

## DIAGNOSTIC TROUBLE CODE CHART

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
B2799 (05-2367) *4 (05-2414) *5	Immobilizer Mal-function	539	Immobilizer malfunction	• Immobilizer system	X	X	–
B2799 (05-2367) *4 (05-2414) *5	Immobilizer Mal-function	540	Immobilizer malfunction	• Immobilizer system	X	X	–
B2799 (05-2367) *4 (05-2414) *5	Immobilizer Mal-function	541	Immobilizer malfunction	• Immobilizer system	X	X	–
B2799 (05-2367) *4 (05-2414) *5	Immobilizer Mal-function	542	Immobilizer malfunction	• Immobilizer system	X	X	–
B2799 (05-2367) *4 (05-2414) *5	Immobilizer Mal-function	543	Immobilizer malfunction	• Immobilizer system	X	X	–
B2799 (05-2367) *4 (05-2414) *5	Immobilizer Mal-function	544	Immobilizer malfunction	• Immobilizer system	X	X	–
P0336 (05-459)	Crankshaft Position Sensor "A" Circuit Range/Performance	137	Engine speed sensor deviation malfunction (CAN communication)	• Wire harness or connector • Crankshaft position sensor • Camshaft position sensor • HV control ECU	X	○	• HV system
P0338 (05-462)	Crankshaft Position Sensor "A" Circuit High Input	600	NEO signal circuit malfunction	• Wire harness or connector • HV control ECU	X	○	• HV system
P0340 (05-459)	Camshaft Position Sensor "A" Circuit	532	Engine speed sensor deviation malfunction (pulse signal)	• Wire harness or connector • Crankshaft position sensor • Camshaft position sensor • HV control ECU	X	○	• HV system
P0343 (05-462)	Camshaft Position Sensor "A" Circuit High Input	601	GO signal circuit malfunction	• Wire harness or connector • HV control ECU	X	○	• HV system
P0500 (05-2698)	Vehicle Speed Sensor "A"	352	No input of vehicle speed signal during cruise control driving	• Cruise control system	X	X	–
P0560 (05-464)	System Voltage	117	HV control ECU back-up power source circuit malfunction	• Wire harness or connector • HEV fuse	○	○	• HV system
P0571 (05-2702)	Brake Switch "A" Circuit	115	Open or short in stop lamp switch circuit	• Cruise control system	X	X	–
P0607 (05-2707)	Control Module Performance	116	When STP signal of HV control ECU is inconsistent with that of skid control ECU, with cruise control indicator ON	• Cruise control system	X	X	–
P0705 (05-468)	Transmission Range Sensor Circuit	571	Open or GND short in shift main sensor circuit	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0705 (05-468)	Transmission Range Sensor Circuit	572	+B short in shift main sensor circuit	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0705 (05-468)	Transmission Range Sensor Circuit	573	Open or GND short in shift sub sensor circuit	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system

## DIAGNOSTICS – HYBRID CONTROL SYSTEM

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0705 (05-468)	Transmission Range Sensor Circuit	574	+B short in shift sub sensor circuit	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0705 (05-468)	Transmission Range Sensor Circuit	575	Open or GND short in select main sensor circuit	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0705 (05-468)	Transmission Range Sensor Circuit	576	+B short in select main sensor circuit	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0705 (05-468)	Transmission Range Sensor Circuit	577	Open or GND short in select sub sensor circuit	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0705 (05-468)	Transmission Range Sensor Circuit	578	+B short in select sub sensor circuit	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0705 (05-468)	Transmission Range Sensor Circuit	595	Difference between shift main sensor value and shift sub sensor value is large	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0705 (05-468)	Transmission Range Sensor Circuit	596	Difference between select main sensor value and select sub sensor value is large	• Wire harness or connector • Selector lever • HV control ECU	X	○	• HV system
P0851 (05-479)	Park/Neutral Switch Input Circuit Low	579	GND short in P position switch circuit	• Wire harness or connector • P position switch • HV control ECU	X	○	• HV system
P0852 (05-479)	Park/Neutral Switch Input Circuit High	580	Open or +B short in P position switch circuit	• Wire harness or connector • P position switch • HV control ECU	X	○	• HV system
P0A08 (05-482)	DC/DC Converter Status Circuit	264	DC/DC converter malfunction	• w/ converter inverter assembly	X	○	• HV system • Discharge
P0A09 (05-483)	DC/DC Converter Status Circuit Low Input	265	Open or GND short in NODD signal circuit of DC/DC converter	• Wire harness or connector • w/ converter inverter assembly	X	○	• HV system • Discharge
P0A09 (05-485)	DC/DC Converter Status Circuit Low Input	591	Open or GND short in VLO signal circuit of DC/DC converter	• Wire harness or connector • w/ converter inverter assembly	X	○	• HV system • Discharge
P0A0F (05-487)	Engine Failed to Start	204	Abnormal signal input from ECM (abnormal engine output)	• ECM • SFI system	X	○	• HV system
P0A0F (05-487)	Engine Failed to Start	205	Abnormal signal input from ECM (engine is unable to start)	• ECM • SFI system	X	○	• HV system
P0A0F (05-488)	Engine Failed to Start	238	Engine does not start even though cranking it (transaxle input malfunction [engine system])	• Engine assembly • HV transaxle assembly (shaft or gear) • Transmission input damper • Wire harness or connector • HV control ECU	X	○	• HV system
P0A0F (05-487)	Engine Failed to Start	533	Abnormal signal input from ECM (abnormal engine output by running out of fuel)	• ECM • SFI system	X	○	• HV system
P0A0F (05-487)	Engine Failed to Start	534	Abnormal signal input from ECM (engine is unable to start by running out of fuel)	• ECM • SFI system	X	○	• HV system
P0A10 (05-483)	DC/DC Converter Status Circuit High Input	263	+B short in NODD signal circuit of DC/DC converter	• Wire harness or connector • w/ converter inverter assembly	X	○	• HV system • Discharge

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P0A10 (05-485)	DC/DC Converter Status Circuit High Input	592	+B short in VLO signal circuit of DC/DC converter	• Wire harness or connector • w/ converter inverter assembly	X	○	• HV system • Discharge
P0A1D (05-493)	Hybrid Powertrain Control Module	134	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-493)	Hybrid Powertrain Control Module	135	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-494)	Hybrid Powertrain Control Module	139	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-495)	Hybrid Powertrain Control Module	140	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-496)	Hybrid Powertrain Control Module	141	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-497)	Hybrid Powertrain Control Module	142	ST signal of HV control ECU is ON with power switch OFF	• Wire harness or connector • Power source control ECU	○	○	• HV system
P0A1D (05-500)	Hybrid Powertrain Control Module	143	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-501)	Hybrid Powertrain Control Module	144	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-501)	Hybrid Powertrain Control Module	145	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-502)	Hybrid Powertrain Control Module	148	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-502)	Hybrid Powertrain Control Module	149	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-503)	Hybrid Powertrain Control Module	150	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-503)	Hybrid Powertrain Control Module	151	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-503)	Hybrid Powertrain Control Module	152	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-503)	Hybrid Powertrain Control Module	155	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-503)	Hybrid Powertrain Control Module	156	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-503)	Hybrid Powertrain Control Module	158	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-505)	Hybrid Powertrain Control Module	159	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-505)	Hybrid Powertrain Control Module	160	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-506)	Hybrid Powertrain Control Module	163	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-506)	Hybrid Powertrain Control Module	164	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-507)	Hybrid Powertrain Control Module	165	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-508)	Hybrid Powertrain Control Module	166	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-508)	Hybrid Powertrain Control Module	167	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-507)	Hybrid Powertrain Control Module	168	HV control ECU internal error	• HV control ECU	○	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A1D (05-509)	Hybrid Powertrain Control Module	177	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-509)	Hybrid Powertrain Control Module	178	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-510)	Hybrid Powertrain Control Module	180	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-510)	Hybrid Powertrain Control Module	181	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-510)	Hybrid Powertrain Control Module	182	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-510)	Hybrid Powertrain Control Module	183	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-510)	Hybrid Powertrain Control Module	184	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-510)	Hybrid Powertrain Control Module	185	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-510)	Hybrid Powertrain Control Module	186	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-512)	Hybrid Powertrain Control Module	187	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-513)	Hybrid Powertrain Control Module	188	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-513)	Hybrid Powertrain Control Module	189	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-513)	Hybrid Powertrain Control Module	192	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-513)	Hybrid Powertrain Control Module	193	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-513)	Hybrid Powertrain Control Module	195	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-513)	Hybrid Powertrain Control Module	196	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-508)	Hybrid Powertrain Control Module	197	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-507)	Hybrid Powertrain Control Module	198	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-507)	Hybrid Powertrain Control Module	199	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-508)	Hybrid Powertrain Control Module	200	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-515)	Hybrid Powertrain Control Module	390	Charge control malfunction	• HV control ECU	○	○	• HV system
P0A1D (05-509)	Hybrid Powertrain Control Module	392	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-516)	Hybrid Powertrain Control Module	393	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-506)	Hybrid Powertrain Control Module	511	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-506)	Hybrid Powertrain Control Module	512	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-503)	Hybrid Powertrain Control Module	564	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-513)	Hybrid Powertrain Control Module	565	HV control ECU internal error	• HV control ECU	○	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A1D (05-509)	Hybrid Powertrain Control Module	567	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-517)	Hybrid Powertrain Control Module	568	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-517)	Hybrid Powertrain Control Module	569	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-493)	Hybrid Powertrain Control Module	570	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1D (05-519)	Hybrid Powertrain Control Module	615	HV control ECU internal error	• HV control ECU	○	○	• HV system
P0A1F (05-520)	Battery Energy Control Module	123	Abnormal signal input from battery ECU (ROMRAM malfunction)	• HV battery system • Battery ECU	○	○	• HV system
P0A1F (05-521)	Battery Energy Control Module	129	HV battery voltage circuit malfunction	• HV battery voltage circuit • Service plug grip • High voltage fuse • Battery plug • Battery ECU	○	○	• HV system
P0A1F (05-525)	Battery Energy Control Module	593	IG2 signal circuit of battery ECU malfunction	• Wire harness or connector • Battery ECU	○	○	• HV system
P0A2B (05-528)	Drive Motor "A" Temperature Sensor Circuit Range/Performance	248	Motor temperature sensor No. 1 malfunction	• Hybrid vehicle motor	X	○	• HV system
P0A2B (05-528)	Drive Motor "A" Temperature Sensor Circuit Range/Performance	250	Motor temperature sensor No. 1 performance problem	• Hybrid vehicle motor	X	○	• HV system
P0A2C (05-529)	Drive Motor "A" Temperature Sensor Circuit Low	247	GND short in motor temperature sensor No. 1 circuit	• Wire harness or connector • Hybrid vehicle motor • HV control ECU	X	○	• HV system
P0A2D (05-529)	Drive Motor "A" Temperature Sensor Circuit High	249	Open or +B short in motor temperature sensor No. 1 circuit	• Wire harness or connector • Hybrid vehicle motor • HV control ECU	X	○	• HV system
P0A37 (05-535)	Generator Temperature Sensor Circuit Range/Performance	258	Motor temperature sensor No. 2 malfunction	• Hybrid vehicle motor	X	○	• HV system
P0A37 (05-536)	Generator Temperature Sensor Circuit Range/Performance	260	Motor temperature sensor No. 2 performance problem	• Hybrid vehicle motor • Transaxle fluid leakage • HV transaxle assembly	X	○	• HV system
P0A38 (05-537)	Generator Temperature Sensor Circuit Low	257	GND short in motor temperature sensor No. 2 circuit	• Wire harness or connector • Hybrid vehicle motor • HV control ECU	X	○	• HV system
P0A39 (05-537)	Generator Temperature Sensor Circuit High	259	Open or +B short in motor temperature sensor No. 2 circuit	• Wire harness or connector • Hybrid vehicle motor • HV control ECU	X	○	• HV system
P0A3F (05-542)	Drive Motor "A" Position Sensor Circuit	243	Interphase short in motor resolver circuit	• Wire harness or connector • Hybrid vehicle motor • HV control ECU	○	○	• HV system
P0A40 (05-542)	Drive Motor "A" Position Sensor Circuit Range/Performance	500	Motor resolver output is out of normal range	• Wire harness or connector • Hybrid vehicle motor • HV control ECU	○	○	• HV system

## DIAGNOSTICS – HYBRID CONTROL SYSTEM

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A41 (05–542)	Drive Motor "A" Position Sensor Circuit Low	245	Open or short in motor re- solver circuit	• Wire harness or connector • Hybrid vehicle motor • HV control ECU	○	○	• HV system
P0A4B (05–547)	Generator Position Sensor Circuit	253	Interphase short in genera- tor resolver circuit	• Wire harness or connector • Hybrid vehicle generator • HV control ECU	○	○	• HV system
P0A4C (05–547)	Generator Position Sensor Circuit Range/Perfor- mance	513	Generator resolver output is out of normal range	• Wire harness or connector • Hybrid vehicle generator • HV control ECU	○	○	• HV system
P0A4D (05–547)	Generator Position Sensor Circuit Low	255	Open or short in generator resolver circuit	• Wire harness or connector • Hybrid vehicle generator • HV control ECU	○	○	• HV system
P0A51 (05–551)	Drive Motor "A" Current Sensor Circuit	174	HV control ECU internal er- ror	• HV control ECU	X	○	• HV system
P0A60 (05–552)	Drive Motor "A" Phase V Current	288	Phase V current sub sensor of motor inverter current sensor malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A60 (05–552)	Drive Motor "A" Phase V Current	289	Open in phase V current sub sensor circuit of motor inverter current sensor	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A60 (05–552)	Drive Motor "A" Phase V Current	290	Phase V current main sen- sor of motor inverter current sensor malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A60 (05–552)	Drive Motor "A" Phase V Current	292	Open in phase V current main sensor circuit of motor inverter current sensor	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A60 (05–552)	Drive Motor "A" Phase V Current	294	Phase V current main and sub sensors of motor inver- ter current sensor perfor- mance problem	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A60 (05–552)	Drive Motor "A" Phase V Current	501	Phase V current main and sub sensors of motor inver- ter current sensor offset mal- function	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A63 (05–552)	Drive Motor "A" Phase W Current	296	Phase W current sub sen- sor of motor inverter current sensor malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A63 (05–552)	Drive Motor "A" Phase W Current	297	Open in phase W current sub sensor circuit of motor inverter current sensor	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A63 (05–552)	Drive Motor "A" Phase W Current	298	Phase W current main sen- sor of motor inverter current sensor malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A63 (05–552)	Drive Motor "A" Phase W Current	300	Open in phase W current main sensor circuit of motor inverter current sensor	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A63 (05–552)	Drive Motor "A" Phase W Current	302	Phase W current main and sub sensors of motor inver- ter current sensor perfor- mance problem	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A63 (05–552)	Drive Motor "A" Phase W Current	502	Phase W current main and sub sensors of motor inver- ter current sensor offset mal- function	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A72 (05-557)	Generator Phase V Current	326	Phase V current sub sensor of generator inverter current sensor malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A72 (05-557)	Generator Phase V Current	327	Open in phase V current sub sensor circuit of generator inverter current sensor	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A72 (05-557)	Generator Phase V Current	328	Phase V current main sensor of generator inverter current sensor malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A72 (05-557)	Generator Phase V Current	330	Open in phase V current main sensor circuit of generator inverter current sensor	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A72 (05-557)	Generator Phase V Current	333	Phase V current main and sub sensors of generator inverter current sensor performance problem	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A72 (05-557)	Generator Phase V Current	515	Phase V current main and sub sensors of generator inverter current sensor offset malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A75 (05-557)	Generator Phase W Current	334	Phase W current sub sensor of generator inverter current sensor malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A75 (05-557)	Generator Phase W Current	335	Open in phase W current sub sensor circuit of generator inverter current sensor	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A75 (05-557)	Generator Phase W Current	336	Phase W current main sensor of generator inverter current sensor malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A75 (05-557)	Generator Phase W Current	338	Open in phase W current main sensor circuit of generator inverter current sensor	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A75 (05-557)	Generator Phase W Current	341	Phase W current main and sub sensors of generator inverter current sensor performance problem	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A75 (05-557)	Generator Phase W Current	516	Phase W current main and sub sensors of generator inverter current sensor offset malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A78 (05-562)	Drive Motor "A" Inverter Performance	266	Open or GND short in inverter voltage (VH) signal circuit	• Wire harness or connector • w/ converter inverter assembly • HV control ECU	○	○	• HV system
P0A78 (05-562)	Drive Motor "A" Inverter Performance	267	+B short in inverter voltage (VH) signal circuit	• Wire harness or connector • w/ converter inverter assembly • HV control ECU	○	○	• HV system
P0A78 (05-571)	Drive Motor "A" Inverter Performance	272	Abnormality in motor PWM circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A78 (05-574)	Drive Motor "A" Inverter Performance	278	+B short in motor inverter over-voltage (OVH) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system

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DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A78 (05-577)	Drive Motor "A" Inverter Performance	279	Motor inverter over-voltage (OVH) signal detection (over-voltage by inverter assembly malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle motor</li> <li>• Hybrid vehicle generator</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-574)	Drive Motor "A" Inverter Performance	280	Open or GND short in motor inverter over-voltage (OVH) signal circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-586)	Drive Motor "A" Inverter Performance	282	Motor inverter over voltage (OVH) signal detection (circuit malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-590)	Drive Motor "A" Inverter Performance	283	+B short in motor inverter fail (MFIV) signal circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-593)	Drive Motor "A" Inverter Performance	284	Motor inverter fail (MFIV) signal detection (inverter overheating)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Inverter cooling system</li> <li>• Water w/ motor &amp; bracket pump assembly</li> <li>• Cooling fan motor</li> <li>• Cooling fan motor No. 2</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle motor</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-590)	Drive Motor "A" Inverter Performance	285	Open or GND short in motor inverter fail (MFIV) signal circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-601)	Drive Motor "A" Inverter Performance	286	Motor inverter fail (MFIV) signal detection (circuit malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-604)	Drive Motor "A" Inverter Performance	287	Motor inverter fail (MFIV) signal detection (over current by inverter assembly malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle motor</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-611)	Drive Motor "A" Inverter Performance	304	Open or +B short in motor gate shutdown (MSDN) signal circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-611)	Drive Motor "A" Inverter Performance	305	GND short in motor gate shutdown (MSDN) signal circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-614)	Drive Motor "A" Inverter Performance	306	Failure in monitoring MG2 torque performance	<ul style="list-style-type: none"> <li>• Hybrid vehicle motor</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-617)	Drive Motor "A" Inverter Performance	308	Collision signal input from airbag ECU or circuit breaker sensor No. 1	<ul style="list-style-type: none"> <li>• Supplemental restraint system</li> <li>• Circuit breaker sensor No. 1</li> </ul>	○	○	• HV system
P0A78 (05-577)	Drive Motor "A" Inverter Performance	503	Motor inverter over-voltage (OVH) signal detection (over-voltage by HV control ECU malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle motor</li> <li>• Hybrid vehicle generator</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A78 (05-577)	Drive Motor "A" Inverter Performance	504	Motor inverter over-voltage (OVH) signal detection (over-voltage by HV transaxle assembly malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle motor</li> <li>• Hybrid vehicle generator</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-604)	Drive Motor "A" Inverter Performance	505	Motor inverter fail (MFIV) signal detection (over current by HV control ECU malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle motor</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-604)	Drive Motor "A" Inverter Performance	506	Motor inverter fail (MFIV) signal detection (over current by HV transaxle assembly malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle motor</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-611)	Drive Motor "A" Inverter Performance	507	Open in motor gate shutdown (MSDN) signal circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-618)	Drive Motor "A" Inverter Performance	508	Motor gate shutdown (MSDN) signal malfunction	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• HV control ECU</li> </ul>	○	○	• HV system
P0A78 (05-621)	Drive Motor "A" Inverter Performance	510	Motor inverter gate malfunction	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-623)	Drive Motor "A" Inverter Performance	523	Inverter voltage (VH) sensor offset malfunction	<ul style="list-style-type: none"> <li>• System main relay</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A78 (05-625)	Drive Motor "A" Inverter Performance	586	Inverter voltage (VH) sensor performance problem	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A7A (05-628)	Generator Inverter Performance	309	Abnormality in generator PWM circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A7A (05-631)	Generator Inverter Performance	321	+B short in generator inverter fail (GFIV) signal circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A7A (05-634)	Generator Inverter Performance	322	Generator inverter fail (GFIV) signal detection (inverter overheating)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Inverter cooling system</li> <li>• Water w/ motor &amp; bracket pump assembly</li> <li>• Cooling fan motor</li> <li>• Cooling fan motor No. 2</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle generator</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A7A (05-631)	Generator Inverter Performance	323	Open or GND short in generator inverter fail (GFIV) signal circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A7A (05-642)	Generator Inverter Performance	324	Generator inverter fail (GFIV) signal detection (circuit malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system
P0A7A (05-645)	Generator Inverter Performance	325	Generator inverter fail (GFIV) signal detection (over current by inverter assembly malfunction)	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• HV transaxle assembly</li> <li>• Hybrid vehicle generator</li> <li>• HV control ECU</li> <li>• w/ converter inverter assembly</li> </ul>	○	○	• HV system

## DIAGNOSTICS – HYBRID CONTROL SYSTEM

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A7A (05–652)	Generator Inverter Performance	342	Open or +B short in generator gate shutdown (GSDN) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A7A (05–652)	Generator Inverter Performance	343	GND short in generator gate shutdown (GSDN) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A7A (05–655)	Generator Inverter Performance	344	Failure in monitoring MG1 torque performance	• Hybrid vehicle generator • w/ converter inverter assembly	○	○	• HV system
P0A7A (05–645)	Generator Inverter Performance	517	Generator inverter fail (GFIV) signal detection (over current by HV control ECU malfunction)	• Wire harness or connector • HV transaxle assembly • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A7A (05–645)	Generator Inverter Performance	518	Generator inverter fail (GFIV) signal detection (over current by HV transaxle assembly malfunction)	• Wire harness or connector • HV transaxle assembly • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A7A (05–652)	Generator Inverter Performance	519	Open in generator gate shutdown (GSDN) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A7A (05–658)	Generator Inverter Performance	520	Generator gate shutdown (GSDN) signal malfunction	• Wire harness or connector • HV control ECU	○	○	• HV system
P0A7A (05–661)	Generator Inverter Performance	522	Generator inverter gate malfunction	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A90 (05–663)	Drive Motor "A" Performance	239	HV transaxle input malfunction (shaft damaged)	• Engine assembly • HV transaxle assembly (shaft or gear) • Transmission input damper • Wire harness or connector • HV control ECU	○	○	• HV system
P0A90 (05–669)	Drive Motor "A" Performance	240	Generator locked	• Hybrid vehicle generator	○	○	• HV system
P0A90 (05–663)	Drive Motor "A" Performance	241	HV transaxle input malfunction (torque limiter slipping)	• Engine assembly • HV transaxle assembly (shaft or gear) • Transmission input damper • Wire harness or connector • HV control ECU	○	○	• HV system
P0A90 (05–670)	Drive Motor "A" Performance	242	Planetary gear locked	• HV transaxle assembly	○	○	• HV system
P0A90 (05–671)	Drive Motor "A" Performance	251	MG2 magnetic force deterioration or same phase short circuit	• Hybrid vehicle motor	○	○	• HV system
P0A90 (05–673)	Drive Motor "A" Performance	509	MG2 system malfunction	• Hybrid vehicle motor • w/ converter inverter assembly	○	○	• HV system
P0A90 (05–663)	Drive Motor "A" Performance	602	HV transaxle output malfunction	• Engine assembly • HV transaxle assembly (shaft or gear) • Transmission input damper • Wire harness or connector • HV control ECU	○	○	• HV system
P0A90 (05–676)	Drive Motor "A" Performance	604	MG2 power balance malfunction (small power balance)	• Battery current sensor • Hybrid vehicle motor	○	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A90 (05-676)	Drive Motor "A" Performance	605	MG2 power balance mal- function (large power bal- ance)	• Battery current sensor • Hybrid vehicle motor	○	○	• HV system
P0A92 (05-679)	Hybrid Generator Performance	261	MG1 magnetic force deteri- oration or same phase short circuit	• Hybrid vehicle generator	○	○	• HV system
P0A92 (05-681)	Hybrid Generator Performance	521	MG1 system malfunction	• Hybrid vehicle generator • w/ converter inverter assembly	○	○	• HV system
P0A92 (05-684)	Hybrid Generator Performance	606	MG1 power balance mal- function (small power bal- ance)	• Battery current sensor • Hybrid vehicle generator	○	○	• HV system
P0A92 (05-684)	Hybrid Generator Performance	607	MG1 power balance mal- function (large power bal- ance)	• Battery current sensor • Hybrid vehicle generator	○	○	• HV system
P0A93 (05-687)	Inverter Cooling System Perfor- mance	346	Inverter cooling system mal- function (water pump sys- tem malfunction)	• Wire harness or connector • Inverter cooling system • Water w/ motor & bracket pump assembly • Cooling fan motor • Cooling fan motor No. 2 • w/ converter inverter assembly	○	○	• HV system
P0A93 (05-687)	Inverter Cooling System Perfor- mance	347	Inverter cooling system mal- function (electric cooling fan system malfunction)	• Wire harness or connector • Inverter cooling system • Water w/ motor & bracket pump assembly • Cooling fan motor • Cooling fan motor No. 2 • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-691)	DC/DC Converter Performance	442	Abnormal voltage execution value	• w/ converter inverter assembly	○	○	• HV system
P0A94 (05-693)	DC/DC Converter Performance	545	Open or GND short in boost converter over-voltage (OVL) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-693)	DC/DC Converter Performance	546	+B short in boost converter over-voltage (OVL) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-696)	DC/DC Converter Performance	547	Boost converter over volt- age (OVL) signal detection (over voltage by HV control ECU malfunction)	• Wire harness or connector • HV transaxle assembly • Hybrid vehicle motor • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-696)	DC/DC Converter Performance	548	Boost converter over volt- age (OVL) signal detection (over voltage by inverter as- sembly malfunction)	• Wire harness or connector • HV transaxle assembly • Hybrid vehicle motor • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-696)	DC/DC Converter Performance	549	Boost converter over volt- age (OVL) signal detection (over voltage by HV trans- axle assembly malfunction)	• Wire harness or connector • HV transaxle assembly • Hybrid vehicle motor • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-704)	DC/DC Converter Performance	550	Boost converter over-volt- age (OVL) signal detection (circuit malfunction)	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A94 (05-707)	DC/DC Converter Performance	551	Open or GND short in boost converter fail (FCV) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-707)	DC/DC Converter Performance	552	+B short in boost converter fail (FCV) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-710)	DC/DC Converter Performance	553	Boost converter fail (FCV) signal detection (boost converter overheating)	• Wire harness or connector • Inverter cooling system • Water w/ motor & bracket pump assembly • Cooling fan motor • Cooling fan motor No. 2 • HV transaxle assembly • Hybrid vehicle motor • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-719)	DC/DC Converter Performance	554	Boost converter fail (FCV) signal detection (over current by HV control ECU malfunction)	• Wire harness or connector • HV transaxle assembly • Hybrid vehicle motor • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-719)	DC/DC Converter Performance	555	Boost converter fail (FCV) signal detection (over current by inverter assembly malfunction)	• Wire harness or connector • HV transaxle assembly • Hybrid vehicle motor • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-719)	DC/DC Converter Performance	556	Boost converter fail (FCV) signal detection (over current by HV transaxle assembly malfunction)	• Wire harness or connector • HV transaxle assembly • Hybrid vehicle motor • Hybrid vehicle generator • HV control ECU • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-727)	DC/DC Converter Performance	557	Boost converter fail (FCV) signal detection (circuit malfunction)	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-730)	DC/DC Converter Performance	558	GND short in boost converter gate shutdown (CSDN) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-730)	DC/DC Converter Performance	559	Open or +B short in boost converter gate shutdown (CSDN) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-730)	DC/DC Converter Performance	560	Open in boost converter gate shutdown (CSDN) signal circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-733)	DC/DC Converter Performance	561	Abnormal boost converter gate shutdown (CSDN) signal	• Wire harness or connector • HV control ECU	○	○	• HV system
P0A94 (05-736)	DC/DC Converter Performance	583	Open or GND short in boost converter temperature sensor circuit	• Wire harness or connector • w/ converter inverter assembly • HV control ECU	○	○	• HV system
P0A94 (05-736)	DC/DC Converter Performance	584	+B short in boost converter temperature sensor circuit	• Wire harness or connector • w/ converter inverter assembly • HV control ECU	○	○	• HV system
P0A94 (05-743)	DC/DC Converter Performance	585	Boost converter voltage (VL) sensor performance problem	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P0A94 (05-746)	DC/DC Converter Performance	587	Difference between voltages from HV battery voltage (VB) sensor and boost converter voltage (VL) sensor is large	• Wire harness or connector • w/ converter inverter assembly • Service plug grip • High voltage fuse • Battery ECU	○	○	• HV system
P0A94 (05-751)	DC/DC Converter Performance	588	Abnormality in boost converter PWM circuit	• Wire harness or connector • w/ converter inverter assembly	○	○	• HV system
P0A94 (05-754)	DC/DC Converter Performance	589	Open or GND short in boost converter voltage (VL) signal circuit	• Wire harness or connector • w/ converter inverter assembly • HV control ECU	○	○	• HV system
P0A94 (05-754)	DC/DC Converter Performance	590	+B short in boost converter voltage (VL) signal circuit	• Wire harness or connector • w/ converter inverter assembly • HV control ECU	○	○	• HV system
P0AA1 (05-760)	Hybrid Battery Positive Contactor Circuit Stuck Closed	224	Open or +B short in system main relay No. 1 circuit	• Wire harness or connector • System main relay No. 1 • HV control ECU	X	○	• HV system
P0AA1 (05-763)	Hybrid Battery Positive Contactor Circuit Stuck Closed	226	Open or +B short in system main relay No. 2 circuit	• Wire harness or connector • System main relay No. 2 • HV control ECU	X	○	• HV system
P0AA1 (05-765)	Hybrid Battery Positive Contactor Circuit Stuck Closed	231	System main relay terminal of HV battery positive side stuck closed	• System main relay No. 1 • System main relay No. 2	X	○	• HV system
P0AA1 (05-766)	Hybrid Battery Positive Contactor Circuit Stuck Closed	233	System main relay terminals of HV battery positive and negative sides stuck closed	• System main relay No. 1 • System main relay No. 2 • System main relay No. 3	X	○	• HV system
P0AA2 (05-760)	Hybrid Battery Positive Contactor Circuit Stuck Open	225	GND short in system main relay No. 1 circuit	• Wire harness or connector • System main relay No. 1 • HV control ECU	X	○	• HV system
P0AA2 (05-763)	Hybrid Battery Positive Contactor Circuit Stuck Open	227	GND short in system main relay No. 2 circuit	• Wire harness or connector • System main relay No. 2 • HV control ECU	X	○	• HV system
P0AA4 (05-767)	Hybrid Battery Negative Contactor Circuit Stuck Closed	228	Open or +B short in system main relay No. 3 circuit	• Wire harness or connector • System main relay No. 3 • HV control ECU	○	○	• HV system
P0AA4 (05-770)	Hybrid Battery Negative Contactor Circuit Stuck Closed	232	System main relay terminal of HV battery negative side stuck closed	• System main relay No. 3	○	○	• HV system
P0AA5 (05-767)	Hybrid Battery Negative Contactor Circuit Stuck Open	229	GND short in system main relay No. 3 circuit	• Wire harness or connector • System main relay No. 3 • HV control ECU	X	○	• HV system
P2120 (05-771)	Throttle/Pedal Position Sensor/Switch "D" Circuit	111	Accelerator pedal position main sensor value does not change while its sub sensor value changes	• Accelerator pedal rod assembly	X	○	• HV system
P2121 (05-771)	Throttle/Pedal Position Sensor/Switch "D" Circuit Range/Performance	106	Internal error of accelerator pedal position main sensor	• Accelerator pedal rod assembly	X	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P2121 (05–771)	Throttle/Pedal Position Sensor/Switch "D" Circuit Range/Performance	114	Accelerator pedal not smoothly returning to its original position	• Accelerator pedal rod assembly	X	○	• HV system
P2122 (05–772)	Throttle/Pedal Position Sensor/Switch "D" Circuit Low Input	104	Open or GND short in accelerator pedal position main sensor circuit	• Wire harness or connector • Accelerator pedal rod assembly • HV control ECU	X	○	• HV system
P2123 (05–772)	Throttle/Pedal Position Sensor/Switch "D" Circuit High Input	105	+B short in accelerator pedal position main sensor circuit	• Wire harness or connector • Accelerator pedal rod assembly • HV control ECU	X	○	• HV system
P2125 (05–771)	Throttle/Pedal Position Sensor/Switch "E" Circuit	112	Accelerator pedal position sub sensor value does not change while its main sensor value changes	• Accelerator pedal rod assembly	X	○	• HV system
P2126 (05–771)	Throttle/Pedal Position Sensor/Switch "E" Circuit Range/Performance	109	Internal error of accelerator pedal position sub sensor	• Accelerator pedal rod assembly	X	○	• HV system
P2127 (05–772)	Throttle/Pedal Position Sensor/Switch "E" Circuit Low Input	107	Open or GND short in accelerator pedal position sub sensor circuit	• Wire harness or connector • Accelerator pedal rod assembly • HV control ECU	X	○	• HV system
P2128 (05–772)	Throttle/Pedal Position Sensor/Switch "E" Circuit High Input	108	+B short in accelerator pedal position sub sensor circuit	• Wire harness or connector • Accelerator pedal rod assembly • HV control ECU	X	○	• HV system
P2138 (05–771)	Throttle/Pedal Position Sensor/Switch "D"/"E" Voltage Correlation	110	Difference between main sensor value and sub sensor value is large	• Accelerator pedal rod assembly	X	○	• HV system
P3000 (05–777)	Battery Control System Malfunction	123	Abnormal signal input from battery ECU (HV battery system malfunction)	• HV battery system • Battery ECU	○	○	• HV system
P3000 (05–777)	Battery Control System Malfunction	125	Abnormal signal input from battery ECU (High voltage fuse blown out)	• HV battery system • Battery ECU	○	○	• HV system
P3000 (05–778)	Battery Control System Malfunction	388	Abnormal signal input from battery ECU (discharge inhibition control malfunction)	• HV control system • Fuel shortage • HV battery assembly	X	○	• HV battery
P3000 (05–780)	Battery Control System Malfunction	389	Abnormal signal input from battery ECU (drop of high voltage)	• HV control system • HV battery assembly	X	○	• HV battery
P3000 (05–777)	Battery Control System Malfunction	603	Abnormal signal input from battery ECU (HV battery cooling system malfunction)	• HV battery system • Battery ECU	○	○	• HV system
P3004 (05–781)	High Voltage Power Resource Malfunction	131	High voltage fuse has blown out, service plug grip is disconnected or limiter resistance is cut off	• HV battery system • System main resistor • System main relay No. 1 • System main relay No. 3 • Main battery cable • Main battery cable No. 2 • Frame wire • w/ converter inverter assembly • HV control ECU	X	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P3004 (05-788)	High Voltage Power Resource Malfunction	132	Inverter voltage sensor malfunction, or limiter resistance increases	<ul style="list-style-type: none"> <li>• HV control system</li> <li>• System main resistor</li> <li>• System main relay No. 1</li> <li>• System main relay No. 3</li> <li>• Main battery cable</li> <li>• Main battery cable No. 2</li> <li>• Frame wire</li> <li>• w/ converter inverter assembly</li> <li>• HV control ECU</li> </ul>	X	○	• HV system
P3004 (05-794)	High Voltage Power Resource Malfunction	133	Abnormal signal input from battery ECU	<ul style="list-style-type: none"> <li>• HV battery system</li> <li>• Battery ECU</li> </ul>	X	X	–
P3009 (05-795)	High Voltage Power Short Circuit	526	Insulation resistance of high voltage circuit and body is low	<ul style="list-style-type: none"> <li>• Frame wire</li> <li>• System main relay</li> <li>• System main resistor</li> <li>• HV battery assembly</li> <li>• w/ motor compressor assembly</li> <li>• Battery ECU</li> <li>• HV transaxle assembly</li> <li>• w/ converter inverter assembly</li> <li>• Main battery cable</li> <li>• Main battery cable No. 2</li> <li>• Battery plug</li> <li>• Frame wire No. 2</li> <li>• Junction block assembly</li> </ul>	X	○	• HV system
P3009 (05-795)	High Voltage Power Short Circuit	611	Insulation resistance of A/C compressor motor or A/C inverter is low	<ul style="list-style-type: none"> <li>• w/ motor compressor assembly</li> <li>• w/ converter inverter assembly</li> </ul>	X	○	• HV system
P3009 (05-795)	High Voltage Power Short Circuit	612	Insulation resistance of HV battery, battery ECU, system main relay, or system main resistor is low	<ul style="list-style-type: none"> <li>• HV battery assembly</li> <li>• Battery ECU</li> <li>• System main relay</li> <li>• System main resistor</li> <li>• Main battery cable</li> <li>• Main battery cable No. 2</li> <li>• Battery plug</li> <li>• Frame wire No. 2</li> <li>• Junction block assembly</li> </ul>	X	○	• HV system
P3009 (05-795)	High Voltage Power Short Circuit	613	Insulation resistance of HV transaxle or motor and generator inverters is low	<ul style="list-style-type: none"> <li>• HV transaxle assembly</li> <li>• w/ converter inverter assembly</li> </ul>	X	○	• HV system
P3009 (05-795)	High Voltage Power Short Circuit	614	Insulation resistance of motor and generator inverters, A/C inverter, system main relay, system main resistor, or frame wire is low	<ul style="list-style-type: none"> <li>• Frame wire</li> <li>• System main relay</li> <li>• System main resistor</li> <li>• HV battery assembly</li> <li>• w/ converter inverter assembly</li> <li>• Main battery cable</li> <li>• Main battery cable No. 2</li> <li>• Battery plug</li> <li>• Frame wire No. 2</li> <li>• Junction block assembly</li> </ul>	X	○	• HV system
P3102 (05-815)	Transmission Control ECU Malfunction	524	BEAN communication problem of transmission control ECU	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Transmission control ECU</li> <li>• HV control ECU</li> <li>• Power source control ECU</li> </ul>	X	○	• HV system
P3102 (05-815)	Transmission Control ECU Malfunction	525	Transmission control ECU IG OFF command malfunction	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Transmission control ECU</li> <li>• HV control ECU</li> <li>• Power source control ECU</li> </ul>	X	○	• HV system

## DIAGNOSTICS – HYBRID CONTROL SYSTEM

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P3102 (05–815)	Transmission Control ECU Malfunction	581	Transmission control ECU malfunction	• Wire harness or connector • Transmission control ECU • HV control ECU • Power source control ECU	X	○	• HV system
P3102 (05–815)	Transmission Control ECU Malfunction	582	P position (PPOS) signal is logically inconsistent	• Wire harness or connector • Transmission control ECU • HV control ECU • Power source control ECU	X	○	• HV system
P3102 (05–815)	Transmission Control ECU Malfunction	597	GND short in P position (PPOS) signal circuit	• Wire harness or connector • Transmission control ECU • HV control ECU • Power source control ECU	X	○	• HV system
P3102 (05–815)	Transmission Control ECU Malfunction	598	+B short in P position (PPOS) signal circuit	• Wire harness or connector • Transmission control ECU • HV control ECU • Power source control ECU	X	○	• HV system
P3102 (05–815)	Transmission Control ECU Malfunction	599	P position (PPOS) signal malfunction (output pulse is abnormal)	• Wire harness or connector • Transmission control ECU • HV control ECU • Power source control ECU	X	○	• HV system
P3107 (05–818)	Lost Communication with Airbag System Control Module	213	GND short in communication circuit between airbag ECU and HV control ECU	• Wire harness or connector • Airbag ECU	X	○	• HV system
P3107 (05–818)	Lost Communication with Airbag System Control Module	214	Open or +B short in communication circuit between airbag ECU and HV control ECU	• Wire harness or connector • Airbag ECU	X	○	• HV system
P3107 (05–818)	Lost Communication with Airbag System Control Module	215	Abnormal communication signals between airbag ECU and HV control ECU	• Wire harness or connector • Airbag ECU	X	○	• HV system
P3108 (05–820)	Lost Communication with A/C System Control Module	535	Serial communication malfunction	• Wire harness or connector • w/ converter inverter assembly	X	X	–
P3108 (05–820)	Lost Communication with A/C System Control Module	536	A/C inverter malfunction	• Wire harness or connector • w/ converter inverter assembly	X	X	–
P3108 (05–822)	Lost Communication with A/C System Control Module	537	A/C amplifier malfunction	• A/C amplifier	X	X	–
P3108 (05–820)	Lost Communication with A/C System Control Module	538	Open in STB signal circuit	• Wire harness or connector • w/ converter inverter assembly	X	X	–
P3108 (05–823)	Lost Communication with A/C System Control Module	594	CAN communication malfunction	• CAN communication system	X	X	–
P3110 (05–824)	HV Main Relay Malfunction	223	IGCT relay is always closed	• Wire harness or connector • Integration relay (IGCT relay)	X	○	• HV system
P3110 (05–824)	HV Main Relay Malfunction	527	IG2 logical inconsistency	• Wire harness or connector • Integration relay (IG2 relay)	X	○	• HV system

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P3137 (05-826)	Collision Sensor Low Input	348	GND short in circuit breaker sensor No. 1 circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Circuit breaker sensor No. 1</li> </ul>	X	○	• HV system
P3138 (05-826)	Collision Sensor High Input	349	Open or +B short in circuit breaker sensor No. 1 circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Circuit breaker sensor No. 1</li> </ul>	X	○	• HV system
P3140 (05-828)	HV Interlock Switch Operation	350	Operating safety devices with vehicle stopped (ILK signal is ON)	<ul style="list-style-type: none"> <li>• Service plug grip installation</li> <li>• Inverter cover installation</li> </ul>	X	○	• HV system
P3143 (05-829)	HV Interlock Switch Open/Short	351	Open in interlock signal circuit while vehicle is running	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Battery plug (interlock switch No. 2)</li> <li>• w/ converter inverter assembly (interlock switch No. 1)</li> </ul>	X	○	• HV system
P3211 (05-832)	Drive Motor "A" Inverter Temperature Sensor Circuit Range/Performance	276	Sudden change in motor inverter temperature sensor output	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Inverter cooling system</li> <li>• Water w/ motor &amp; bracket pump assembly</li> <li>• Cooling fan motor</li> <li>• Cooling fan motor No. 2</li> <li>• w/ converter inverter assembly</li> </ul>	X	○	• HV system
P3211 (05-832)	Drive Motor "A" Inverter Temperature Sensor Circuit Range/Performance	277	Motor inverter temperature sensor output deviation	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Inverter cooling system</li> <li>• Water w/ motor &amp; bracket pump assembly</li> <li>• Cooling fan motor</li> <li>• Cooling fan motor No. 2</li> <li>• w/ converter inverter assembly</li> </ul>	X	○	• HV system
P3212 (05-837)	Drive Motor "A" Inverter Temperature Sensor Circuit High/Low	275	Open or GND short in motor inverter temperature sensor circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> <li>• HV control ECU</li> </ul>	X	○	• HV system
P3213 (05-837)	Drive Motor "A" Inverter Temperature Sensor Circuit High	274	+B short in motor inverter temperature sensor circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> <li>• HV control ECU</li> </ul>	X	○	• HV system
P3221 (05-843)	Generator Inverter Temperature Sensor Circuit Range/Performance	314	Sudden change in generator inverter temperature sensor output	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Inverter cooling system</li> <li>• Water w/ motor &amp; bracket pump assembly</li> <li>• Cooling fan motor</li> <li>• Cooling fan motor No. 2</li> <li>• w/ converter inverter assembly</li> </ul>	X	○	• HV system
P3221 (05-843)	Generator Inverter Temperature Sensor Circuit Range/Performance	315	Generator inverter temperature sensor output deviation	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• Inverter cooling system</li> <li>• Water w/ motor &amp; bracket pump assembly</li> <li>• Cooling fan motor</li> <li>• Cooling fan motor No. 2</li> <li>• w/ converter inverter assembly</li> </ul>	X	○	• HV system
P3222 (05-848)	Generator Inverter Temperature Sensor Circuit High/Low	313	Open or GND short in generator inverter temperature sensor circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> <li>• HV control ECU</li> </ul>	X	○	• HV system
P3223 (05-848)	Generator Inverter Temperature Sensor Circuit High	312	+B short in generator inverter temperature sensor circuit	<ul style="list-style-type: none"> <li>• Wire harness or connector</li> <li>• w/ converter inverter assembly</li> <li>• HV control ECU</li> </ul>	X	○	• HV system

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DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
P3226 (05–854)	DC/DC (Boost) Converter Temper- ature Sensor Mal- function	562	Sudden change in boost converter temperature sen- sor output	• Wire harness or connector • Inverter cooling system • Water w/ motor & bracket pump assembly • Cooling fan motor • Cooling fan motor No. 2 • w/ converter inverter assembly	X	○	• HV system
P3226 (05–854)	DC/DC (Boost) Converter Temper- ature Sensor Mal- function	563	Boost converter tempera- ture sensor output deviation	• Wire harness or connector • Inverter cooling system • Water w/ motor & bracket pump assembly • Cooling fan motor • Cooling fan motor No. 2 • w/ converter inverter assembly	X	○	• HV system
U0100 (05–859)	Lost Communica- tion with ECM/ PCM "A"	211	CAN communication prob- lem between ECM and HV control ECU (no signal in- put)	• CAN communication system	○	○	• HV system
U0100 (05–859)	Lost Communica- tion with ECM/ PCM "A"	212	CAN communication prob- lem between ECM and HV control ECU (transmission error)	• CAN communication system	○	○	• HV system
U0100 (05–859)	Lost Communica- tion with ECM/ PCM "A"	530	CAN communication prob- lem between ECM and HV control ECU (CAN commu- nication system malfunc- tion)	• CAN communication system	○	○	• HV system
U0111 (05–859)	Lost Communica- tion with Battery Energy Control Module "A"	208	CAN communication prob- lem between battery ECU and HV control ECU (no signal input)	• CAN communication system	○	○	• HV system
U0111 (05–859)	Lost Communica- tion with Battery Energy Control Module "A"	531	CAN communication prob- lem between battery ECU and HV control ECU (CAN communication system mal- function)	• CAN communication system	○	○	• HV system
U0129 (05–859)	Lost Communica- tion with Brake System Control Module	220	CAN communication prob- lem between skid control ECU and HV control ECU (no signal input)	• CAN communication system	X	○	• HV system
U0129 (05–859)	Lost Communica- tion with Brake System Control Module	222	CAN communication prob- lem between skid control ECU and HV control ECU (CAN communication sys- tem malfunction)	• CAN communication system	X	○	• HV system
U0129 (05–859)	Lost Communica- tion with Brake System Control Module	528	CAN communication prob- lem between skid control ECU and HV control ECU (transmission error)	• CAN communication system	X	○	• HV system
U0129 (05–859)	Lost Communica- tion with Brake System Control Module	529	CAN communication prob- lem between skid control ECU and HV control ECU (regenerative torque mal- function)	• CAN communication system	X	○	• HV system
U0131 (05–859)	Lost Communica- tion with Power Steering Control Module	433	CAN communication prob- lem between power steering ECU and HV control ECU (no signal input)	• CAN communication system	X	X	–

DTC No. (See Page)	Detection Item	INF Code	Detection Condition	Trouble Area	MIL *1	Master Warning Lamp *2	Warning *3
U0131 <b>(05–859)</b>	Lost Communication with Power Steering Control Module	434	CAN communication problem between power steering ECU and HV control ECU (CAN communication system malfunction)	• CAN communication system	X	X	–
U0146 <b>(05–859)</b>	Lost Communication with Gateway "A"	435	CAN communication problem between gateway ECU and HV control ECU (no signal input)	• CAN communication system	X	○	• HV system

\*1: "○" ... MIL is illuminated, "X" ... MIL is not illuminated.

\*2: "○" ... Master warning lamp is illuminated, "X" ... Master warning lamp is not illuminated.

\*3: Warning on the multi-information display

\*4: w/ smart entry system

\*5: w/o smart entry system