

# UBCO Trouble Shooting

Speedometer Display	Detectable Faults	Possible Causes	Possible Remedy
C-0001	Head/Tail light Open Circuit	Wiring or connector problem. Lamp failure. ECU Failure	Check Connection. Replace lamp.
C-0002	Head/Tail light Short Circuit	Wiring or connector problem. Lamp failure. ECU Failure	Check Connection. Replace lamp.
C-0003	Indicator or brake light open circuit	Wiring or connector problem. Lamp failure. ECU Failure	Check Connection. Replace lamp.
C-0004	Only one Left Indicator operational	Wiring or connector problem. Lamp failure. ECU Failure	Check Connection. Replace lamp
C-0005	Only one Right Indicator operational	Wiring or connector problem. Lamp failure. ECU Failure	Check Connection. Replace lamp.
C-0006	Indicator or brake light short circuit	Wiring or connector problem. Lamp failure. ECU Failure	Check Connection. Replace lamp.
C-0007	Bluetooth Initialisation failure	ECU failure.	Replace ECU
C-0010	GeoFence Active	Geofencing is actively reducing bike power and speed	Get bike back to allowed geo area.
C-0011	Throttle too tight	Throttle is detected as being on when bike set to run	Loosen throttle cable.
C-1058, C-2058	Vdc Low FLDBK	Flat battery	Check battery voltages, not below 35 volts
C-1061, C-2061	Vdc High FLDBK	Over voltage, re-gen , incorrect battery	Check battery and charging voltage
C-1062, C-2062	Motor Temp FLDBK	Motor over temp	Check Wiring & Sensor
C-1063, C-2063	ContrlTemp FLDBK	Controller over temp	Replace controller

C Faults indicate a warning that the bike is experiencing a problem but can still operate. If the fault persists follow the instructions above

# UBCO Trouble Shooting

ECU Display	Detectable Faults	Possible Causes	Possible Remedy
F-0001	ECU Application Crash	Electrical interference in the area	Cycle bike power, update bike firmware, check wiring, change ECU
F-1001, F-2001	Front Motor Controller Communication Timeout	Wiring problem between ECU and Motor Controller.	Cycle bike power, update bike firmware, check wiring, change ECU
F-0003	ECU over temperature	High ambient temperature, ECU over 100°C	Allow bike to cool in shaded area, replace ECU if required
F-0004	CAN Bus Error (Speedo not responding)	Speedo wiring or connector problem. ECU failure	Cycle bike power, update bike firmware, check wiring, change ECU
F-0005	DC-DC Converter output <10V	Wiring or connector problem. Faulty DC converter	Check DC converter output, Check connection and wiring, replace DC converter
F-0006	DC-DC Converter output >15V	Wiring or connector problem. Faulty DC converter	Check DC converter output, Check connection and wiring, replace DC converter
F-1011, F-2011	Motor Controller over voltage	Battery voltage is more than 60V	Test battery voltage/ check charger output/ check BMS
F-1012, F-2012	Motor Filtered phase over current	Current going to the motors is over limit	TBC
F-1013, F-2013	Motor Bad current sensor calibration	internal calibration of controller has changed	Ensure motor controller firmware up to date, change controller
F-1014, F-2014	Motor Current sensor overcurrent	motor sensor overcurrent	Ensure motor controller firmware up to date, change controller
F-1015, F-2015	Motor Controller over temperature	Controller is above specified limit	Allow controllers to cool. Ensure controllers are correctly mounted.
F-1016, F-2016	Motor Hall sensor fault	Controller is not receiving hall sensor signals	Check wiring to hall sensor and motor cable for damage or water ingress.
F-1017, F-2017	Input voltage <xxV (Controller under voltage)	Controller is not receiving minimum voltage	Check battery voltage. Check connections to battery including clip
F-1018, F-2018	Motor POST static gating test	Motor Controller failure or motor phase short	Check motor coils and motor cable. Replace controller
F-1021, F-2021	Motor Network communication timeout	Disconnected wiring	Check wiring to ECU for poor connections
F-1022, F-2022	Motor Instantaneous Phase Over Current	Current spike detected controller above limits from sudden shock to wheel	Check motor keyways planetary gears
F-1023, F-2023	Motor over temperature	Motor temperature sensor hot	Allow motor to cool. If fault persists, check temp sensor on motor
F-1024, F-2024	Motor Throttle voltage outside range	Signal received from the throttle is not in specified range	Check throttle cable connection to throttle box. Voltage between red and black wire should not be above
F-1025, F-2025	Motor Instantaneous controller over voltage	as read	check firmware to motor controllers is up to date. Power cycle bike
F-1026, F-2026	Motor Internal Error	as read	check firmware to motor controllers is up to date. Power cycle bike
F-1027, F-2027	Motor POST dynamic gating test	Controller fail or motor phase shorted.	Check motor cable for damage and service motor
F-1028, F-2028	Motor Instantaneous controller under voltage	Controller received lower than specified voltage	Check battery voltage. Check connections to battery including clip
F-1051, F-2051	Communication time out		Check wiring connections
F-1052, F-2052	Hall Sensor	Hall sensor signals not being received	Check motor cable connections for water damage and continuity
F-1053, F-2053	Hall stall	Motor has exceeded its time for not rotating	Motor has stalled. Check for obstructions and free wheel rotation
F-1056, F-2056	Hall Illegal sector	Wiring or connector problem. Motor failure.	Check motor cable connections for water damage and continuity
F-1057, F-2057	Hall Illegal transition	Wiring or connector problem. Motor failure.	Check motor cable connections for water damage and continuity
F-1064, F-2064	Low SCOCFLDBK	Hall sensor signals not being received by ECU	Check motor cable and connection for damage. Check motor cable plugs in console

F Faults indicate a warning that the bike requires immediate attention