

KOEO/KOER SELF-TEST [LF]

B3E010200102T04

• The self-test function consists of the KOEO (Key On, Engine Off) self-test, performed when the ignition switch is turned to the ON position and the engine is stopped; and the KOER (Key On, Engine Running) self-test, performed when idling. If a malfunction is detected when either self-test is executed, a DTC is displayed on the WDS or equivalent. Using the self-test function, the present malfunction or a successful repair is readily confirmed. Refer to the self-test function table for the corresponding DTCs.

KOEO (Key ON, Engine Off) Self-test

• The KOEO self-test is a powertrain control system self-diagnosis, performed when the ignition switch is turned to the ON position and the engine is stopped. A KOEO self-test begins when the connected WDS or equivalent sends an execute command to the PCM.

• As the KOEO self-test is performed, the PCM performs the inspection for set DTCs and if a malfunction is detected the DTC is displayed on the WDS or equivalent.

KOER (Key ON, Engine Running) Self-test

• The KOER self-test is a powertrain control system self-diagnosis, performed when the ignition switch is turned to the ON position and the engine is idling. A KOER self-test begins when the connected WDS or equivalent sends an execute command to the PCM.

• As the KOER self-test is performed, the PCM performs the inspection for set DTCs and if a malfunction is detected the DTC is displayed on the WDS or equivalent.

KOEO/KOER self-test table

×: Applicable

–: Not applicable

DTC No.	Condition	Test condition	
		KOEO	KOER
P0031	Front HO2S heater circuit low input	×	×
P0032	Front HO2S heater circuit high input	×	×
P0037	Rear HO2S heater circuit low input	×	×
P0038	Rear HO2S heater circuit high input	×	×
P0101	MAF sensor circuit range/performance problem	–	–
P0102	MAF sensor circuit low input	×	×
P0103	MAF sensor circuit high input	×	×
P0107	MAP sensor circuit low input	×	×
P0108	MAP sensor circuit high input	×	×
P0111	IAT sensor circuit range/performance problem	–	–
P0112	IAT sensor circuit low input	×	×
P0113	IAT sensor circuit high input	×	×
P0117	ECT sensor circuit low input	×	×
P0118	ECT sensor circuit high input	×	×
P0121	TP sensor stuck closed	–	–
P0122	TP sensor circuit low input	×	×
P0123	TP sensor circuit high input	×	×

P0125	Excessive time to enter closed loop fuel control	-	-
P0132	Front HO2S circuit high input	x	x
P0133	Front HO2S circuit problem	-	-
P0134	Front HO2S no activity detected	-	x
P0138	Rear HO2S circuit high input	x	x
P0140	Rear HO2S no activity detected	-	x
P0300	Random misfire detected	-	x
P0301	Cylinder No.1 misfire detected	-	x
P0302	Cylinder No.2 misfire detected	-	x
P0303	Cylinder No.3 misfire detected	-	x
P0304	Cylinder No.4 misfire detected	-	x
P0327	KS circuit low input	x	x
P0328	KS circuit high input	x	x
P0335	CKP sensor circuit problem	-	-
P0340	CMP sensor circuit problem	-	-
P0403	EGR valve (stepper motor) circuit problem	x	x
P0420	Catalyst system efficiency below threshold	-	-
P0443	Purge solenoid valve circuit problem	x	x
P0480	Cooling fan control circuit problem	x	x
P0500	VSS circuit problem	-	-
P0505	IAC system problem	-	x
P0506	Idle control system RPM lower than expected	-	-
P0507	Idle control system RPM higher than expected	-	-
P0511	IAC valve circuit problem	x	x
P0602	PCM programming error	x	x
P0610	PCM vehicle options error	x	x
P0661	Variable intake-air solenoid valve circuit low input	x	x
P0662	Variable intake-air solenoid valve circuit high input	x	x
P0703	Brake switch input circuit problem	-	-
P0704	CPP switch input circuit problem	-	-
P0850	Neutral switch input circuit problem	-	-
P1260	Immobilizer system problem	x	-
P2006	Variable tumble shutter valve stuck closed	-	x
P2009	Variable tumble solenoid valve circuit low input	x	x
P2010	Variable tumble solenoid valve circuit high input	x	x
P2096	Target A/F feedback system too lean	-	-
P2097	Target A/F feedback system too rich	-	-
P2177	Fuel system too lean at off idle	-	x
P2178	Fuel system too rich at off idle	-	x
P2187	Fuel system too lean at idle	-	x
P2188	Fuel system too rich at idle	-	x
P2195	Front HO2S signal stuck lean	-	-
P2196	Front HO2S signal stuck rich	-	-
P2228	BARO sensor circuit low input	x	x
P2229	BARO sensor circuit high input	x	x
P2502	Charging system voltage problem	-	x
P2503	Charging system voltage problem	-	-

	Charging system voltage low	-	x
P2504	Charging system voltage high	-	x
P2507	PCM B+ voltage low	x	x