

Fail-Safe Conditions

Fail-Safe Conditions, OBD

DTC	Circuit Effected	Fail-Safe Trigger	Fail-Safe Operation
12	Cranshaft Position	ECU does not receive either G1 or G2 signal	ECU defaults to remaining sensor; if both sensors lost, engine will not restart
14	Igniter IGF	ECU fails to receive IGF singal more than 4-6 weeks in a row	Fuel injection stopped to protect catalyst
22	Engine Coolant Temperature	ECT > 138°C (280°F) or < -50°C (-58°F)	Standard value substituted for ECT signal, typically 80°C (176°F)
24	Intake Air Temperature	THA > 138°C (280°F) or < -50°C (-58°F)	Standard value substituted for THA signal, typically 20°C (68°F)
31/32	Air Flow Meter	Open or short detected signal circuit	Standard value substituted based on STA and ID singals
35	High Altitude Compensation	Open or short detected in HAC signal circuit	Standard value substituted for HAC; value equals 29.92 in. Hg
41	Throttle Position	Open or short detected in TPS signal	Standard value substituted for VTA; typically 0° or 30° based on IDL
52/53	Knock Sensor	Open or short detected in knock signal circuit or ECU detects internal fault	Maximum corrective retard applies to ESA

Fail-Safe Conditions, OBD II

DTC	Circuit Effected	Fail-Safe Operation	Fail-Safe Deactivation Conditions
P0100	Mass Air Flow	Ignition timing fixed at 5° Injection timing fixed •STA ON = 11.0 ms •IDL ON = 3.5 ms •IDL OFF = 6.3 ms	When fault is no longer detected
P0100	Intake Air Temperature	IAT fixed at 20°C (68°F)	When fault is no longer detected
P0115	Engine Coolant Temperature	ECT fixed at 80°C (176°F)	When fault is no longer detected
P0120	Throttle Position	TP fixed at 0%	CTP switch is ON with VTA between 0.1 to 0.95 volts
P0135 P0141 P0155	Oxygen Sensor Heater	Heater circuit effected is turned off	After ignition is switched off
P0325 P0330	Knock Sensor	Maximum knock retard	After ignition is switched off
P0720	A/T Speed Sensor	Gear shift program based on rpm and TP	When fault is no longer detected
P0753	Shift Solenoid A	Power to solenoid valve and lock-up solenoid valve is cut	When fault is no longer detected
P0758	Shift Solenoid B	Power to solenoid valve and lock-up solenoid valve is cut	When fault is no longer detected
P0773	Shift Solenoid E	Power to solenoid valve is cut	When fault is no longer detected
P1300	Igniter IGF	Fuel cut	After IGF is not detected for 2~6 consecutive IGT signals (See Section 4, Primary Circuit SA)
P1605	Knock Control CPU	Maximum knock retard	When fault is no longer detected
P1765	Accumulator Pressure Linear Solenoid	Power to solenoid valve is cut	When fault is no longer detected