

Inspection Mode

ENGINE (DIAGNOSTICS)

11. Inspection Mode

A: PROCEDURE

Perform the diagnosis shown in the following DTC table.

When performing the diagnosis not listed in “List of Diagnostic Trouble Code (DTC)”, refer to the item on the drive cycle. <Ref. to EN(H4DO HEV)(diag)-55, Drive Cycle.>

DTC	Item	Condition
B1570	Antenna	—
B1571	Reference Code Incompatibility	—
B1572	IMM Circuit Failure (Except Antenna Circuit)	—
B1574	Key Communication Failure	—
B1575	Incorrect Immobilizer Key	—
B1576	EGI Control Module EEPROM	—
B1577	IMM Control Module EEPROM	—
B1578	Meter Failure	—
P0010	"A" Camshaft Position Actuator Circuit/Open (Bank 1)	—
P0013	B Camshaft Position Actuator Circuit/Open (Bank 1)	—
P0020	"A" Camshaft Position Actuator Circuit/Open (Bank 2)	—
P0023	B Camshaft Position Actuator Circuit/Open (Bank 2)	—
P0031	HO2S Heater Control Circuit Low (Bank 1 Sensor 1)	—
P0032	HO2S Heater Control Circuit High (Bank 1 Sensor 1)	—
P0037	HO2S Heater Control Circuit Low (Bank 1 Sensor 2)	—
P0038	HO2S Heater Control Circuit High (Bank 1 Sensor 2)	—
P0072	Ambient Temperature Sensor Circuit "A" Low	—
P0073	Ambient Temperature Sensor Circuit "A" High	—
P0102	Mass or Volume Air Flow Circuit Low Input	—
P0103	Mass or Volume Air Flow Circuit High Input	—
P0107	Manifold Absolute Pressure/Barometric Pressure Circuit Low Input	—
P0108	Manifold Absolute Pressure/Barometric Pressure Circuit High Input	—
P0112	Intake Air Temperature Sensor 1 Circuit Low	—
P0113	Intake Air Temperature Sensor 1 Circuit High	—
P0117	Engine Coolant Temperature Circuit Low	—
P0118	Engine Coolant Temperature Circuit High	—
P0122	Throttle/Pedal Position Sensor/Switch "A" Circuit Low	—
P0123	Throttle/Pedal Position Sensor/Switch "A" Circuit High	—
P0131	O2 Sensor Circuit Low Voltage (Bank 1 Sensor 1)	—
P0132	O2 Sensor Circuit High Voltage (Bank 1 Sensor 1)	—
P0197	Engine Oil Temperature Sensor Low	—
P0198	Engine Oil Temperature Sensor High	—
P0201	Injector #1	—
P0202	Injector #2	—
P0203	Injector #3	—
P0204	Injector #4	—
P0222	Throttle/Pedal Position Sensor/Switch "B" Circuit Low	—
P0223	Throttle/Pedal Position Sensor/Switch "B" Circuit High	—
P0327	Knock Sensor 1 Circuit Low (Bank 1 or Single Sensor)	—
P0328	Knock Sensor 1 Circuit High (Bank 1 or Single Sensor)	—
P0335	Crankshaft Position Sensor "A" Circuit	—
P0336	Crankshaft Position Sensor "A" Circuit Range/Performance	—
P0340	Camshaft Position Sensor "A" Circuit (Bank 1 or Single Sensor)	—

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P0341	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 1 or Single Sensor)	—
P0345	Camshaft Position Sensor "A" Circuit (Bank 2)	—
P0346	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 2)	—
P0351	Ignition Coil A Primary/Secondary Circuit	—
P0352	Ignition Coil B Primary/Secondary Circuit	—
P0353	Ignition Coil C Primary/Secondary Circuit	—
P0354	Ignition Coil D Primary/Secondary Circuit	—
P0365	Camshaft Position Sensor "B" Circuit (Bank 1)	—
P0366	Camshaft Position Sensor B Circuit Range/Performance (Bank 1)	—
P0390	Camshaft Position Sensor "B" Circuit (Bank 2)	—
P0391	Camshaft Position Sensor B Circuit Range/Performance (Bank 2)	—
P0452	Evaporative Emission System Pressure Sensor/Switch Low	—
P0453	Evaporative Emission System Pressure Sensor/Switch High	—
P0458	Evaporative Emission System Purge Control Valve Circuit Low	—
P0462	Fuel Level Sensor "A" Circuit Low	—
P0463	Fuel Level Sensor "A" Circuit High	—
P0512	Starter Request Circuit	—
P0560	System Voltage	—
P0604	Internal Control Module Random Access Memory (RAM) Error	—
P0605	Internal Control Module Read Only Memory (ROM) Error	—
P0606	Control Module Processor	—
P060A	Internal Control Module Monitoring Processor Performance	—
P060B	Internal Control Module A/D Processing Performance	—
P0616	Starter Relay Circuit Low	—
P0617	Starter Relay Circuit High	—
P062F	Internal Control Module EEPROM Error	—
P0685	ECM/PCM Power Relay Control Circuit/Open	—
P081A	Starter Disable Circuit Low	—
P0A7B	Battery Energy Control Module Request MIL Illumination	—
P0AC4	Hybrid Powertrain Control Module Request MIL Illumination	—
P0CA1	Drive Motor Control Module Request MIL Illumination	—
P1160	Return Spring Failure	—
P2006	Intake Manifold Runner Control Stuck Closed (Bank 1)	—
P2007	Intake Manifold Runner Control Stuck Closed (Bank 2)	—
P2009	Intake Manifold Runner Control Circuit Low (Bank 1)	—
P2012	Intake Manifold Runner Control Circuit Low (Bank 2)	—
P2101	Throttle Actuator Control Motor Circuit Range/Performance	—
P2102	Throttle Actuator Control Motor Circuit Low	—
P2103	Throttle Actuator Control Motor Circuit High	—
P2109	Throttle/Pedal Position Sensor "A" Minimum Stop Performance	—
P2119	Throttle Actuator Control Throttle Body Range/Performance	—
P2122	Throttle/Pedal Position Sensor/Switch "D" Circuit Low Input	—
P2123	Throttle/Pedal Position Sensor/Switch "D" Circuit High Input	—
P2127	Throttle/Pedal Position Sensor/Switch "E" Circuit Low Input	—
P2128	Throttle/Pedal Position Sensor/Switch "E" Circuit High Input	—
P2135	Throttle/Pedal Position Sensor/Switch "A"/"B" Voltage Correlation	—
P2138	Throttle/Pedal Position Sensor/Switch "D"/"E" Voltage Correlation	—

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DTC	Item	Condition
P2401	Evaporative Emission System Leak Detection Pump Control Circuit Low	«Coolant Temp.»: 5 — 45°C (41 — 113°F) «Intake Air Temp.»: 5 — 50°C (41 — 122°F)
P2419	Evaporative Emission System Switching Valve Control Circuit Low	
P2530	Ignition Switch Run Position Circuit	—
U0073	Control Module Communication Bus Off	—
U0075	Control Module Communication Bus "PU-CAN" Off	—
U0101	Lost Communication With TCM	—
U0122	Lost Communication With Vehicle Dynamics Control Module	—
U0155	Lost Communication With Instrument Panel Cluster (IPC) Control Module	—
U0284	Lost Communication With Active Grille Shutter Module "A"	—
U0293	Lost Communication With Hybrid Powertrain Control Module	—
U0402	Invalid Data Received From TCM	—
U0416	Invalid Data Received From Vehicle Dynamics Control Module	—
U0423	Invalid Data Received From Instrument Panel Cluster Control Module	—
U0594	Invalid Data Received From Hybrid Powertrain Control Module	—
U1101	Lost Communication With TCM PU-CAN	—
U1293	Lost Communication With Hybrid Powertrain Control Module PU-CAN	—
U1402	Invalid Data Received From TCM PU-CAN	—
U1594	Invalid Data Received From Hybrid Powertrain Control Module PU-CAN	—

1) Check that the 12 volt auxiliary battery voltage is 12 V or more and fuel remains approx. half [20 — 40 L (5.3 — 10.6 US gal, 4.4 — 8.8 Imp gal)].

2) Perform the Clear Memory Mode. <Ref. to EN(H4DO HEV)(diag)-66, Clear Memory Mode.>

3) Read the diagnostic trouble code (DTC) and check that no DTC is displayed. <Ref. to EN(H4DO HEV)(diag)-51, Read Diagnostic Trouble Code (DTC).>

NOTE:

If the DTC is displayed on the screen, the trouble is still present. Perform the diagnosis using “Diagnostic Procedure with Diagnostic Trouble Code (DTC)”. <Ref. to EN(H4DO HEV)(diag)-102, Diagnostic Procedure with Diagnostic Trouble Code (DTC).> After solving the DTC, repeat from step 2).

4) Start the engine, and run the engine at idle for 10 seconds or more.

5) Read the readiness code using Subaru Select Monitor and check that the concerned DTC is not displayed. For detailed operation procedures, refer to “PC application help for Subaru Select Monitor”.

NOTE:

If the concerned DTC is displayed, the self-diagnosis of the DTC is not complete. Repeat from step 4).

6) Read the diagnostic trouble code (DTC) and check the DTC. <Ref. to EN(H4DO HEV)(diag)-51, Read Diagnostic Trouble Code (DTC).>

NOTE:

If the DTC is displayed on the screen, the trouble is still present. Perform the diagnosis using “Diagnostic Procedure with Diagnostic Trouble Code (DTC)”. <Ref. to EN(H4DO HEV)(diag)-102, Diagnostic Procedure with Diagnostic Trouble Code (DTC).> After solving the DTC, repeat from step 2).