SPN	FMI	Variable Description	J2012 DTC Code
29	0	DTC 2116: FPP2 higher than IVS	2116
29	1	DTC 2140: FPP2 lower than IVS	2140
29	3	DTC 2128: FPP2 voltage high	2128
29	4	DTC 2127: FPP2 voltage low	2127
51	0	DTC 221: TPS1-2 higher than expected	0221
51	1	DTC 121: TPS1-2 lower than expected	0121
51	3	DTC 123: TPS1 voltage high	0123
51	4	DTC 122: TPS1 voltage low	0122
51	7	DTC 2112: Unable to reach higher TPS	2112
51	7	DTC 2111: Unable to reach lower TPS	2111
51	31	DTC 2135: TPS1/2 simultaneous voltages out-of-range	2135
84	8	DTC 502: Roadspeed input loss of signal	0502
91	0	DTC 2115: FPP1 higher than IVS	2115
91	1	DTC 2139: FPP1 lower than IVS	2139
91	3	DTC 2122: FPP1 voltage high	2122
91	4	DTC 2123: FPP1 voltage low	2123
91	16	DTC 2126: FPP1-2 higher than expected	2126
91	18	DTC 2121: FPP1-2 lower than expected	2121
91	19	DTC 1630: J1939 ETC message receipt loss	1630
91	31	DTC 1121: FPP1/2 simultaneous voltages out-of-range (redundancy lost)	1121
94	0	DTC 88 Fuel pressure higher than expected	0088
94	1	DTC 87 Fuel pressure lower than expected	0087
94	3	DTC 92: FP high voltage	0092
94	4	DTC 91: FP low voltage	0091
100	0	DTC 521: Oil pressure sender high pressure	0521
100	1	DTC 524: Oil pressure low	0524
100	1	DTC 524: Oil pressure sender low pressure stage 2	0524
100	3	DTC 523: Oil pressure sender high voltage	0523
100	4	DTC 522: Oil pressure sender low voltage	0522
100	18	DTC 520: Oil pressure sender low pressure stage 1	0520
105	0	DTC 127: IAT higher than expected stage 2	0127
105	3	DTC 113: IAT voltage high	0113
105	4	DTC 112: IAT voltage low	0112
105	15	DTC 111: IAT higher than expected stage 1	0111
106	4	DTC 107: MAP voltage low	0107
106	16	DTC 108: MAP pressure high	0108
108	0	DTC 2229: BP pressure high	2229
108	1	DTC 129: BP pressure low	0129
110	0	DTC 217: ECT higher than expected stage 2	0217
110	0	DTC 1522: CHT higher than expected stage 2	1522
110	1	DTC 9999: Water flow fault	0128
110	3	DTC 118: ECT voltage high	0118
110	4	DTC 117: ECT voltage low	0117
110	7	DTC 9999: Failed to reach operating temperature	0128
110	15	DTC 116: ECT higher than expected stage 1	0116
110	16	DTC 1521: CHT higher than expected stage 1	1521
168	15	DTC 563: Vbat voltage high	0563

168	17	DTC 562: Vbat voltage low	0562
515	0	DTC 1112: RPM above spark rev limit level	1112
515	15	DTC 219: RPM higher than max allowed govern speed	0219
515	16	DTC 1111: RPM above fuel rev limit level	1111
515	31	DTC 1113: RPM higher than expected	1113
628	13	DTC 601: Microprocessor failure - FLASH	0601
629	31	DTC 606: Microprocessor failure - COP	0606
629	31	DTC 1612: Microprocessor failure - RTI 1	1612
629	31	DTC 1613: Microprocessor failure - RTI 2	1613
629	31	DTC 1614: Microprocessor failure - RTI 3	1614
629	31	DTC 1615: Microprocessor failure - A/D	1615
629	31	DTC 1616: Microprocessor failure - Interrupt	1616
630	12	DTC 604: Microprocessor failure - RAM	0604
636	2	DTC 336: CRANK input signal noise	0336
636	4	DTC 337: Crank signal loss	0337
636	8	DTC 16: Crank and/or cam could not synchronize during start	0016
639	12	DTC 1626: CAN-J1939 Tx fault	1626
639	12	DTC 1627: CAN-J1939 Rx fault	1627
639	13	DTC 1628: J1939 CAN address / engine-number conflict	1628
645	3	DTC 2619: Tach output short to power	2619
645	4	DTC 2618: Tach output ground short	2618
651	5	DTC 261: Injector 1 open or short to ground	0261
651	6	DTC 262: Injector 1 coil shorted	0262
652	5	DTC 264: Injector 2 open or short to ground	0264
652	6	DTC 265: Injector 2 coil shorted	0265
653	5	DTC 267: Injector 3 open or short to ground	0267
653	6	DTC 268: Injector 3 coil shorted	0268
654	5	DTC 270: Injector 4 open or short to ground	0270
654	6	DTC 271: Injector 4 coil shorted	0271
655	5	DTC 273: Injector 5 open or short to ground	0273
655	6	DTC 274: Injector 5 coil shorted	0274
656	5	DTC 276: Injector 6 open or short to ground	0276
656	6	DTC 277: Injector 6 coil shorted	0277
657	5	DTC 279: Injector 7 open or short to ground	0279
657	6	DTC 280: Injector 7 coil shorted	0280
658	5	DTC 282: Injector 8 open or short to ground	0282
658	6	DTC 283: Injector 8 coil shorted	0283
695	9	DTC 1629: J1939 TSC1 message receipt loss	1629
697	3	DTC 1632: PWM1-Gauge1 short to power	1632
697	5	DTC 1631: PWM1-Gauge1 open / ground short	1631
698	3	DTC 1634: PWM2-Gauge2 short to power	1634
698	5	DTC 1633: PWM2-Gauge2 open / ground short	1633
699	3	DTC 1636: PWM3-Gauge3 short to power	1636
699	5	DTC 1635: PWM3-Gauge3 open / ground short	1635
700	3	DTC 1638: PWM4 short to power	1638
700	5	DTC 1637: PWM4 open / ground short	1637
701	3	DTC 1511: AUX analog Pull-Up 1 high voltage	1511
701	4	DTC 1512: AUX analog Pull-Up 1 low voltage	1512

702	3	*DTC 1513: AUX analog Pull-Up 2 high voltage*	*1513*
702	4	*DTC 1514: AUX analog Pull-Up 2 low voltage*	*1514*
703	3	*DTC 1517: AUX analog Pull-Up 3 high voltage*	*1517*
703	4	*DTC 1518: AUX analog Pull-Up 3 low voltage*	*1518*
704	3	*DTC 1541: AUX analog Pull-Up/Down 1 high voltage*	*1541*
704	4	*DTC 1542: AUX analog Pull-Up/Down 1 low voltage*	*1542*
705	3	*DTC 1543: AUX analog Pull-Up/Down 2 high voltage*	*1543*
705	4	*DTC 1544: AUX analog Pull-Up/Down 2 low voltage*	*1544*
706	3	*DTC 1545: AUX analog Pull-Up/Down 3 high voltage*	*1545*
706	4	*DTC 1546: AUX analog Pull-Up/Down 3 low voltage*	*1546*
707	3	*DTC 1551: AUX digital 1 high voltage*	*1551*
707	4	*DTC 1552: AUX digital 1 low voltage*	*1552*
708	3	*DTC 1553: AUX digital 2 high voltage*	*1553*
708	4	*DTC 1554: AUX digital 2 low voltage*	*1554*
709	3	*DTC 1555: AUX digital 3 high voltage*	*1555*
709	4	*DTC 1556: AUX digital 3 low voltage*	*1556*
710	3	*DTC 1515: AUX analog Pull-Down 1 high voltage*	*1515*
710	4	*DTC 1516: AUX analog Pull-Down 1 low voltage*	*1516*
711	3	*DTC 1561: AUX analog Pull-Down 2 high voltage*	*1561*
711	4	*DTC 1562: AUX analog Pull-Down 2 low voltage*	*1562*
712	3	*DTC 1563: AUX analog Pull-Down 3 high voltage*	*1563*
712	4	*DTC 1564: AUX analog Pull-Down 3 low voltage*	*1564*
713	3	*DTC 1547: AUX analog Pull-Up/Down 4 high voltage*	*1547*
713	4	*DTC 1548: AUX analog Pull-Up/Down 4 low voltage*	*1548*
714	3	*DTC 1567: AUX analog Pull-Up/Down 6 high voltage*	*1567*
714	4	*DTC 1568: AUX analog Pull-Up/Down 6 low voltage*	*1568*
715	3	*DTC 1569: AUX analog Pull-Up/Down 7 high voltage*	*1569*
715	4	*DTC 1571: AUX analog Pull-Up/Down 7 low voltage*	*1571*
716	3	*DTC 1572: AUX digital 4 high voltage*	*1572*
716	4	*DTC 1573: AUX digital 4 low voltage*	*1573*
717	3	*DTC 1565: AUX analog Pull-Up/Down 5 high voltage*	*1565*
717	4	*DTC 1566: AUX analog Pull-Up/Down 5 low voltage*	*1566*
723	2	*DTC 341: CAM input signal noise*	*0341*
723	4	*DTC 342: Loss of CAM input signal*	*0342*
731	2	*DTC 326: Knock1 excessive or erratic signal*	*0326*
731	4	*DTC 327: Knock1 sensor open or not present*	*0327*
920	3	*DTC 1643: Buzzer control short to power*	*1643*
920	4	*DTC 1641: Buzzer control ground short*	*1641*
920	5	*DTC 1642: Buzzer open*	*1642*
924	3	*DTC 1640: PWM5 short to power*	*1640*
924	5	*DTC 1639: PWM5 open / ground short*	*1639*
925	3	*DTC 1662: PWM6 short to power*	*1662*
925	5	*DTC 1661: PWM6 open / ground short*	*1661*
926	3	*DTC 1664: PWM7 short to power*	*1664*
926	5	*DTC 1663: PWM7 open / ground short*	*1663*
1079	3	*DTC 643: Sensor supply voltage 1 high*	*0643*
1079	4	*DTC 642: Sensor supply voltage 1 low*	*0642*
1079	31	*DTC 1611: Sensor supply voltage 1 and 2 out-of-range*	*1611*
1080	3	*DTC 653: Sensor supply voltage 2 high*	*0653*
1080	4	*DTC 652: Sensor supply voltage 2 low*	*0652*

1110	31	DTC 1625: J1939 shutdown request	1625
1213	3	DTC 1645: MIL control short to power	1645
1213	4	DTC 1644: MIL control ground short	1644
1213	5	DTC 650: MIL open	0650
1268	5	DTC 2300: Spark coil 1 primary open or short to ground	2300
1268	6	DTC 2301: Spark coil 1 primary shorted	2301
1268	31	DTC 0350: External spark module failure	0350
1268	31	DTC 0351: External spark module coil 1 failure	0351
1269	5	DTC 2303: Spark coil 2 primary open or short to ground	2303
1269	6	DTC 2304: Spark coil 2 primary shorted	2304
1269	31	DTC 0352: External spark module coil 2 failure	0352
1270	5	DTC 2306: Spark coil 3 primary open or short to ground	2306
1270	6	DTC 2307: Spark coil 3 primary shorted	2307
1270	31	DTC 0353: External spark module coil 3 failure	0353
1271	5	DTC 2309: Spark coil 4 primary open or short to ground	2309
1271	6	DTC 2310: Spark coil 4 primary shorted	2310
1271	31	DTC 0354: External spark module coil 4 failure	0354
1272	5	DTC 2312: Spark coil 5 primary open or short to ground	2312
1272	6	DTC 2313: Spark coil 5 primary shorted	2313
1272	31	DTC 0355: External spark module coil 5 failure	0355
1273	5	DTC 2315: Spark coil 6 primary open or short to ground	2315
1273	6	DTC 2316: Spark coil 6 primary shorted	2316
1273	31	DTC 0356: External spark module coil 6 failure	0356
1274	5	DTC 2318: Spark coil 7 primary open or short to ground	2318
1274	6	DTC 2319: Spark coil 7 primary shorted	2319
1274	31	DTC 0357: External spark module coil 7 failure	0357
1275	5	DTC 2321: Spark coil 8 primary open or short to ground	2321
1275	6	DTC 2322: Spark coil 8 primary shorted	2322
1275	31	DTC 0358: External spark module coil 8 failure	0358
1321	3	DTC 617: Start relay coil short to power	0617
1321	4	DTC 616: Start relay ground short	0616
1321	5	DTC 615: Start relay coil open	0615
1323	11	DTC 1311: Cylinder 1 misfire detected	1311
1323	31	DTC 301: Cylinder 1 emissions/catalyst damaging misfire	0301
1324	11	DTC 1312: Cylinder 2 misfire detected	1312
1324	31	DTC 302: Cylinder 2 emissions/catalyst damaging misfire	0302
1325	11	DTC 1313: Cylinder 3 misfire detected	1313
1325	31	DTC 303: Cylinder 3 emissions/catalyst damaging misfire	0303
1326	11	DTC 1314: Cylinder 4 misfire detected	1314
1326	31	DTC 304: Cylinder 4 emissions/catalyst damaging misfire	0304
1327	11	DTC 1315: Cylinder 5 misfire detected	1315
1327	31	DTC 305: Cylinder 5 emissions/catalyst damaging misfire	0305
1328	11	DTC 1316: Cylinder 6 misfire detected	1316
1328	31	DTC 306: Cylinder 6 emissions/catalyst damaging misfire	0306

1329	11	*DTC 1317: Cylinder 7 misfire detected*	*1317*
1329	31	*DTC 307: Cylinder 7 emissions/catalyst damaging misfire*	*0307*
1330	11	*DTC 1318: Cylinder 8 misfire detected*	*1318*
1330	31	*DTC 308: Cylinder 8 emissions/catalyst damaging misfire*	*0308*
1347	5	*DTC 628: Fuel-pump high-side open or short to ground*	*0628*
1347	6	*DTC 629: Fuel-pump high-side short to power*	*0629*
1348	3	*DTC 629: Fuel pump relay coil short to power*	*0629*
1348	4	*DTC 628: Fuel pump relay control ground short*	*0628*
1348	5	*DTC 627: Fuel pump relay coil open*	*0627*
1485	3	*DTC 687: Power relay coil short to power*	*0687*
1485	4	*DTC 686: Power relay ground short*	*0686*
1485	5	*DTC 685: Power relay coil open*	*0685*
1634	2	*DTC 1674: Hardware ID failure: MOT update required*	*1674*
1634	13	*DTC 1673: Calibration configuration error*	*1673*
1675	3	*DTC 1675: Start command stuck active*	*1675*
2634	3	*DTC 9999: Power relay off high voltage*	*0690*
2634	4	*DTC 9999: Power relay on low voltage*	*0689*
2646	3	*DTC 1666: PWM8 short to power*	*1666*
2646	5	*DTC 1665: PWM8 open / ground short*	*1665*
2647	3	*DTC 1670: PWM9 short to power*	*1670*
2647	5	*DTC 1669: PWM9 open / ground short*	*1669*
3050	11	*DTC 420: Catalyst inactive on gasoline (Bank 1)*	*0420*
3051	11	*DTC 430: Catalyst inactive on gasoline (Bank 2)*	*0430*
3056	3	*DTC 8906: UEGO1 return voltage shorted high*	*8906*
3056	4	*DTC 8907: UEGO1 return voltage shorted low*	*8907*
3217	3	*DTC 8910: UEGO1 sense cell voltage high*	*8910*
3217	4	*DTC 8911: UEGO1 sense cell voltage low*	*8911*
3217	5	*DTC 134: EGO1 open / lazy*	*0134*
3218	3	*DTC 8908: UEGO1 pump voltage shorted high*	*8908*
3218	4	*DTC 8909: UEGO1 pump voltage shorted low*	*8909*
3221	3	*DTC 8904: UEGO1 cal resistor voltage high*	*8904*
3221	4	*DTC 8905: UEGO1 cal resistor voltage low*	*8905*
3221	31	*DTC 8901: UEGO1 microprocessor internal fault*	*8901*
3222	0	*DTC 8916: UEGO1 sense cell impedance high*	*8916*
3222	3	*DTC 8902: UEGO1 heater supply high voltage*	*8902*
3222	3	*DTC 0032: EGOH1 short to power*	*0032*
3222	3	*DTC 9999: UEGO1 heater short to power*	*8938*
3222	4	*DTC 8903: UEGO1 heater supply low voltage*	*8903*
3222	4	*DTC 0031: EGOH1 open/ground short*	*0031*
3222	4	*DTC 9999: UEGO1 heater open/ground short*	*8937*
3222	10	*DTC 8914: UEGO1 sense cell slow to warm up*	*8914*
3225	0	*DTC 8917: UEGO1 pump cell impedance high*	*8917*
3225	1	*DTC 8918: UEGO1 pump cell impedance low*	*8918*
3225	3	*DTC 8912: UEGO1 pump voltage at high drive limit*	*8912*
3225	4	*DTC 8913: UEGO1 pump voltage at low drive limit*	*8913*
3225	10	*DTC 8915: UEGO1 pump cell slow to warm up*	*8915*
3227	5	*DTC 154: EGO2 open / lazy*	*0154*
3232	3	*DTC 0052: EGOH2 short to power*	*0052*

3232	3	*DTC 9999: UEGO2 heater short to power*	*8941*
3232	4	*DTC 0051: EGOH2 open/ground short*	*0051*
3232	4	*DTC 9999: UEGO2 heater open/ground short*	*8940*
3256	5	*DTC 140: EGO3 open / lazy*	*0140*
3261	3	*DTC 0038: EGOH3 short to power*	*0038*
3261	4	*DTC 0037: EGOH3 open/ground short*	*0037*
3266	5	*DTC 160: EGO4 open / lazy*	*0160*
3271	3	*DTC 0058: EGOH4 short to power*	*0058*
3271	4	*DTC 0057: EGOH4 open/ground short*	*0057*
3673	3	*DTC 223: TPS2 voltage high*	*0223*
3673	4	*DTC 222: TPS2 voltage low*	*0222*
4236	0	*DTC 1155: Closed-loop gasoline bank1 high*	*1155*
4236	1	*DTC 1156: Closed-loop gasoline bank1 low*	*1156*
4237	0	*DTC 171: Adaptive-learn gasoline bank1 high*	*0171*
4237	1	*DTC 172: Adaptive-learn gasoline bank1 low*	*0172*
4238	0	*DTC 1157: Closed-loop gasoline bank2 high*	*1157*
4238	1	*DTC 1158: Closed-loop gasoline bank2 low*	*1158*
4239	0	*DTC 174: Adaptive-learn gasoline bank2 high*	*0174*
4239	1	*DTC 175: Adaptive-learn gasoline bank2 low*	*0175*
67000	3	*DTC 9999: AUX analog Pull-Up/Down 9 high voltage*	*1595*
67001	4	*DTC 9999: AUX analog Pull-Up/Down 9 low voltage*	*1596*
67002	3	*DTC 9999: AUX analog Pull-Up/Down 10 high voltage*	*1597*
67003	4	*DTC 9999: AUX analog Pull-Up/Down 10 low voltage*	*1598*
67004	3	*DTC 9999: AUX analog Pull-Up/Down 11 high voltage*	*1599*
67005	4	*DTC 9999: AUX analog Pull-Up/Down 11 low voltage*	*1600*
67006	3	*DTC 9999: AUX analog Pull-Up/Down 12 high voltage*	*1601*
67007	4	*DTC 9999: AUX analog Pull-Up/Down 12 low voltage*	*1602*
67008	3	*DTC 9999: AUX analog Pull-Up/Down 13 high voltage*	*1603*
67009	4	*DTC 9999: AUX analog Pull-Up/Down 13 low voltage*	*1604*
67010	3	*DTC 9999: AUX analog Pull-Up/Down 14 high voltage*	*1605*
67011	4	*DTC 9999: AUX analog Pull-Up/Down 14 low voltage*	*1606*
67012	3	*DTC 9999: AUX analog Pull-Up/Down 15 high voltage*	*1607*
67013	4	*DTC 9999: AUX analog Pull-Up/Down 15 low voltage*	*1608*
67014	3	*DTC 9999: AUX analog Pull-Up/Down 16 high voltage*	*1609*
67015	4	*DTC 9999: AUX analog Pull-Up/Down 16 low voltage*	*1610*
67016	3	*DTC 9999: AUX analog Pull-Up/Down 17 high voltage*	*1676*
67017	4	*DTC 9999: AUX analog Pull-Up/Down 17 low voltage*	*1677*
67018	3	*DTC 9999: AUX analog Pull-Up/Down 18 high voltage*	*1678*
67019	4	*DTC 9999: AUX analog Pull-Up/Down 18 low voltage*	*1679*
67020	3	*DTC 9999: AUX analog Pull-Up/Down 19 high voltage*	*1680*
67021	4	*DTC 9999: AUX analog Pull-Up/Down 19 low voltage*	*1681*
67022	3	*DTC 9999: AUX analog Pull-Up/Down 20 high voltage*	*1682*
67023	4	*DTC 9999: AUX analog Pull-Up/Down 20 low voltage*	*1683*
67024	3	*DTC 9999: AUX analog Pull-Up/Down 21 high voltage*	*1684*
67025	4	*DTC 9999: AUX analog Pull-Up/Down 21 low voltage*	*1685*
67026	3	*DTC 9999: AUX analog Pull-Up/Down 22 high voltage*	*1686*
67027	4	*DTC 9999: AUX analog Pull-Up/Down 22 low voltage*	*1687*
67028	3	*DTC 9999: AUX analog Pull-Up/Down 23 high voltage*	*1688*
67029	4	*DTC 9999: AUX analog Pull-Up/Down 23 low voltage*	*1689*
67030	3	*DTC 9999: AUX analog Pull-Up/Down 24 high voltage*	*1690*

67031	4	*DTC 9999: AUX analog Pull-Up/Down 24 low voltage*	*1691*
67032	3	*DTC 9999: AUX analog Pull-Up/Down 25 high voltage*	*1692*
67033	4	*DTC 9999: AUX analog Pull-Up/Down 25 low voltage*	*1693*
67034	3	*DTC 9999: AUX digital 13 high voltage*	*1694*
67035	4	*DTC 9999: AUX digital 13 low voltage*	*1695*
67036	3	*DTC 9999: AUX digital 14 high voltage*	*1696*
67037	4	*DTC 9999: AUX digital 14 low voltage*	*1697*
67038	3	*DTC 9999: AUX digital 15 high voltage*	*1698*
67039	4	*DTC 9999: AUX digital 15 low voltage*	*1699*
67040	3	*DTC 9999: AUX digital 16 high voltage*	*1700*
67041	4	*DTC 9999: AUX digital 16 low voltage*	*1701*
67042	3	*DTC 9999: AUX digital 17 high voltage*	*1702*
67043	4	*DTC 9999: AUX digital 17 low voltage*	*1703*
67044	3	*DTC 9999: AUX digital 18 high voltage*	*1704*
67045	4	*DTC 9999: AUX digital 18 low voltage*	*1705*
67046	3	*DTC 9999: AUX digital 19 high voltage*	*1706*
67047	4	*DTC 9999: AUX digital 19 low voltage*	*1707*
67049	31	*DTC 9999: UEGO2 microprocessor internal fault*	*8919*
67050	3	*DTC 9999: UEGO2 heater supply high voltage*	*8920*
67051	4	*DTC 9999: UEGO2 heater supply low voltage*	*8921*
67052	3	*DTC 9999: UEGO2 cal resistor voltage high*	*8922*
67053	4	*DTC 9999: UEGO2 cal resistor voltage low*	*8923*
67054	3	*DTC 9999: UEGO2 return voltage shorted high*	*8924*
67055	4	*DTC 9999: UEGO2 return voltage shorted low*	*8925*
67056	3	*DTC 9999: UEGO2 pump voltage shorted high*	*8926*
67057	4	*DTC 9999: UEGO2 pump voltage shorted low*	*8927*
67058	3	*DTC 9999: UEGO2 sense cell voltage high*	*8928*
67059	4	*DTC 9999: UEGO2 sense cell voltage low*	*8929*
67060	3	*DTC 9999: UEGO2 pump voltage at high drive limit*	*8930*
67061	4	*DTC 9999: UEGO2 pump voltage at low drive limit*	*8931*
67062	10	*DTC 9999: UEGO2 sense cell slow to warm up*	*8932*
67063	10	*DTC 9999: UEGO2 pump cell slow to warm up*	*8933*
67064	0	*DTC 9999: UEGO2 sense cell impedance high*	*8934*
67065	0	*DTC 9999: UEGO2 pump cell impedance high*	*8935*
67066	1	*DTC 9999: UEGO2 pump cell impedance low*	*8936*
520197	2	*DTC 331: Knock2 excessive or erratic signal*	*0331*
520197	4	*DTC 332: Knock2 sensor open or not present*	*0332*
520199	11	*DTC 2120: FPP1 invalid voltage and FPP2 disagrees with IVS (redundancy lost)*	*2120*
520199	11	*DTC 2125: FPP2 invalid voltage and FPP1 disagrees with IVS (redundancy lost)*	*2125*
520199	11	*DTC 1122: FPP1/2 do not match each other or IVS (redundancy lost)*	*1122*
520201	5	*DTC 509: IAC coil open/short*	*0509*
520201	6	*DTC 508: IAC ground short*	*0508*
520202	3	*DTC 1574: AUX digital 5 high voltage*	*1574*
520202	4	*DTC 1575: AUX digital 5 low voltage*	*1575*
520203	3	*DTC 1576: AUX digital 6 high voltage*	*1576*
520203	4	*DTC 1577: AUX digital 6 low voltage*	*1577*
520204	3	*DTC 1578: AUX digital 7 high voltage*	*1578*

520204	4	*DTC 1579: AUX digital 7 low voltage*	*1579*
520205	3	*DTC 1581: AUX digital 8 high voltage*	*1581*
520205	4	*DTC 1582: AUX digital 8 low voltage*	*1582*
520206	3	*DTC 1583: AUX digital 9 high voltage*	*1583*
520206	4	*DTC 1584: AUX digital 9 low voltage*	*1584*
520207	3	*DTC 1585: AUX digital 10 high voltage*	*1585*
520207	4	*DTC 1586: AUX digital 10 low voltage*	*1586*
520208	3	*DTC 1587: AUX analog Pull-Up/Down 8 high voltage*	*1587*
520208	4	*DTC 1588: AUX analog Pull-Up/Down 8 low voltage*	*1588*
520209	3	*DTC 1589: AUX digital 11 high voltage*	*1589*
520209	4	*DTC 1591: AUX digital 11 low voltage*	*1591*
520210	3	*DTC 1592: AUX digital 12 high voltage*	*1592*
520210	4	*DTC 1593: AUX digital 12 low voltage*	*1593*
520401	0	*DTC 1182: Fuel impurity level high*	*1182*
520800	7	*DTC 11: Intake cam / distributor position error*	*0011*
520801	7	*DTC 24: Exhaust cam position error*	*0024*