please contact dealer		(1)Export BMS data (storage data) (2)Send data to Atlas (3)Atlas-review data and suggest action
21	Controller	Precharging failure, low charging voltage	Please contact dealer	Controller failure	(1)Replace controller
22	Controller	Precharge fault	Please contact dealer	Controller failure	(1)Replace controller
23	Controller	Discharge fault	Please contact dealer	Controller failure	(1)Replace controller
24	Controller	Main contact Failure	Please contact dealer	Solenoid or controller failure	(1)Replace solenoid (2)If not fixed, then replace controller
30	Controller	Bus over-voltage	Please contact dealer	Controller failure	(1)Replace controller
31	Controller	U Phase over current	Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Controller failure	(1)Replace controller
33	Controller	W Phase over current	Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Controller failure	(1)Replace controller
40	Controller	Low battery voltage while operating vehicle	Charge battery to 100%. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer		(1)Export BMS data (storage data)
41	Controller	Motor over-heating	Stop vehicle and let it cool down. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Motor failure	(1)Replace motor

42	Controller	Controller over-heating	Stop vehicle and let it cool down. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Controller failure	(1)Replace controller
60	Controller	Throttle voltage/start switch timing error	Please contact dealer		(1)Check output of accelerator is > 0.3V (runtime page) and accelerator pedal switch is closed. (2)Replace accelerator pedal box. (3)If not fixed, replace controller
61	Controller	Throttle voltage overrun fault	Please contact dealer		(1)Check accelerator voltage > 5V (2)Replace accelerator box. (3)If not fixed, replace controller
70	Controller	Speed sensor A channel rror	Please contact dealer		(1)Replace speed sensor and check wiring harness from speed sensor to controller. (2)Check PIN 16 and 7. (3)If no power replace controller
71	Controller	Speed sensor B channel rror	Please contact dealer		(1)Replace speed sensor (2)Check wiring harness from speed sensor to controller. (3)Check PIN 16 and 7. (4)If no power replace controller
72	Controller	Speed sensor A & B channel error	Please contact dealer		(1)Replace speed sensor (2)Check wiring harness from speed sensor to controller. (3)Check PIN 16 and 7. (4)If no power replace controller
80	Controller	Aux1 (EM brake) output over current	Please contact dealer		(1)Check for short-circuit on harness from EM brake to controller (2)Check resistance of EM brake to confirm it is 60 OHM (3)If not 60 OHM, replace EM brake (4)In not fixed, replace harness from EM brake to controller (5)If not fixed, replace controller
81	Controller	Voltage detection error when Aux1 output is turned on	Please contact dealer		(1)Check for short-circuit on harness from EM brake to controller (2)Check resistance of EM brake to confirm it is 55-66 OHM. (3)If not fixed, replace EM brake (4)If not fixed, replace harness from EM brake to controller (5)If not fixed, replace controller
82	Controller	Voltage detection error when Aux1 output is off	Please contact dealer		(1)Check for short-circuit on harness from EM brake to controller (2)Check resistance of EM brake to confirm it is 55-66 OHM. (3)If not fixed, replace EM brake (4)If not fixed, replace harness from EM brake to controller (5)If not fixed, replace controller
83	Controller	Aux2 output over current	Please contact dealer		
84	Controller	Voltage detection error when Aux2 output is turned on	Please contact dealer		
85	Controller	Voltage detection error when Aux2 output is off	Please contact dealer		

90	Controller	Main contact output over current	Please contact dealer		(1)Check the output load connection (2)Replace solenoid (3)Replace controller
91	Controller	Voltage detection error on main contact output opening	Please contact dealer		(1)Check the output load connection (2)Replace solenoid (3)Replace controller
92	Controller	Voltage detection error when main contactor output is off	Please contact dealer		(1)Check the output load connection (2)Replace solenoid (3)Replace controller
93	Controller	Main contactor open when closed	Please contact dealer		(1)Replace solenoid (2)Replace controller
98	Controller	Direct short circuit protection	Please contact dealer		(1)Check cable from motor to controller for short-circuit (2)replace controller
99	Controller	Open circuit protection	Please contact dealer		(1)Check cable from motor to controller for short-circuit (2)replace controller
B051	BMS	Battery over temperature	Stop vehicle and let it cool down. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Occurs when battery temp > 55C	(1)Export BMS data (storage data)
B101	BMS	Battery over temperature	Stop vehicle and let it cool down. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Occurs when battery temp > 50C	(1)Export BMS data (storage data)
B052	BMS	Insulation fault	Please contact dealer		(1)Check insulators below battery. (2)Lift battery-if code still disappears, replace battery (3)Lift battery-if code appears, check controller (4)Check controller bolt connection. (5)If code still disappears, replace controller
B102	BMS	Insulation fault	Please contact dealer		(1)Check insulators below battery. (2)Lift battery-if code still disappears, replace battery (3)Lift battery-if code appears, check controller (4)Check controller bolt connection. (5)If code still disappears, replace controller
B053	BMS	Cell over voltage	Stop vehicle and let it cool down. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer		(1)Export BMS data (storage data)
B103	BMS	Cell over voltage	Stop vehicle and let it cool down. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer		(1)Export BMS data (storage data)
B054	BMS	Low cell voltage	Charge battery. If problem continues, please contact dealer	Occurs when cell voltage below 2.8V	(1)Export BMS data (storage data)
B104	BMS	Low cell voltage	Charge battery. If problem continues, please contact dealer	Occurs when cell voltage below 3.1V	(1)Export BMS data (storage data)
B055	BMS	Pack over voltage	Stop vehicle and let it cool down. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Occurs when pack voltage greater 55.5V	(1)Export BMS data (storage data)

B105	BMS	Pack over voltage	Stop vehicle and let it cool down. Recycle keyswitch (power OFF and ON). If problem continues, please contact dealer	Occurs when pack voltage greater 54.75V	(1)Export BMS data (storage data)
B056	BMS	Pack under voltage	Charge battery. If problem continues, please contact dealer		(1)Export BMS data (storage data)
B106	BMS	Pack under voltage	Charge battery. If problem continues, please contact dealer		(1)Export BMS data (storage data)
B057	BMS	Over charge current	Please use Atlas charger	Occurs when current > 35A	
B107	BMS	Over charge current	Please use Atlas charger	Occurs when current > 30A	
B058	BMS	Over discharge current	Reduce vehicle load or reduce speed when climbing a hill	Occurs when current > 280A	(1)Reduce "Forward Acceleration Rate" in controller setting
B108	BMS	Over discharge current	Reduce vehicle load or reduce speed when climbing a hill	Occurs when current > 250A	(1)Reduce "Forward Acceleration Rate" in controller setting
B059	BMS	Over regen current	Please press brake pedal when going downhill		(1)Adjust BMS#6 parameter. Make less than 30%
B109	BMS	Over regen current	Please press brake pedal when going downhill		(1)Adjust BMS#6 parameter. Make less than 50%
B010	BMS	Low SOC	Charge battery. If problem continues, please contact dealer		(1)Export BMS data (storage data)
B060	BMS	Low SOC	Charge battery. If problem continues, please contact dealer		(1)Export BMS data (storage data)
B110	BMS	Low SOC	Charge battery. If problem continues, please contact dealer		(1)Export BMS data (storage data)
B101	BMS	High voltage connector fault	Please contact dealer	Fault should not occur	Not applicable
B111	BMS	High voltage connector fault	Please contact dealer	Fault should not occur	Not applicable
B012	BMS	Fire alarm	Please contact dealer	Fault should not occur	Not applicable
B064	BMS	Charging/Discharging socket over temperature	Please contact dealer	Charge temp > 65C Discharge temp > 65C	(1)Check and tighten the screws in charger receptacle
B112	BMS	Charging/Discharging socket over temperature	Please contact dealer	Charge temp > 60C Discharge temp > 60C	(1)Check and tighten the screws in charger receptacle
B065	BMS	Battery low temperature	Please do not use car when ambient temperature is too low	Car needs heating element Battery temp <-10C	Not applicable
B113	BMS	Battery low temperature	Please do not use car when ambient temperature is too low	Car needs heating element Battery temp <-5C	Not applicable
B066	BMS	Cell voltage difference too high	Please contact dealer	(1)Difference > 0.5V (2)Battery cells need to be balanced	(1)Export BMS data (storage data)
B114	BMS	Cell voltage difference too high	Please contact dealer	(1)Difference > 0.3V (2)Battery cells need to be balanced	(1)Export BMS data (storage data)
B067	BMS	Cell temperature difference too high	Please contact dealer	Difference >8C	(1)Export BMS data (storage data) (2)Replace temp sensor (3)If replacing sensor does not fix fault, replace battery
B115	BMS	Cell temperature difference too high	Please contact dealer	Difference >5C	(1)Export BMS data (storage data) (2)Replace temp sensor (3)If replacing sensor does not fix fault, replace battery
B069	BMS	SOC too high	Please contact dealer	Not applicable	Not applicable
	BMS	SOC too high	Please contact dealer	Not applicable	Not applicable
B018	BMS	Communication failed with controller	Please contact dealer		(1)Check CAN bus communication harness connection from BMS to controller (2)If connection OK, replace BMS

B019	BMS	Discharge precharging fault	Please contact dealer		(1)Export BMS data (storage data) (2)Replace resistor (3)Replace relay
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