

DTC	SYS	FAULT DESCRIPTION	MONITORING CONDITIONS	CK ENG	OTHER	DEFAULT ACTION	CM PIN	POSSIBLE CAUSES
P1643	EMS OBD II	CAN ECM / TCM network malfunction	Ignition ON 10 seconds	2	A	ECM Default: - Speed control inhibited - Maximum throttle opening for N range inhibited - Throttle opening limited to 30% - Maximum engine speed reduced	P11 -123 -124	CAN open circuit fault - TCM to ECM CAN short circuit fault TCM failure ECM failure
P1646	EMS OBD II	ECM HO2 Sensor control malfunction - bank 1 upstream (1/1)	Drive vehicle for 10 minutes	2	N	ECM Default: - HO2S 1/1 control circuit inhibited	-	HO2 Sensor 1/1 heater failure HO2 Sensor 1/1 sensing circuit: short circuit to ground, short circuit to high voltage, open circuit, high resistance ECM failure
P1647	EMS OBD II	ECM HO2 Sensor control malfunction - bank 2 upstream (2/1)	Drive vehicle for 10 minutes	2	N	ECM Default: - HO2S 2/1 control circuit inhibited	-	HO2 Sensor 2/1 heater failure HO2 Sensor 2/1 sensing circuit: short circuit to ground, short circuit to high voltage, open circuit, high resistance ECM failure
P1648	EMS OBD II	ECM internal Knock Sensor CPU self test failure	Start engine Battery voltage > 12 volts Idle for 2 minutes	2	A	ECM Default: - Maximum ignition retard - Maximum engine speed reduced	-	ECM failure
P1656	EMS OBD II	TP Sensor amplifier circuit malfunction	Ignition ON 10 seconds	2	A	ECM Default: - Maximum engine speed reduced	P11 -075	ECM failure

DTC	CM	SYSTEM	FAULT DESCRIPTION	MIL	CM PIN	POSSIBLE CAUSES
U2023	ASCM	Adaptive Speed Control	CAN fault message received from other network module(s)	N	EC23 -4 -10	CAN / ASCM related fault: ECM, TCM, DSCM, IC ASCM internal CAN fault CAN network fault
U2150	DDM	Driver Door Module	SCP invalid REM data during security and locking operations	N	—	REM SCP circuit: open circuit, short circuit to B+ voltage, short circuit to ground REM SCP fault SCP network fault
U2150	IC	Central Locking	SCP missing or invalid REM steering column lock enable status message	N	—	REM SCP fault SCP network fault
U2152	IC	Central Locking	SCP missing or invalid FEM steering column lock enable status message	N	—	FEM SCP fault SCP network fault
U2160	DDM	Driver Door Module	SCP invalid IC data during security and locking operations	N	—	IC SCP circuit: open circuit, short circuit to B+ voltage, short circuit to ground IC SCP fault SCP network fault
U2195	DDM	Driver Door Module	SCP invalid SCLM data during security and locking operations	N	—	SCLM SCP circuit: open circuit, short circuit to B+ voltage, short circuit to ground SCLM SCP fault SCP network fault
U2195	IC	Central Locking	SCP missing or invalid SCLM steering column lock enable status message	N	—	SCLM SCP fault SCP network fault
U2196	IC	Instrumentation	CAN invalid ECM engine speed data	N	—	ECM CAN fault CAN network fault
U2197	IC	Instrumentation	CAN invalid DSCM vehicle speed data	N	—	DSCM CAN fault CAN network fault

DTC	CM	SYSTEM	FAULT DESCRIPTION	MIL	CM PIN	POSSIBLE CAUSES
U2516	RCCM	Rear Climate Control	CAN not responding	N	RA1 -8 -16	Multiple CAN modules with CAN DTCs flagged CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground CCM internal CAN fault CAN network fault
U2518	ASM	Air Suspension	CAN CCM message missing	N	—	CCM CAN DTC flagged
U2520	ASCM	Adaptive Speed Control	CAN IC missing	N	EC23 -4 -10	IC CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground IC CAN fault CAN network fault
U2520	CCM	Climate Control	CAN IC missing	N	CR119 -6 -7 16 -17	IC CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground IC CAN fault CAN network fault
U2521	ASCM	Adaptive Speed Control	CAN DSCM missing	N	EC23 -4 -10	DSCM CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground DSCM CAN fault CAN network fault
U2521	ASM	Air Suspension	CAN DSCM message missing	N	—	DSCM CAN DTC flagged
U2521	CCM	Climate Control	CAN DSCM missing	N	CR119 -6 -7 16 -17	DSCM CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground DSCM CAN fault CAN network fault
U2521	IC	Instrumentation	CAN DSCM vehicle speed data missing	N	—	DSCM CAN DTC flagged

DYNAMIC STABILITY CONTROL MESSAGE

DTC	CM	SYSTEM	FAULT DESCRIPTION	MIL	CM PIN	POSSIBLE CAUSES
U2522	ASCM	Adaptive Speed Control	CAN TCM missing	N	EC23 -4 -10	TCM CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground TCM CAN fault CAN network fault
U2522	DSCM	Dynamic Stability Control	CAN TCM missing	N	EC30 -11 -12 -14 -15	TCM CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground TCM CAN fault CAN network fault
U2522	IC	Instrumentation	CAN TCM gear selected data missing	N	—	TCM CAN DTC flagged
U2523	ASCM	Adaptive Speed Control	CAN ECM missing	N	EC23 -4 -10	ECM CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground ECM CAN fault CAN network fault
U2523	ASM	Air Suspension	CAN ECM message missing	N	—	ECM CAN DTC flagged
U2523	CCM	Climate Control	CAN ECM missing	N	CR119 -6 -7 16 -17	ECM CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground ECM CAN fault CAN network fault
U2523	DSCM	Dynamic Stability Control	CAN ECM missing	N	EC30 -11 -12 -14 -15	ECM CAN circuit: open circuit, short circuit to B+ voltage, short circuit to ground ECM CAN fault CAN network fault
U2523	IC	Instrumentation	CAN ECM engine speed data missing	N	—	ECM CAN DTC flagged
U2524	IC	Instrumentation	CAN ASM data missing	N	—	ASM CAN DTC flagged