

S-Drive Fault Code Table

Trip Code	Trip Description	Trip Action	Mode	Error Bars	Comments
0x0003	EEProm cache checksum	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x0100	ROM checksum	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x0200	EEProm cache checksum	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x0300	Parallel speed pot wiper open-circuit	Limp	all modes	7	Only tested if speed pot enabled
0x0704	Internal 12v supply Fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x0815	Throttle Reference Fault	Trip	startup	7	Value checked for valid range. Tests only if "reference tests" enabled.
	Throttle Reference Fault	Trip	all modes	7	Value checked for valid range. Tests only if "reference tests" enabled.
0x0A00	Sleep timer	Trip	standby	6	If active (greater than 0) then it will pulse trucharge gauge, recycle keyswitch to reset
0x0A01	Keyswitch has been turned off	Trip	all modes	6	Informs of rapid power cycle on key-switch input, controller may not reset correctly
0x0E07	Throttle ISO Test Fault	Trip	startup	7	Test only if ISO tests enabled, 10K resistor, in series with wiper
	Throttle ISO Test Fault	Trip	all modes	7	Test only if ISO tests enabled, 10K resistor, in series with wiper
0x0E08	Throttle Wiper Fault	Trip	startup	7	Trips if throttle wiper exceeds limits
	Throttle Wiper Fault	Trip	all modes	7	Trips if throttle wiper exceeds limits
0x1310	Overcurrent fault	Trip	drive	8	Internal Fault. Return to PGDT if happening all the time.
0x1500	Solenoid Brake Fault	Trip	drive	9	Trips if solenoid brake is short-circuited, if test is enabled
0x1502	Solenoid Brake Fault	Trip	startup	9	Trips if solenoid brake is open-circuited, if test is enabled
	Solenoid Brake Fault	Trip	standby	9	Trips if solenoid brake is open-circuited, if test is enabled
0x1504	Solenoid Brake Fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x1600	Battery voltage too high	Trip	startup	10	Battery voltage is greater than 35.0V
	Battery voltage too high	Trip	all modes	10	Battery voltage has risen above 35.0V, possibly under regen.
0x1601	Battery overvoltage test	Trip	all modes	10	Gross bridge/battery overvoltage under regen with battery disconnected (>45.75V)
0x1703	Relay interlock fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x1705	Possible Relay Fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
	Possible Relay Fault	Trip	standby	8	As above, but can also be caused by intermittent loss of battery voltage during use.
0x1800	Watchdog Fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x1B10	M+ current null fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x1B12	M+ current feedback fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x1C10	M- current null fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x1C12	M- current feedback fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x1E08	Inhibit active	note 1	all modes	note 2	note 1 - trip or speed limit depends on programming
					note 2 - trucharge display depends on programming
0x1E09	Inhibit active	note 1	all modes	note 2	note 1 - trip or speed limit depends on programming
					note 2 - trucharge display depends on programming
0x1E0A	Inhibit active	note 1	all modes	note 2	note 1 - trip or speed limit depends on programming
					note 2 - trucharge display depends on programming
0x2100	Software loop counter fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.

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0x2A12	M+ voltage feedback fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x2A10	M+ voltage null fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x2B10	M- voltage null fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x2B12	M- voltage feedback fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x2C00	Battery voltage too low	Trip	startup	1	Battery Voltage is below 13.5V
	Battery voltage too low	Trip	all modes	1	Battery Voltage has dipped below 13.5V
0x2C01	Battery voltage very low	Trip	drive	1	Battery Voltage has dipped below 12.5V
0x2E00	Software loop ran out of time	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x2F01	Throttle displacement fault	Trip	startup	7	Throttle wiper is outside neutral deadband limits at startup - trip condition depends
0x2F01	Throttle displacement fault	No	startup	Ripple	upon programming - latched trip of 7 bars, or rippling up/down of 10 bars, or nothing.
0x3100	Bridge voltage too low	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x3201	Stack overflow fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x3240	Illegal state fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x3600	Controller fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.
0x3601	Watchdog fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x3610	Controller fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x3612	Controller fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x3A00	Bad settings fault	Trip	startup	8	Internal Fault. Return to PGDT if happening all the time.
0x3B01	Motor open-circuit fault	Trip	startup	2	Check Motor connections and/or motor brushes
	Motor open-circuit fault	Trip	standby	2	Check Motor connections and/or motor brushes
					NB: Test disabled when sol. brake test is disabled.
0x3D02	Motor output shorted high fault	Trip	startup	3	Check Motor connections and/or motor brushes are not shorted to Batt +
0x3D03	Motor output shorted low	Trip	startup	3	Check Motor connections and/or motor brushes are not shorted to Batt -
0x4401	Generic internal fault code	N/A	N/A	N/A	Generic code for logging internal faults to system log
0x5300	Programmable setting changed	Trip	all modes	8	Recycle Keyswitch to reset. Not normally recorded in fault log.
0x7000	Push input in active state at startup	Trip	startup	4	Freewheel (Push Input) is enabled, so check Inhibit 3 input and programming.
0x7001	Push input in active state in drive	Trip	drive	4	Freewheel (Push Input) is enabled, so check Inhibit 3 input and programming.
0x7821	Thermal current limit foldback active	No	all modes	N/A	No indication, just logs this code in the diagnostic log. Check motor is not working too hard.
0x7825	Unit over-temperature	No	all modes	N/A	Cleared on cooling and throttle release.
0x7C00	Thermistor fault	Trip	all modes	8	Internal Fault. Return to PGDT if happening all the time.