| PEN NGE / PERFORMANCE W H (bank 1) SE (bank 1) LEARNING LIMIT ROL CIRCUIT / OPEN (bank 1) WANCED (bank 1) WTROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) WANCED (bank 2) WANCED (bank 2) CTARDED (bank 2) | G (G | | CONT G * G * G * G * G * G * G * G * G * G | KOEO | KOER | CONT |
|--|---|--|--|-------------------------|-------------------------|---|
| PEN NGE / PERFORMANCE W H (bank 1) SE (bank 1) LEARNING LIMIT ROL CIRCUIT / OPEN (bank 1) WANCED (bank 1) WTROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) WANCED (bank 2) WANCED (bank 2) CTARDED (bank 2) | G (G | | G* | DEO | OER I | DNT |
| NGE / PERFORMANCE V H (bank 1) SE (bank 1) LEARNING LIMIT ROL CIRCUIT / OPEN (bank 1) VANCED (bank 1) TARDED (bank 1) TROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G (G | | G* | | | |
| H (bank 1) SE (bank 1) EARNING LIMIT ROL CIRCUIT / OPEN (bank 1) VANCED (bank 1) TARDED (bank 1) TROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G (G | | G* | | | |
| (bank 1) SE (bank 1) SE (bank 1) EARNING LIMIT ROL CIRCUIT / OPEN (bank 1) VANCED (bank 1) STARDED (bank 1) NTROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) STARDED (bank 2) | G (((((((((((((((((((| | G* G* G* G* G* G* G* G* G* | | | |
| (bank 1) SE (bank 1) EARNING LIMIT ROL CIRCUIT / OPEN (bank 1) VANCED (bank 1) TARDED (bank 1) NTROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G (((((((((((((((((((| | G * G * G * G * G * G * G * | | | |
| (bank 1) SE (bank 1) SE (bank 1) SE (bank 1) SEARNING LIMIT ROL CIRCUIT / OPEN (bank 1) STARDED (bank 1) STARDED (bank 1) STROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) STARDED (bank 2) | G (G | 3 3 3 3 | G* G* G* G* G* G* G* | | | |
| SE (bank 1) JEARNING LIMIT ROL CIRCUIT / OPEN (bank 1) VANCED (bank 1) TARDED (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G (G | 3 3 3 3 | G * G * G * G * G * G * | | | |
| EARNING LIMIT ROL CIRCUIT / OPEN (bank 1) VANCED (bank 1) TARDED (bank 1) TROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G (| | G * G * G * G * G * G * | | | |
| ROL CIRCUIT / OPEN (bank 1) VANCED (bank 1) TARDED (bank 1) NTROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G ((| 3 3 3 | G * G * G * G * | | | |
| VANCED (bank 1) TARDED (bank 1) TARDED (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G ((| 3 3 3 | G * G * G * G * | | | |
| TARDED (bank 1) NTROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G (| G G G | G * G * G * | | | |
| NTROL CIRCUIT / OPEN (bank 1) ADVANCED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | G (| 3 3 3 | G * G * G * | | | |
| ADVANCED (bank 1) RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | (| G G | G * G * | | | |
| RETARDED (bank 1) RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | (| Э Э | G * | | | |
| RRELATION (bank 1, sensor A) RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | (| G | | | | |
| RRELATION (bank 1, sensor B) RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | _ | _ | | | | |
| RRELATION (bank 2, sensor A) RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | (| şΤ | G * | | | |
| RRELATION (bank 2, sensor B) ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | | ۷ | G * | | | |
| ROL CIRCUIT / OPEN (bank 2) VANCED (bank 2) TARDED (bank 2) | | | G * | | | |
| VANCED (bank 2) TARDED (bank 2) | _ | | G * | | | |
| TARDED (bank 2) | G | G | G * | | | |
| ` ′ | (| G | G * | | | |
| ITDOL OIDOLUT / ODEN // L O | (| G | G * | | | |
| NTROL CIRCUIT / OPEN (bank 2) | G (| G | G * | | | |
| ADVANCED (bank 2) | (| G | G * | | | |
| RETARDED (bank 2) | (| G | G * | | | |
| | _ | G | G * | | | |
| sor 1) | (| G | G * | | | |
| sor 1) | G (| G | G * | | | |
| E "A" CONTROL CIRCUIT / OPEN | | | | | | |
| E "A" CONTROL CIRCUIT LOW | G (| _ | G | | | |
| E "A" CONTROL CIRCUIT HIGH | G (| + | G | | | |
| | _ | G | G * | | | |
| sor 2) | _ | G | G * | | | |
| sor 2) | _ | _ | G * | | | |
| SOR 1 / BANK 2 SENSOR 1 | | _ | | | | |
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| sor 3) | | _ | | | _ | |
| n A O 1 | nsor 2) ISOR 1 / BANK 2 SENSOR 1 ISOR 2 / BANK 2 SENSOR 2 Insor 3) A CIRCUIT RANGE / PERFORMANCE OVERSPEED 1) Insor 1) Insor 1) Insor 2) Insor 2) Insor 3) | ISOR 1 / BANK 2 SENSOR 1 ISOR 2 / BANK 2 SENSOR 2 ISOR 3 / BANK 2 SE | SOR 1 / BANK 2 SENSOR 1 G G ISOR 2 / BANK 2 SENSOR 2 G ISOR 3 / BANK 2 SENSOR 1 G ISOR 4 / BANK 2 SENSOR 2 G ISOR 5 / BANK 2 SENSOR 1 G ISOR 6 / BANK 2 SENSOR 1 G ISOR 7 / BANK 2 SENSOR 1 G ISOR 7 / BANK 2 SENSOR 1 G ISOR 8 / BANK 2 SENSOR 1 G ISOR 9 / BANK 2 SENSOR 1 G ISOR 9 / BANK 2 SENSOR 1 G ISOR 9 / BANK 2 SENSOR 2 G | SOR 1 / BANK 2 SENSOR 1 | SOR 1 / BANK 2 SENSOR 1 | SOR 1 / BANK 2 SENSOR 1 G G G T SOR 2 / BANK 2 SENSOR 2 G G T SISOR 3 G T T SISOR 3 G T T SISOR 4 / BANK 2 SENSOR 2 G T SISOR 5 G T SISOR 6 T T SISOR 7 T T SISOR 8 T T SISOR 9 T T SISOR 9 T T SISOR 9 T |

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|--------|-------|--|----------|-----------|-----|-----------------|------------------------|
| М | P0066 | AIR ASSISTED INJECTOR CONTROL CIRCUIT OR CIRCUIT LOW | G | G | G * | | |
| М | | MAP / MAF - THROTTLE POSITION CORRELATION | | G | G * | ot | |
| М | P0069 | MAP - BAROMETRIC PRESSURE CORRELATION | | | | $oxed{oxed}$ | |
| M | P006B | MAP - EXHAUST PRESSURE CORRELATION | | | | Щ | |
| М | P006D | BAROMETRIC PRESSURE - TURBO / SUPERCHARGER INLET PRESSURE CORRELATION | | | | Щ | |
| M | P0071 | AMBIENT AIR TEMPERATURE SENSOR CIRCUIT "A" RANGE / PERFORMANCE | _ | G | G * | oxdot | |
| M | | AMBIENT AIR TEMPERATURE SENSOR CIRCUIT "A" LOW | | G | G * | oxdot | |
| М | | AMBIENT AIR TEMPERATURE SENSOR CIRCUIT "A" HIGH | | G | G * | igwdap | |
| | | AMBIENT AIR TEMPERATURE SENSOR CIRCUIT "A" INTERMITTENT / ERRATIC | | G | G | igwdap | |
| М | | CHARGE AIR COOLER TEMPERATURE SENSOR RANGE / PERFORMANCE (bank 1) | _ | G | G * | igwdap | |
| М | | CHARGE AIR COOLER TEMPERATURE SENSOR CIRCUIT LOW (bank 1) | _ | G | G * | igwdap | |
| М | | CHARGE AIR COOLER TEMPERATURE SENSOR CIRCUIT HIGH (bank 1) | G | G | G * | igwdap | |
| М | | FUEL RAIL / SYSTEM PRESSURE - TOO LOW (Bank 1) | | | G * | igwdap | |
| М | | FUEL RAIL / SYSTEM PRESSURE - TOO HIGH (Bank 1) | | | G * | igwdap | |
| М | | FUEL PRESSURE REGULATOR PERFORMANCE | | | | igwdap | |
| | | LOW PRESSURE FUEL SYSTEM PRESSURE - TOO LOW | | G | G | igspace | |
| | | LOW PRESSURE FUEL SYSTEM PRESSURE - TOO HIGH | L | G | G | $\vdash \vdash$ | |
| | | FUEL COOLER PUMP CONTROL CIRCUIT / OPEN | L | Ш | | $\vdash \vdash$ | |
| | | FUEL COOLER PUMP CONTROL CIRCUIT LOW | L | Ш | | $\vdash \vdash$ | |
| | | FUEL COOLER PUMP CONTROL CIRCUIT HIGH | ┡ | \sqcup | | $\vdash \vdash$ | \longmapsto |
| M | | ENGINE COOLANT TEMPERATURE / FUEL TEMPERATURE CORRELATION | ┡ | \sqcup | | $\vdash \vdash$ | \longmapsto |
| M | | FUEL PRESSURE REGULATOR CONTROL CIRCUIT / OPEN | ┡ | \sqcup | 0 † | $\vdash \vdash$ | \vdash |
| M | | FUEL PRESSURE REGULATOR CONTROL CIRCUIT LOW | ┡ | | G * | Ь— | |
| M | | FUEL PRESSURE REGULATOR CONTROL CIRCUIT HIGH | - | | G * | | |
| M | | FUEL SYSTEM LEAK DETECTED - LARGE LEAK | | | 0.1 | | |
| M | | INTAKE AIR TEMPERATURE (IAT2) SENSOR 2 CIRCUIT RANGE / PERFORMANCE (bank 1) | | G | G* | | |
| M | | INTAKE AIR TEMPERATURE (IAT2) SENSOR 2 CIRCUIT LOW (bank 1) | | G | G * | $\vdash \vdash$ | |
| М | | INTAKE AIR TEMPERATURE (IAT2) SENSOR 2 CIRCUIT HIGH (bank 1) | G | G | G * | | |
| | | INTAKE AIR TEMPERATURE (IAT2) SENSOR 2 CIRCUIT INTERMITTENT / ERRATIC (bank 1) | Ł | | 0.1 | | |
| М | | INTAKE AIR TEMPERATURE / AMBIENT AIR TEMPERATURE CORRELATION | - | | G * | | |
| | | LOW PRESSURE FUEL SYSTEM PRESSURE – TOO LOW, LOW AMBIENT TEMPERATURE | - | | _ | $\vdash \vdash$ | |
| | | LOW FUEL PRESSURE – FORCED LIMITED POWER | ┢ | | G | $\vdash \vdash$ | |
| | | FUEL INJECTOR INSUFFICIENT FLOW - FORCED LIMITED POWER | ┢ | | G | $\vdash \vdash$ | |
| M | | MASS OR VOLUME (MAF/VAF) AIR FLOW "A" CIRCUIT RANGE / PERFORMANCE - AIR FLOW TOO LOW | - | | | \vdash | |
| М | | MASS OR VOLUME (MAF/VAF) AIR FLOW "A" CIRCUIT RANGE / PERFORMANCE - AIR FLOW TOO HIGH | | | _ | \vdash | |
| | | TURBOCHARGER / SUPERCHARGER BYPASS VALVE "B" CONTROL CIRCUIT LOW | _ | G | G | \vdash | |
| | | TURBOCHARGER / SUPERCHARGER BYPASS VALVE "B" CONTROL CIRCUIT HIGH | G | G | G | \vdash | |
| F4 | | FUEL RAIL PRESSURE TOO LOW - ENGINE CRANKING (Bank 1) INTAKE AID TEMPERATURE MEASUREMENT SYSTEM, MULTIPLE SENSOR CORRELATION (Bank 1) | Ͱ | \vdash | G * | $\vdash\vdash$ | - |
| M M | | INTAKE AIR TEMPERATURE MEASUREMENT SYSTEM - MULTIPLE SENSOR CORRELATION (bank 1) BAROMETRIC PRESSURE - TURBO / SUPERCHARGER BOOST SENSOR "A" CORRELATION | Ͱ | H | G * | $\vdash\vdash$ | \vdash |
| M | | | ┢ | G | G* | $\vdash\vdash$ | $\vdash \vdash \vdash$ |
| M | | HO2S HEATER CONTROL CIRCUIT RANGE / PERFORMANCE (Bank 1 Sensor 1) HO2S HEATER CONTROL CIRCUIT RANGE / PERFORMANCE (Bank 1 Sensor 2) | \vdash | G | G* | $\vdash\vdash$ | |
| M | | HO2S HEATER CONTROL CIRCUIT RANGE / PERFORMANCE (Bank 1 Sensor 2) | ┢ | G | G* | \vdash | |
| M | | HO2S HEATER CONTROL CIRCUIT RANGE / PERFORMANCE (Bank 2 Sensor 1) | ┢ | G | G* | \vdash | |
| M | | MASS OR VOLUME (MAF / VAF) AIR FLOW SENSOR "A" CIRCUIT | C | G | G* | \vdash | |
| M | | MASS OR VOLUME (MAF / VAF) AIR FLOW SENSOR "A" CIRCUIT RANGE PERFORMANCE | ۳ | G | G* | $\vdash\vdash$ | |
| M W | | MASS OR VOLUME (MAF / VAF) AIR FLOW SENSOR "A" CIRCUIT LOW | G | G | G*+ | $\vdash\vdash$ | |
| M W | | MASS OR VOLUME (MAF / VAF) AIR FLOW SENSOR "A" CIRCUIT HIGH | - | G | G*+ | $\vdash\vdash$ | |
| .vi vv | | MASS OR VOLUME (MAF / VAF) AIR FLOW SENSOR "A" CIRCUIT INTERMITTENT / ERRATIC | <u> </u> | - | G + | \vdash | \vdash |
| М | | MANIFOLD ABSOLUTE PRESSURE / BAROMETRIC PRESSURE SENSOR CIRCUIT | \vdash | \forall | G* | \vdash | $\vdash \vdash \vdash$ |
| M | | MANIFOLD ABSOLUTE PRESSURE / BARO PRESSURE SENSOR CIRCUIT RANGE / PERFORMANCE | ┢ | G | G* | \vdash | |
| M | | MANIFOLD ABSOLUTE PRESSURE / BARO PRESSURE SENSOR CIRCUIT HANGE / PERFORMANCE | G | - | G* | $\vdash\vdash$ | \vdash |
| M | | MANIFOLD ABSOLUTE PRESSURE / BARO PRESSURE SENSOR CIRCUIT HIGH | _ | G | G* | \vdash | |
| IVI | | MANIFOLD ABSOLUTE PRESSURE / BARO PRESSURE SENSOR CIRCUIT INTERMITTENT | ٩ | G | G | \vdash | |
| | | INTAKE AIR TEMPERATURE (IAT1) SENSOR 1 CIRCUIT (bank 1) | \vdash | Н | G | $\vdash\vdash$ | $\vdash \vdash \vdash$ |
| N/I | | | Ͱ | C | G* | $\vdash\vdash$ | \vdash |
| М | P0111 | INTAKE AIR TEMPERATURE (IAT1) SENSOR 1 CIRCUIT RANGE / PERFORMANCE (bank 1) | <u> </u> | G | G^ | ш_ | igsquare |

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|----------|-------|--|----------|--------|-----|----------|--|
| М | | INTAKE AIR TEMPERATURE (IAT1) SENSOR 1 CIRCUIT LOW (bank 1) | _ | G | G * | \perp | |
| М | P0113 | INTAKE AIR TEMPERATURE (IAT1) SENSOR 1 CIRCUIT HIGH (bank 1) | _ | G | G * | | |
| М | P0114 | INTAKE AIR TEMPERATURE (IAT1) SENSOR 1 CIRCUIT INTERMITTENT / ERRATIC (bank 1) | G | G | G * | | |
| | | ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1 CIRCUIT | 1 | | G | | |
| М | | ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1 CIRCUIT RANGE / PERFORMANCE | 1 | G | G * | | |
| М | P0117 | ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1 CIRCUIT LOW | | G | G * | | |
| М | | ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1 CIRCUIT HIGH | _ | G | G * | | |
| М | | ENGINE COOLANT TEMPERATURE (ECT) SENSOR 1 CIRCUIT INTERMITTENT / ERRATIC | G | G | G * | | |
| М | | ENGINE COOLANT TEMPERATURE 1 / AMBIENT AIR TEMPERATURE CORRELATION | 1 | G | G * | | |
| М | | THROTTLE / PEDAL POSITION SENSOR "A" (TP-A) CIRCUIT | 1 | | G * | | |
| M W | | THROTTLE / PEDAL POSITION SENSOR "A" (TP-A) CIRCUIT RANGE / PERFORMANCE | Ļ | G | G*+ | | |
| M W | | THROTTLE / PEDAL POSITION SENSOR "A" (TP-A) CIRCUIT LOW | 4— | G | | | |
| M W | | THROTTLE / PEDAL POSITION SENSOR "A" (TP-A) CIRCUIT HIGH | +- | G | G*+ | | |
| | | THROTTLE / PEDAL POSITION SENSOR "A" (TP-A) INTERMITTENT | G | G | G | | |
| M | | INSUFFICIENT COOLANT TEMPERATURE (ECT) FOR CLOSED LOOP FUEL CONTROL | + | G | G* | | |
| М | | INSUFFICIENT COOLANT TEMPERATURE (ECT) FOR STABLE OPERATION | _ | | G * | _ | |
| . | | INTAKE AIR TEMPERATURE (IAT) TOO HIGH | G | G | G | \dashv | |
| M | | COOLANT THERMOSTAT (coolant temp below thermostat regulating temperature) | _ | | G* | \dashv | |
| M | | TURBOCHARGER / SUPERCHARGER INLET PRESSURE SENSOR CIRCUIT RANGE / PERFORMANCE | | G | G * | \dashv | |
| M | | TURBOCHARGER / SUPERCHARGER INLET PRESSURE SENSOR CIRCUIT LOW | | G | G * | + | |
| М | | TURBOCHARGER / SUPERCHARGER INLET PRESSURE SENSOR CIRCUIT HIGH | _ | G G | G* | + | |
| м | | TURBOCHARGER / SUPERCHARGER INLET PRESSURE SENSOR CIRCUIT INTERMITTENT/ERRATIC | G | G | G | + | |
| | | ENGINE COOLANT TEMPERATURE / ENGINE OIL TEMPERATURE CORRELATION | + | | C * | | |
| M | | O2 SENSOR CIRCUIT (bank 1, sensor 1) | + | G | G * | | |
| M M | | O2 SENSOR CIRCUIT LOW VOLTAGE (bank 1, sensor 1) | +- | G | G * | - | |
| M | | O2 SENSOR CIRCUIT HIGH VOLTAGE (bank 1, sensor 1) O2 SENSOR CIRCUIT SLOW RESPONSE (bank 1, sensor 1) | +- | G | G* | - | |
| M | | O2 SENSOR CIRCUIT NO ACTIVITY DETECTED (bank 1, sensor 1) | + | G | G* | | |
| M | | O2 SENSOR HEATER CIRCUIT (bank 1, sensor 1) | G | - | G* | | |
| M | | O2 SENSOR CIRCUIT (bank 1, sensor 2) | G | G | G* | | |
| M | | O2 SENSOR CIRCUIT LOW VOLTAGE (bank 1, sensor 2) | G | G | G* | - | |
| M | | O2 SENSOR CIRCUIT HIGH VOLTAGE (bank 1, sensor 2) | | G | G* | | |
| M | | O2 SENSOR CIRCUIT SLOW RESPONSE (bank 1, sensor 2) | <u> </u> | u | G* | | |
| м | | O2 SENSOR SLOW RESPONSE - RICH TO LEAN (bank 1 sensor 2) | + | G | G* | | |
| М | | O2 SENSOR SLOW RESPONSE - RICH TO LEAN (bank 2 sensor 2) | T | | G * | | |
| М | | O2 SENSOR DELAYED RESPONSE - RICH TO LEAN (bank 1 sensor 2) | ╁ | | G* | | |
| М | | O2 SENSOR CIRCUIT NO ACTIVITY DETECTED (bank 1, sensor 2) | ╁ | G | G * | | |
| М | | O2 SENSOR HEATER CIRCUIT (bank 1, sensor 2) | G | G | G * | | |
| | | O2 SENSOR CIRCUIT (bank 1, sensor 3) | T . | | G | | |
| М | | O2 SENSOR CIRCUIT HIGH VOLTAGE (bank 1, sensor 3) | T | G | G * | + | |
| М | | O2 SENSOR CIRCUIT NO ACTIVITY DETECTED (bank 1, sensor 3) | t | Ħ | G * | \top | |
| М | | O2 SENSOR HEATER CIRCUIT (bank 1, sensor 3) | G | G | G * | | |
| M W | | FUEL DELIVERY ERROR | T | П | G * | | |
| W | | FUEL TIMING ERROR | T | П | | | |
| М | | O2 SENSOR DELAYED RESPONSE - RICH TO LEAN (bank 2 sensor 2) | T | П | G * | \top | |
| М | | O2 SENSOR CIRCUIT (bank 2, sensor 1) | T | G | G * | | |
| М | P0151 | O2 SENSOR CIRCUIT LOW VOLTAGE (bank 2, sensor 1) | G | G | G * | | |
| М | P0152 | O2 SENSOR CIRCUIT HIGH VOLTAGE (bank 2, sensor 1) | T | G | G * | | |
| М | P0153 | O2 SENSOR CIRCUIT SLOW RESPONSE (bank 2, sensor 1) | T | П | G * | | |
| М | P0154 | O2 SENSOR CIRCUIT NO ACTIVITY DETECTED (bank 2, sensor 1) | Ī | G | G * | | |
| М | | O2 SENSOR HEATER CIRCUIT (bank 2, sensor 1) | G | G | G * | | |
| М | P0156 | O2 SENSOR CIRCUIT (bank 2, sensor 2) | T | | G * | | |
| М | P0157 | O2 SENSOR CIRCUIT LOW VOLTAGE (bank 2, sensor 2) | G | G | G * | | |
| М | P0158 | O2 SENSOR CIRCUIT HIGH VOLTAGE (bank 2, sensor 2) | G | G | G * | | |
| М | P0159 | O2 SENSOR CIRCUIT SLOW RESPONSE (bank 2, sensor 2) | 1 | | G * | | |
| М | P0160 | O2 SENSOR CIRCUIT NO ACTIVITY DETECTED (bank 2, sensor 2) | Ī | | G * | | |
| | | | | | | | |

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|-----------|-------|--|------|---|-------|-----------------|-----|
| M | | O2 SENSOR HEATER CIRCUIT (bank 2, sensor 2) | G | G | G * | | + |
| М | | O2 SENSOR CIRCUIT HIGH VOLTAGE (bank 2, sensor 3) | | G | G * | | |
| М | | O2 SENSOR CIRCUIT NO ACTIVITY DETECTED (bank 2, sensor 3) | | | G * | | |
| М | | O2 SENSOR HEATER CIRCUIT (bank 2, sensor 3) | G | G | G * | | + |
| | | ENGINE FUEL TEMPERATURE TOO HIGH | | | | | |
| М | | EXCESSIVE TIME TO ENTER CLOSED LOOP AIR/FUEL RATIO CONTROL | | | G * | | 1 |
| | | CLOSED LOOP AIR/FUEL RATIO CONTROL AT LIMIT - SYSTEM TOO RICH | | | | | 1 |
| | | CLOSED LOOP AIR/FUEL RATIO CONTROL AT LIMIT - SYSTEM TOO LEAN | | | | | 1 |
| М | | EXCESSIVE TIME TO ENTER CLOSED LOOP FUEL PRESSURE CONTROL | | | | | 1 |
| | | FUEL TRIM (bank 1) | | | G | | 1 |
| M | | SYSTEM TOO LEAN (bank 1) | | | G * | | 1 |
| М | | SYSTEM TOO RICH (bank 1) | | | G * | | 1 |
| | | FUEL TRIM (bank 2) | | | G | | 1 |
| M | | SYSTEM TOO LEAN (bank 2) | | | G * | | 1 |
| M | | SYSTEM TOO RICH (bank 2) | | | G * | | 1 |
| M | | FLEXIBLE FUEL SENSOR (FFS) CIRCUIT | | G | G * | | - |
| M | | FUEL TEMPERATURE SENSOR "A" (FRT-A) CIRCUIT | | G | G * | | |
| M | | FUEL TEMPERATURE SENSOR "A" (FRT-A) CIRCUIT RANGE / PERFORMANCE | | G | 0 * | | |
| M | | FUEL TEMPERATURE SENSOR "A" (FRT-A) CIRCUIT LOW | | G | G * | | |
| М | | FUEL TEMPERATURE SENSOR "A" (FRT-A) CIRCUIT HIGH | G | G | G * | | - |
| | | FUEL TEMPERATURE SENSOR "A" (FRT-A) CIRCUIT INTERMITTENT | | | | | + |
| | | FUEL TEMPERATURE SENSOR "B" (FRT-B) CIRCUIT RANGE / PERFORMANCE | | G | 0.4 | | - |
| M | | FUEL TEMPERATURE SENSOR "B" (FRT-B) CIRCUIT LOW | | G | G * | | - |
| М | | FUEL TEMPERATURE SENSOR "B" (FRT-B) CIRCUIT HIGH | | G | | | |
| | | FUEL PRESSURE SENSOR "B" (FRP-B) CIRCUIT LOW | | G | G | _ | 1 |
| | | FUEL PRESSURE SENSOR "B" (FRP-B) CIRCUIT HIGH | G | G | G | _ | 1 |
| M | | FUEL RAIL PRESSURE SENSOR CIRCUIT (Bank 1) | | | G * | | 1 |
| M W | | FUEL RAIL PRESSURE SENSOR CIRCUIT RANGE / PERFORMANCE (Bank 1) | | G | G * | _ | 1 |
| M | | FUEL RAIL PRESSURE SENSOR CIRCUIT LOW (Bank 1) | | G | G * | | - |
| М | | FUEL RAIL PRESSURE SENSOR CIRCUIT HIGH (Bank 1) | | G | G* | _ | 1 |
| | | FUEL RAIL PRESSURE SENSOR CIRCUIT INTERMITTENT / ERRATIC (Bank 1) | G | G | G | | + |
| | | ENGINE OIL TEMPERATURE (EOT) SENSOR "A" CIRCUIT | | | G * | | + |
| M | | ENGINE OIL TEMPERATURE (EOT) SENSOR "A" RANGE / PERFORMANCE | | G | G* | | + |
| M | | ENGINE OIL TEMPERATURE (EOT) SENSOR "A" CIRCUIT LOW | | _ | G* | \vdash | + |
| М | | ENGINE OIL TEMPERATURE (EOT) SENSOR "A" CIRCUIT HIGH | G | G | G * | | + |
| | | ENGINE OIL TEMPERATURE (EOT) SENSOR "A" CIRCUIT INTERMITTENT / ERRATIC | | | G * | | - |
| M M | | CYLINDER 1 INJECTOR "A" CIRCUIT / OPEN | | G | G* | | + |
| | | CYLINDER 2 INJECTOR "A" CIRCUIT / OPEN | | _ | | \vdash | + |
| M | | CYLINDER 3 INJECTOR "A" CIRCUIT / OPEN | | G | G * | | - |
| M | | CYLINDER 4 INJECTOR "A" CIRCUIT / OPEN | | G | G* | \vdash | + |
| M | | CYLINDER 5 INJECTOR "A" CIRCUIT / OPEN CYLINDER 6 INJECTOR "A" CIRCUIT / OPEN | | G | G* | $\vdash \vdash$ | + |
| M | | | | G | G* | $\vdash \vdash$ | + |
| M M | | CYLINDER 7 INJECTOR "A" CIRCUIT / OPEN | | G | G* | $\vdash\vdash$ | + |
| | | CYLINDER 8 INJECTOR "A" CIRCUIT / OPEN CYLINDER 9 INJECTOR "A" CIRCUIT / OPEN | | G | G * | $\vdash\vdash$ | + |
| M M | | CYLINDER 9 INJECTOR "A" CIRCUIT / OPEN CYLINDER 10 INJECTOR "A" CIRCUIT / OPEN | | G | G* | $\vdash \vdash$ | + |
| M | | CYLINDER 10 INJECTOR "A" CIRCUIT / OPEN CYLINDER 11 INJECTOR "A" CIRCUIT / OPEN | | G | G* | $\vdash\vdash$ | + |
| M | | CYLINDER 11 INJECTOR "A" CIRCUIT / OPEN CYLINDER 12 INJECTOR "A" CIRCUIT / OPEN | | G | G * | $\vdash \vdash$ | + |
| - | | COLD START INJECTOR #1 | - | G | G* | | |
| W | | INJECTOR / INJECTION TIMING CONTROL CIRCUIT | | | ū | \vdash | + |
| - VV | | ENGINE COOLANT (ECT) OVER TEMPERATURE CONDITION | | G | G | \vdash | + |
| NA. | | | | G | | $\vdash \vdash$ | T * |
| M | | TRANSMISSION FLUID (TFT) OVER TEMPERATURE CONDITION | - 16 | G | G | $\vdash \vdash$ | T * |
| М | | ENGINE OVER SPEED CONDITION THROTTLE / DEDAL DOSITION SENSOR / SWITCH "P!" /TD P) CIRCUIT | | | G | | 1 " |
| P4 | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "B" (TP-B) CIRCUIT | | | - | $\vdash\vdash$ | + |
| M | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "B" (TP-B) CIRCUIT RANGE / PERFORMANCE | | G | | $\vdash \vdash$ | + |
| M W | P0222 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "B" (TP-B) CIRCUIT LOW | G | G | G * + | | |

| M W | P0223 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "B" (TP-B) CIRCUIT HIGH | _ | G | G * + | | | |
|-----|-------|--|--------|----------|----------|----------|---|---|
| | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "B" (TP-B) CIRCUIT INTERMITTENT | _ | G | G | | | |
| | P0227 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "C" (TP-C) CIRCUIT LOW | _ | G | G | | | |
| | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "C" (TP-C) CIRCUIT HIGH | G | _ | G | | | |
| | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "C" (TP-C) CIRCUIT INTERMITTENT | G | | G | | | |
| | | FUEL PUMP (FP) PRIMARY CIRCUIT | _ | G | G | | | |
| М | | FUEL PUMP (FP) SECONDARY CIRCUIT LOW | G | | G | | | |
| | | FUEL PUMP (FP) SECONDARY CIRCUIT HIGH | | G | G | | | |
| М | | TURBOCHARGER / SUPERCHARGER "A" OVER BOOST CONDITION | G | G | G | | | |
| | | TURBOCHARGER / SUPERCHARGER BOOST SENSOR "A" (TC/SCB-A) CIRCUIT | _ | | | | | |
| М | | TURBOCHARGER / SUPERCHARGER BOOST SENSOR "A" CIRCUIT RANGE / PERFORMANCE | | G | G * | | | |
| М | | TURBOCHARGER / SUPERCHARGER BOOST SENSOR "A" (TC/SCB-A) CIRCUIT LOW | _ | G | G * | | | |
| М | | TURBOCHARGER / SUPERCHARGER BOOST SENSOR "A" (TC/SCB-A) CIRCUIT HIGH | G | G | G * | | | _ |
| М | | MANIFOLD ABSOLUTE PRESSURE - TURBO/SUPERCHARGER BOOST SENSOR "A" CORRELATION | _ | | G * | | | |
| М | | TURBOCHARGER / SUPERCHARGER WASTEGATE SOLENOID "A" (TCWGS-A) | | G | G | | | |
| М | | TURBOCHARGER / SUPERCHARGER WASTEGATE SOLENOID "A" LOW | | G | G * | | | |
| М | | TURBOCHARGER / SUPERCHARGER WASTEGATE SOLENOID "A" HIGH | G | G | G * | | | |
| | | INJECTION PUMP FUEL METERING CONTROL "A" | _ | | G | | | |
| | | FUEL PUMP MODULE "A" CONTROL CIRCUIT / OPEN | | G | G | | | |
| | | FUEL PUMP MODULE "A" CONTROL CIRCUIT RANGE / PERFORMANCE | | G | G | | | |
| | | FUEL PUMP MODULE "A" CONTROL CIRCUIT LOW | | G | G | | | |
| | | FUEL PUMP MODULE "A" CONTROL CIRCUIT HIGH | | G | G | | | |
| | | TURBOCHARGER / SUPERCHARGER BOOST SENSOR "A" INTERMITTENT / ERRATIC | _ | G | G | | | |
| М | | CYLINDER #1 - INJECTOR "A" CIRCUIT LOW | _ | G | G * | | | |
| М | | CYLINDER #1 - INJECTOR "A" CIRCUIT HIGH | G | G | G * | | | |
| M | | CYLINDER #1 - CONTRIBUTION / BALANCE | 1 | | | | | |
| М | | CYLINDER #2 - INJECTOR "A" CIRCUIT LOW | _ | G | G * | | 4 | |
| М | | CYLINDER #2 - INJECTOR "A" CIRCUIT HIGH | G | G | G * | | 4 | |
| M | | CYLINDER #2 - CONTRIBUTION / BALANCE | | | | | _ | |
| M | | CYLINDER #3 - INJECTOR "A" CIRCUIT LOW | _ | G | G * | | | |
| М | | CYLINDER #3 - INJECTOR "A" CIRCUIT HIGH | G | G | G * | | 4 | |
| M | | CYLINDER #3 - CONTRIBUTION / BALANCE | _ | | | | 4 | |
| M | | CHARGE AIR COOLER EFFICIENCY BELOW THRESHOLD | | | | | _ | |
| M | | CYLINDER #4 - INJECTOR "A" CIRCUIT LOW | _ | G | G * | | | |
| М | | CYLINDER #4 - INJECTOR "A" CIRCUIT HIGH | G | G | G * | | 4 | |
| M | | CYLINDER #4 - CONTRIBUTION / BALANCE | _ | | | | 4 | |
| M | | CYLINDER #5 - INJECTOR "A" CIRCUIT LOW | _ | G | G | | 4 | |
| M | | CYLINDER #5 - INJECTOR "A" CIRCUIT HIGH | G | G | G | | | |
| M | | CYLINDER #5 - CONTRIBUTION / BALANCE | _ | | | | _ | |
| M | | CYLINDER #6 - INJECTOR "A" CIRCUIT LOW | _ | G | G | | - | |
| M | | CYLINDER #6 - INJECTOR "A" CIRCUIT HIGH | G | G | G | \vdash | + | |
| M | | CYLINDER #6 - CONTRIBUTION / BALANCE | _ | | | \vdash | + | |
| M | | CYLINDER #7 - INJECTOR "A" CIRCUIT LOW | _ | G | G | \vdash | 1 | |
| M | | CYLINDER #7 - INJECTOR "A" CIRCUIT HIGH | G | G | G | | - | |
| M | | CYLINDER #7 - CONTRIBUTION / BALANCE | 1 | | | \vdash | 1 | |
| M | | CYLINDER #8 - INJECTOR "A" CIRCUIT LOW | _ | G | G | + | + | |
| M | | CYLINDER #8 - INJECTOR "A" CIRCUIT HIGH | G | G | G | + | + | |
| М | | CYLINDER #8 - CONTRIBUTION / BALANCE | + | \vdash | | \perp | - | |
| | | VEHICLE OVER SPEED CONDITION | + | Н | G C * | \vdash | 1 | |
| M | | ENGINE OIL OVER TEMPERATURE (EOT) CONDITION | + | \vdash | G * | \perp | - | |
| M | | TURBOCHARGER / SUPERCHARGER "A" UNDERBOOST CONDITION | + | \vdash | G | \perp | - | |
| M | | CYLINDER 1 FUEL INJECTOR OFFSET LEARNING AT MINIMUM LIMIT | + | \vdash | | \perp | - | |
| M | | CYLINDER 1 FUEL INJECTOR OFFSET LEARNING AT MAXIMUM LIMIT | + | \vdash | | \perp | - | |
| M | | CYLINDER 2 FUEL INJECTOR OFFSET LEARNING AT MINIMUM LIMIT | + | \vdash | | \perp | - | |
| M | | CYLINDER 2 FUEL INJECTOR OFFSET LEARNING AT MAXIMUM LIMIT | \bot | Н | | | - | |
| М | P02D0 | CYLINDER 3 FUEL INJECTOR OFFSET LEARNING AT MINIMUM LIMIT | | Ш | | | | |

| М | P02D1 | CYLINDER 3 FUEL INJECTOR OFFSET LEARNING AT MAXIMUM LIMIT | | | | | 1 |
|--------|-------|--|---|---------------|---------|---------|--------------------------|
| M | P02D2 | CYLINDER 4 FUEL INJECTOR OFFSET LEARNING AT MINIMUM LIMIT | | | | | |
| M | P02D3 | CYLINDER 4 FUEL INJECTOR OFFSET LEARNING AT MAXIMUM LIMIT | | | | | |
| M | | CYLINDER 5 FUEL INJECTOR OFFSET LEARNING AT MINIMUM LIMIT | | | | | |
| М | | CYLINDER 5 FUEL INJECTOR OFFSET LEARNING AT MAXIMUM LIMIT | | | | | |
| М | | CYLINDER 6 FUEL INJECTOR OFFSET LEARNING AT MINIMUM LIMIT | | | | _ | |
| М | | CYLINDER 6 FUEL INJECTOR OFFSET LEARNING AT MAXIMUM LIMIT | | | | _ | |
| М | | CYLINDER 7 FUEL INJECTOR OFFSET LEARNING AT MINIMUM LIMIT | | | | _ | |
| М | | CYLINDER 7 FUEL INJECTOR OFFSET LEARNING AT MAXIMUM LIMIT | | | | _ | + |
| М | | CYLINDER 8 FUEL INJECTOR OFFSET LEARNING AT MINIMUM LIMIT | | | | _ | + |
| M | | CYLINDER 8 FUEL INJECTOR OFFSET LEARNING AT MAXIMUM LIMIT | | | | _ | + |
| M | | DIESEL INTAKE AIR FLOW CONTROL CIRCUIT / OPEN | | | | _ | + |
| M | | DIESEL INTAKE AIR FLOW CONTROL CIRCUIT PERFORMANCE | - | | | | - |
| M | | DIESEL INTAKE AIR FLOW CONTROL CIRCUIT LOW | | | | | + |
| M | | DIESEL INTAKE AIR FLOW CONTROL CIRCUIT HIGH | - | | | _ | + |
| M | | DIESEL INTAKE AIR FLOW POSITION SENSOR CIRCUIT LOW | ┢ | | | - | + |
| M | | DIESEL INTAKE AIR FLOW POSITION SENSOR CIRCUIT HIGH | ┢ | | | - | + |
| M | | DIESEL INTAKE AIR FLOW CONTROL SYSTEM - HIGH AIR FLOW DETECTED | + | \vdash | | + | + |
| M | | DIESEL INTAKE AIR FLOW CONTROL SYSTEM - LOW AIR FLOW DETECTED | + | \vdash | | + | + |
| M | | CYLINDER 1 INJECTOR CIRCUIT RANGE / PERFORMANCE | + | \vdash | | + | + |
| M | | CYLINDER 2 INJECTOR CIRCUIT RANGE / PERFORMANCE | + | ${\mathbb H}$ | | \perp | + |
| M | | CYLINDER 3 INJECTOR CIRCUIT RANGE / PERFORMANCE | + | | | - | + |
| M | | CYLINDER 4 INJECTOR CIRCUIT RANGE / PERFORMANCE | + | | | - | + |
| M | | CYLINDER 5 INJECTOR CIRCUIT RANGE / PERFORMANCE | + | | | | + |
| M | | CYLINDER 6 INJECTOR CIRCUIT RANGE / PERFORMANCE | - | | | | + |
| M | | CYLINDER 7 INJECTOR CIRCUIT RANGE / PERFORMANCE | + | | | | + |
| М | | CYLINDER 8 INJECTOR CIRCUIT RANGE / PERFORMANCE COLD START FUEL INJECTION CONTROL CIRCUIT / OPEN | | _ | | - | + |
| M | | | G | G | G G* | - | + |
| M M | | RANDOM MISFIRE DETECTED CYLINDER #1 - MISFIRE DETECTED | ┢ | G | G* | | + |
| M | | CYLINDER #2 - MISFIRE DETECTED | + | G | G * | - | + |
| M | | CYLINDER #3 - MISFIRE DETECTED | + | G | G* | | + |
| M | | CYLINDER #4 - MISFIRE DETECTED | + | G | G * | | + |
| M | | CYLINDER #5 - MISFIRE DETECTED | ┢ | ŭ | G * | - | + |
| M | | CYLINDER #6 - MISFIRE DETECTED | + | | G * | - | + |
| М | | CYLINDER #7 - MISFIRE DETECTED | 1 | | G * | | + |
| М | | CYLINDER #8 - MISFIRE DETECTED | 1 | | G * | | + |
| M | | CYLINDER #9 - MISFIRE DETECTED | + | | G * | | + |
| М | | CYLINDER #10 - MISFIRE DETECTED | 1 | | G * | | + |
| M | | CYLINDER #11 - MISFIRE DETECTED | T | H | G * | + | + |
| М | | CYLINDER #12 - MISFIRE DETECTED | T | H | G * | + | + |
| М | | MISFIRE DETECTED WITH LOW FUEL | 1 | G | G * | | + |
| М | | CRANKSHAFT POSITION SYSTEM VARIATION NOT LEARNED | T | Ħ | G * | \top | + |
| M | | MISFIRE DETECTED ON STARTUP (first 1000 revolutions) | T | H | G * | + | + |
| М | | IGNITION / DISTRIBUTOR ENGINE SPEED INPUT CIRCUIT | t | G | G * | \top | † |
| M W | | IGNITION / DISTRIBUTOR ENGINE SPEED INPUT CIRCUIT RANGE / PERFORMANCE | T | | G * + | | $\uparrow \neg \uparrow$ |
| М | P0322 | IGNITION / DISTRIBUTOR ENGINE SPEED INPUT CIRCUIT NO SIGNAL | T | G | G * | | |
| М | P0325 | KNOCK / COMBUSTION VIBRATION SENSOR 1 (KS-1) CIRCUIT (bank 1) | | G | G * | T | |
| М | P0326 | KNOCK / COMBUSTION VIBRATION SENSOR 1 (KS-1) CIRCUIT RANGE / PERFORMANCE (bank 1) | | G | G * | T | |
| | P0327 | KNOCK / COMBUSTION VIBRATION SENSOR 1 (KS-1) CIRCUIT LOW (bank 1) | Ī | G | G * | | |
| | | KNOCK / COMBUSTION VIBRATION SENSOR 1 (KS-1) CIRCUIT HIGH (bank 1) | T | G | G * | \top | |
| М | P0330 | KNOCK / COMBUSTION VIBRATION SENSOR 2 (KS-2) CIRCUIT (bank 2) | T | G | G * | \top | |
| М | P0331 | KNOCK / COMBUSTION VIBRATION SENSOR 2 (KS-2) CIRCUIT RANGE / PERFORMANCE (bank 2) | | G | G * | | |
| | P0332 | KNOCK / COMBUSTION VIBRATION SENSOR 2 (KS-2) CIRCUIT LOW (bank 2) | | G | G | | |
| | P0333 | KNOCK / COMBUSTION VIBRATION SENSOR 2 (KS-2) CIRCUIT HIGH (bank 2) | Ī | G | G | | |
| М | P0335 | CRANKSHAFT POSITION (CKP) SENSOR CIRCUIT "A" | Ī | | G * | | |
| | | | | | | | |

| М | | CRANKSHAFT POSITION (CKP) SENSOR CIRCUIT "A" RANGE / PERFORMANCE | | | G * | |
|---|-------|--|----------|---|-----|----------|
| М | | CRANKSHAFT POSITION (CKP) SENSOR CIRCUIT "A" LOW | | | | |
| М | | CRANKSHAFT POSITION (CKP) SENSOR CIRCUIT "A" HIGH | | | | |
| М | | CAMSHAFT POSITION (CMP) SENSOR "A" CIRCUIT (Bank 1 or single sensor) | | G | G * | |
| М | | CAMSHAFT POSITION SENSOR "A" CIRCUIT RANGE / PERF. (Bank 1 or single sensor) | | G | G * | |
| М | | CAMSHAFT POSITION SENSOR "A" CIRCUIT LOW (Bank 1 or single sensor) | <u> </u> | | | |
| М | | CAMSHAFT POSITION SENSOR "A" CIRCUIT INTERMITTENT (Bank 1 or single sensor) | | G | G * | |
| М | | CAMSHAFT POSITION (CMP) SENSOR "A" CIRCUIT (Bank 2) | | | G * | |
| М | P0346 | CAMSHAFT POSITION SENSOR "A" CIRCUIT RANGE / PERF. (Bank 2) | | | G * | |
| М | | CAMSHAFT POSITION SENSOR "A" CIRCUIT INTERMITTENT (Bank 2) | | | G * | |
| М | | IGNITION COIL (COP) PRIMARY / SECONDARY CIRCUIT | | | G * | |
| М | | IGNITION COIL "A" (COP-A) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | P0352 | IGNITION COIL "B" (COP-B) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | P0353 | IGNITION COIL "C" (COP-C) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | P0354 | IGNITION COIL "D" (COP-D) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | P0355 | IGNITION COIL "E" (COP-E) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | P0356 | IGNITION COIL "F" (COP-F) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | | IGNITION COIL "G" (COP-G) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | | IGNITION COIL "H" (COP-H) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | | IGNITION COIL "I" (COP-I) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | P0360 | IGNITION COIL "J" (COP-J) PRIMARY CONTROL CIRCUIT / OPEN | | G | G * | |
| М | | CAMSHAFT POSITION (CMP) SENSOR "B" CIRCUIT (Bank 1) | | G | G * | |
| М | P0366 | CAMSHAFT POSITION SENSOR "B" CIRCUIT RANGE / PERFORMANCE (Bank 1) | | G | G * | |
| М | P0369 | CAMSHAFT POSITION SENSOR "B" CIRCUIT INTERMITTENT (Bank 1) | | G | G * | |
| M | P0380 | GLOW PLUG / HEATER CIRCUIT "A" | | | | |
| М | P0381 | GLOW PLUG / HEATER INDICATOR CONTROL CIRCUIT / OPEN | | | | |
| М | P0385 | CRANKSHAFT POSITION SENSOR "B" CIRCUIT (CKP-B) | | G | G * | |
| M | P0390 | CAMSHAFT POSITION (CMP) SENSOR "B" CIRCUIT (Bank 2) | | | G * | |
| М | P0391 | CAMSHAFT POSITION SENSOR "B" CIRCUIT RANGE / PERFORMANCE (Bank 2) | | | G * | |
| М | P0394 | CAMSHAFT POSITION SENSOR "B" CIRCUIT INTERMITTENT (Bank 2) | | | G * | |
| M | P0400 | EXHAUST GAS RECIRCULATION (EGR) "A" FLOW | G | G | G * | |
| M | P0401 | EXHAUST GAS RECIRCULATION (EGR) "A" FLOW INSUFFICIENT DETECTED | | | G * | |
| М | P0402 | EXHAUST GAS RECIRCULATION (EGR) "A" FLOW EXCESSIVE DETECTED (stuck open at idle) | | G | G * | |
| М | P0403 | EXHAUST GAS RECIRCULATION (EGR) "A" CONTROL CIRCUIT / OPEN | G | G | G * | |
| М | P0404 | EXHAUST GAS RECIRCULATION (EGR) "A" CONTROL CIRCUIT RANGE / PERFORMANCE | | | G | |
| М | P0405 | EXHAUST GAS RECIRCULATION (EGR) SENSOR "A" CIRCUIT LOW | _ | G | G * | |
| М | P0406 | EXHAUST GAS RECIRCULATION (EGR) SENSOR "A" CIRCUIT HIGH | G | G | G * | |
| М | | EXHAUST GAS RECIRCULATION (EGR) SENSOR "B" CIRCUIT LOW | | | | |
| М | | EXHAUST GAS RECIRCULATION (EGR) SENSOR "B" CIRCUIT HIGH | _ | Ш | | |
| М | | EXHAUST GAS RECIRCULATION (EGR) SENSOR "A" CIRCUIT | _ | Ш | | |
| М | P040B | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "A" CIRCUIT RANGE / PERFORMANCE | 1 | Ш | | |
| М | | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "A" CIRCUIT LOW | 1 | Ш | | |
| М | | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "A" CIRCUIT HIGH | 1 | Ш | | |
| | | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "A" CIRCUIT INTERMITTENT / ERRATIC | 1 | Ш | | |
| | | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "A" / "B" CORRELATION | 1 | | | |
| М | | AIR SYSTEM | 1 | G | G * | |
| М | | AIR SYSTEM INCORRECT FLOW DETECTED | 1 | G | G * | |
| М | _ | AIR SYSTEM SWITCHING VALVE "A" CIRCUIT | | G | G * | |
| М | | AIR SYSTEM SWITCHING VALVE "A" CIRCUIT OPEN | - | G | G * | <u> </u> |
| М | | AIR SYSTEM SWITCHING VALVE "A" CIRCUIT SHORTED | - | G | G * | <u> </u> |
| М | | AIR SYSTEM SWITCHING VALVE "B" CIRCUIT OPEN | _ | G | G * | |
| М | | AIR SYSTEM SWITCHING VALVE "B" CIRCUIT SHORTED | G | G | G * | |
| М | | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "B" CIRCUIT RANGE / PERFORMANCE | 1 | Ш | | |
| М | | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "B" CIRCUIT LOW | _ | Ш | | |
| М | P041D | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "B" CIRCUIT HIGH | | | | |
| | P041E | EXHAUST GAS RECIRCULATION TEMPERATURE SENSOR "B" CIRCUIT INTERMITTENT / ERRATIC | | Ш | | |

| | 1 | | | | | | 1 1 |
|--------|-------|---|---|----------|----------|-----------------|----------|
| М | | CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD (bank 1) | | | G * | oxdot | |
| M | | WARM UP CATALYST EFFICIENCY BELOW THRESHOLD (bank 1) | | | G * | \vdash | |
| М | | EXHAUST GAS RECIRCULATION (EGR) "A" CONTROL STUCK OPEN | | | | \vdash | |
| M | | EXHAUST GAS RECIRCULATION (EGR0 "A" CONTROL STUCK CLOSED | | | | \vdash | |
| M | | CATALYST SYSTEM EFFICIENCY BELOW THRESHOLD (bank 2) | | | G * | \vdash | |
| M | | WARM UP CATALYST EFFICIENCY BELOW THRESHOLD (bank 2) | | | G * | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM | | | G* | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM INCORRECT PURGE FLOW | | | G * | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM LEAK DETECTED (small leak) | _ | | G * | $\vdash\vdash$ | |
| M | | EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE "A" CIRCUIT | _ | G | G * | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE "A" CIRCUIT OPEN | G | G | G * | $\vdash\vdash$ | |
| M | | EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE "A" CIRCUIT SHORTED | _ | | G * | $\vdash\vdash$ | |
| M | | EVAPORATIVE EMISSION SYSTEM VENT CONTROL CIRCUIT | G | G | G * | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM PRESSURE SENSOR / SWITCH | _ | G | G* | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM PRESSURE SENSOR / SWITCH RANGE / PERF. | | G | G * | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM PRESSURE SENSOR / SWITCH LOW | _ | G | G * | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM PRESSURE SENSOR / SWITCH HIGH | G | G | G * | \vdash | |
| M | | EVAPORATIVE EMISSION SYSTEM PRESSURE SENSOR / SWITCH INTERMITTENT | _ | \vdash | G * | \vdash | - |
| M | | EVAPORATIVE EMISSION SYSTEM LEAK DETECTED (large leak) | _ | H | | \dashv | \vdash |
| M | | EVAPORATIVE EMISSION SYSTEM LEAK DETECTED (very small leak) | | H | G * | \dashv | \vdash |
| M | | EVAPORATIVE EMISSION SYSTEM LEAK DETECTED (fuel cap loose / off) EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE "A" CIRCUIT LOW | _ | G | G* | \dashv | - |
| M | | | | G | G* | \dashv | - |
| M | | EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE "A" CIRCUIT HIGH | | | G * | \vdash | |
| M | | FUEL LEVEL SENSOR "A" (FLI) CIRCUIT | G | G | G* | \vdash | |
| M | | FUEL LEVEL SENSOR "A" (FLI) CIRCUIT RANGE / PERFORMANCE | _ | _ | G* | \vdash | |
| M | | FUEL LEVEL SENSOR "A" CIRCUIT LOW | | G G | G* | \vdash | |
| M | | FUEL LEVEL SENSOR "A" CIRCUIT HIGH | G | G | G* | + | |
| M | | FUEL LEVEL SENSOR "A" CIRCUIT INTERMITTENT | | | | + | |
| M M | | EXHAUST PRESSURE SENSOR "A" CIRCUIT EXHAUST PRESSURE SENSOR "A" CIRCUIT RANGE / PERFORMANCE | | | G | + | |
| M | | | | | | + | |
| M | | EXHAUST PRESSURE SENSOR "A" CIRCUIT LOW EXHAUST PRESSURE SENSOR "A" CIRCUIT HIGH | | | | \vdash | |
| IVI | | EXHAUST PRESSURE SENSOR A CIRCUIT HIGH EXHAUST PRESSURE SENSOR "A" CIRCUIT INTERMITTENT / ERRATIC | | | | + | |
| м | | EXHAUST PRESSURE (EP) CONTROL VALVE "A" | | | | + | |
| IVI | | EXHAUST PRESSURE (EP) CONTROL VALVE "A" RANGE / PERFORMANCE | | | | \vdash | |
| | | | | | | + | |
| M | | EXHAUST PRESSURE (EP) CONTROL "A" VALVE HIGH FAN 1 CONTROL (FC-1) CIRCUIT | _ | G | G | + | |
| IVI | | FAN 2 CONTROL (FC-2) CIRCUIT | | G | G | + | |
| | | FAN 3 CONTROL (FC-3) CIRCUIT | _ | - | | \vdash | |
| M | | FAN PERFORMANCE | G | G G | G G | \dashv | \vdash |
| M | | EXHAUST GAS RECIRCULATION THROTTLE CONTROL CIRCUIT "A" / OPEN | | u | u | \dashv | \vdash |
| M W | | EXHAUST GAS RECIRCULATION THROTTLE CONTROL CIRCUIT "A" RANGE / PERFORMANCE | | | | \dashv | |
| M | | EXHAUST GAS RECIRCULATION (EGR) "A" CONTROL CIRCUIT LOW | | H | G * | \dashv | + |
| M | | EXHAUST GAS RECIRCULATION (EGR) "A" CONTROL CIRCUIT HIGH | | H | G* | \dashv | + |
| M | | AIR SYSTEM INSUFFICIENT FLOW (Bank 1) | | G | G * | \dashv | +-+ |
| M | | FAN SPEED LOW | | <u> </u> | <u>~</u> | \dashv | |
| M | | FAN SPEED HIGH | | H | | \dashv | +- |
| M | | EVAPORATIVE EMISSION SYSTEM HIGH PURGE FLOW | | G | G * | \dashv | +-+ |
| M | | EVAPORATIVE EMISSION SYSTEM LOW PURGE FLOW | | G | G * | \dashv | +-+ |
| M | | EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE "B" CIRCUIT / OPEN | G | G | G * | \dashv | |
| M | | EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE "B" PERFORMANCE / STUCK OPEN | Ĕ | J | G * | \dashv | +-+ |
| M | | REFUELING VAPOR CONTROL VALVE CIRCUIT / OPEN | G | G | G * | \dashv | +-+ |
| M | | REFUELING VAPOR CONTROL VALVE PERFORMANCE / STUCK OPEN | Ĕ | <u> </u> | G * | $\dashv \vdash$ | |
| M | | REFUELING VAPOR CONTROL VALVE STUCK CLOSED | | H | G * | $\dashv \vdash$ | |
| M | | FUEL FILL DOOR STUCK OPEN | | H | G * | $\dashv \vdash$ | |
| M | | FUEL FILL DOOR POSITION SENSOR / SWITCH CIRCUIT INTERMITTENT / ERRATIC | | \vdash | G * | \dashv | +-+ |
| IVI | FU4B/ | FUEL FILL DOON FOOTHON DENOON / DWITCH CIRCUIT INTERMITTENT / ERRATIC | | Ш | G " | Ш_ | <u> </u> |

| r | 1 | | | | | | |
|----------|--------|--|----------|----------|--------|----------|--|
| М | | CLOSED LOOP EGR CONTROL AT LIMIT - FLOW TOO LOW | | Ш | | | |
| М | | CLOSED LOOP EGR CONTROL AT LIMIT - FLOW TOO HIGH | _ | Ш | | | <u> </u> |
| М | | CRANKCASE VENTILATION SYSTEM DISCONNECTED | _ | Ш | | | |
| М | | CRANKCASE VENTILATION HOSE CONNECTION SENSOR CIRCUIT LOW | | | | | |
| М | | CRANKCASE VENTILATION HOSE CONNECTION SENSOR CIRCUIT HIGH | _ | | | | |
| М | - | VEHICLE SPEED SENSOR "A" (VSS) | | G | G * | | |
| М | | VEHICLE SPEED SENSOR "A" (VSS) RANGE / PERFORMANCE | | | G* | | |
| | | VEHICLE SPEED SENSOR "A" (VSS) INTERMITTENT / ERRATIC / HIGH | - | | G | | |
| W | | BRAKE SWITCH "A" / "B" CORRELATION | - | | G + | | |
| М | | IDLE CONTROL SYSTEM | - | G | G * | | |
| M | | IDLE CONTROL SYSTEM - RPM LOWER THAN EXPECTED | - | G | G * | | |
| M | 1 | IDLE CONTROL SYSTEM - RPM HIGHER THAN EXPECTED | - | G | G * | | |
| M | - | COLD START IDLE AIR CONTROL SYSTEM PERFORMANCE | - | | G * | | |
| M | - | COLD START IGNITION TIMING PERFORMANCE | - | | G * | | - |
| M | | COLD START ENGINE EXHAUST TEMPERATURE TOO LOW | - | | G * | | |
| M | | CLOSED THROTTLE POSITION (CTP) SWITCH | _ | | G * | | - |
| М | - | IDLE AIR CONTROL CIRCUIT | G | G | G * | | - |
| | - | STARTER REQUEST CIRCUIT | + | | G | \vdash | \vdash |
| | 1 | INCORRECT IMMOBILIZER KEY | + | G | G | - | |
| | - | IDLE AIR CONTROL CIRCUIT INTERMITTENT | - | \vdash | G G | | |
| | | ENGINE OIL PRESSURE SENSOR / SWITCH "A" CIRCUIT RANGE / PERFORMANCE ENGINE OIL PRESSURE SENSOR / SWITCH "A" CIRCUIT LOW | _ | | G | | |
| | | | | G G | G | | |
| | 1 | ENGINE OIL PRESSURE SENSOR / SWITCH "A" CIRCUIT HIGH | G | G | G | | |
| | - | ENGINE OIL PRESSURE TOO LOW | _ | | G | | - |
| | | CRUISE CONTROL SERVO CONTROL CIRCUIT RANGE / PERFORMANCE | G G | | | | - |
| B.A | 1 | FAN SPEED SENSOR CIRCUIT NO SIGNAL FAN SPEED SENSOR CIRCUIT INTERMITTENT | G | \vdash | G | | - |
| M M | | | + | H | G * | - | \vdash |
| M | | COLD START INTAKE (A) CAMSHAFT POSITION TIMING OVER-ADVANCED (Bank 1) COLD START INTAKE (A) CAMSHAFT POSITION TIMING OVER-RETARDED (Bank 1) | + | H | G* | | \vdash |
| M | | COLD START INTAKE (A) CAMSHAFT POSITION TIMING OVER-RETARDED (Bank 1) COLD START INTAKE (A) CAMSHAFT POSITION TIMING OVER-ADVANCED (Bank 2) | + | H | G* | | \vdash |
| M | | COLD START INTAKE (A) CAMSHAFT POSITION TIMING OVER-ADVANCED (Bank 2) | + | H | G* | | \vdash |
| IVI | | A/C REFRIGERANT PRESSURE SENSOR "A" CIRCUIT RANGE / PERFORMANCE | - | G | G | | |
| | - | A/C REFRIGERANT PRESSURE SENSOR "A" CIRCUIT LOW | G | G | G | | |
| | | A/C REFRIGERANT PRESSURE SENSOR "A" CIRCUIT HIGH | | G | G | | |
| | - | A/C REFRIGERANT CHARGE LOSS | <u> </u> | u | G | - | |
| | | A/C EVAPORATOR TEMPERATURE SENSOR CIRCUIT LOW | - | G | G | - | |
| | | A/C EVAPORATOR TEMPERATURE SENSOR CIRCUIT HIGH | _ | G | G | - | |
| | | POSITIVE CRANKCASE VENTILATION (PCV) HEATER CONTROL CIRCUIT / OPEN | 1 | u | G | | |
| М | | COLD START FUEL PRESSURE PERFORMANCE | ╁ | H | G* | \vdash | |
| IVI | | INTAKE AIR HEATER A CIRCUIT LOW | + | H | u | | |
| | 1 | INTAKE AIR HEATER A CIRCUIT HIGH | ╁ | H | | \vdash | |
| М | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT - BANK 1 SENSOR 1 | 1 | H | | \vdash | |
| M | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT LOW - BANK 1 SENSOR 1 | + | \vdash | | \vdash | |
| M | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT HIGH - BANK 1 SENSOR 1 | + | Н | | \vdash | |
| M | | COLD START EXHAUST 'B" CAMSHAFT POSITION TIMING OVER-ADVANCED (bank 1) | + | Н | G * | \vdash | |
| M | | COLD START EXHAUST "B" CAMSHAFT POSITION TIMING OVER-RETARDED (bank 1) | + | H | G* | | |
| М | | COLD START EXHAUST "B" CAMSHAFT POSITION TIMING OVER-ADVANCED (bank 2) | ╁ | \vdash | G * | \vdash | |
| М | - | COLD START EXHAUST "B" CAMSHAFT POSITION TIMING OVER-RETARDED (bank 2) | ╁ | \vdash | G * | \vdash | |
| М | | IDLE CONTROL SYSTEM - FUEL QUANTITY LOWER THAN EXPECTED | + | H | | | |
| М | - | IDLE CONTROL SYSTEM - FUEL QUANTITY HIGHER THAN EXPECTED | + | H | | | |
| M | - | POWER STEERING PRESSURE (PSP) SENSOR / SWITCH CIRCUIT | | | G * | | |
| М | | POWER STEERING PRESSURE (PSP) SENSOR / SWITCH CIRCUIT RANGE / PERF. | + | H | G * | | |
| | | POWER STEERING PRESSURE (PSP) SENSOR / SWITCH CIRCUIT LOW | 1 | G | G | | \vdash |
| | | POWER STEERING PRESSURE (PSP) SENSOR / SWITCH CIRCUIT HIGH | 1 | G | G | | \vdash |
| | | BRAKE BOOSTER PRESSURE SENSOR CIRCUIT RANGE / PERFORMANCE | 1 | Ť | G | | \vdash |
| | - | BRAKE BOOSTER PRESSURE SENSOR CIRCUIT LOW | G | G | G | | |
| <u> </u> | . 0007 | 2.2.2.2.2.2.2.2.1.11.2.2.2.1.2.2.2.2.2. | I | J | ٦ | ш_ | |

| | Doces | DRAVE DOCOTED DEFOCUES OF MOOD CURCUIT LUCUI | 1_ | _ | _ | | |
|------|----------------|--|----------|----------|----------|----------|--------------------|
| | | BRAKE BOOSTER PRESSURE SENSOR CIRCUIT HIGH | G | G | G | | |
| | | SYSTEM VOLTAGE | +- | _ | G | | T |
| M W | | SYSTEM VOLTAGE LOW | _ | G | G | | T * + |
| M W | | SYSTEM VOLTAGE HIGH | G | G | G | | T * + |
| | | CRUISE CONTROL MULTI-FUNCTION INPUT A CIRCUIT | - | | G | | _ |
| | | CRUISE CONTROL ON SIGNAL | | | G | | _ |
| | | CRUISE CONTROL OFF SIGNAL | - | | G | | |
| | | CRUISE CONTROL RESUME SIGNAL | | | G | | |
| | | CRUISE CONTROL SET SIGNAL | | | G | | |
| | | CRUISE CONTROL COAST SIGNAL | - | | G | | |
| - NA | | CRUISE CONTROL ACCEL SIGNAL | | | G G* | | |
| М | | BRAKE SWITCH "A" CIRCUIT | - | | | | |
| | | BRAKE SWITCH "A" CIRCUIT LIGH | _ | | G C * | | _ |
| М | | BRAKE SWITCH "A" CIRCUIT HIGH CRUISE CONTROL MULTI-FUNCTION INPUT "A" CIRCUIT STUCK | _ | G | G * | | |
| | | CRUISE CONTROL MULTI-FUNCTION INPUT A CIRCUIT STOCK CRUISE CONTROL MULTI-FUNCTION INPUT "A" CIRCUIT RANGE / PERFORMANCE | G | G | G | | _ |
| | | | _ | G | | - | _ |
| | | CRUISE CONTROL MULTI-FUNCTION INPUT "A" CIRCUIT HIGH CRUISE CONTROL SERVO CONTROL CIRCUIT / OPEN | G | u | G G | \vdash | +- |
| М | | THERMOSTAT HEATER CONTROL CIRCUIT / OPEN | C | G | G * | \vdash | + |
| IVI | | ACTIVE GRILLE AIR SHUTTER "A" POSITION SENSOR CIRCUIT | - 4 | u | u | \vdash | + |
| | | ACTIVE GRILLE AIR SHUTTER "A" PERFORMANCE / STUCK OFF | + | \vdash | | \vdash | + |
| | | ACTIVE GRILLE AIR SHUTTER "A" POSITION SENSOR MINIMUM / MAXIMUM STOP PERFORMANCE | - | | | | - |
| | | ACTIVE GRILLE AIR SHOTTER "A" POSITION SENSOR MINIMUMOM/ MAXIMOM STOP FERI ORIMANCE | - | | | | - |
| | | ACTIVE GRILLE AIR SHOTTER 'A CONTROL GIRCOIT / OPEN ACTIVE GRILLE AIR SHOTTER "A" SUPPLY VOLTAGE CIRCUIT / OPEN | - | | | | - |
| | | ACTIVE GRILLE AIR SHUTTER MODULE "A" OVER TEMPERATURE | | | | | - |
| M W | | SERIAL COMMUNICATION LINK | - | | G*+ | H | - |
| M W | | INTERNAL CONTROL MODULE MEMORY CHECKSUM ERROR | - | | G* | H | T * + |
| M | | POWERTRAIN CONTROL MODULE PROGRAMMING ERROR | G | G | G* | | T * |
| M W | | INTERNAL CONTROL MODULE KEEP ALIVE MEMORY (KAM) ERROR | G | _ | G* | H | T*+ |
| M W | | INTERNAL CONTROL MODULE RANDOM ACCESS MEMORY (RAM) ERROR | <u> </u> | | G* | Т | T*+ |
| M | | INTERNAL CONTROL MODULE READ ONLY MEMORY (ROM) ERROR | G | | G * | H | T * |
| M | | ECM / PCM PROCESSOR | + | | G* | | +-' |
| M | | CONTROL MODULE PERFORMANCE | - | | G* | | T * |
| | | CONTROL MODULE VEHICLE SPEED OUTPUT "A" | - | | <u> </u> | | + |
| M W | | INTERNAL CONTROL MODULE MONITORING PROCESSOR PERFORMANCE | - | G | G*+ | | |
| M W | | INTERNAL CONTROL MODULE A/D PROCESSING PERFORMANCE | - | G | G*+ | | |
| M W | | INTERNAL CONTROL MODULE MAIN PROCESSOR PERFORMANCE | - | | G*+ | | + |
| M W | | INTERNAL CONTROL MODULE ACCELERATOR PEDAL POSITION PERFORMANCE | | G | | | + |
| | | INTERNAL CONTROL MODULE ENGINE COOLANT TEMPERATURE PERFORMANCE | 1 | Ŭ | G | | + |
| М | | CONTROL MODULE VEHICLE OPTIONS ERROR | | | G* | | Т |
| M | | FUEL INJECTOR CONTROL MODULE PERFORMANCE | 1 | | <u> </u> | | - - |
| M | | TCM PPROCESSOR | G | H | G * | Т | T * |
| | | ECM / TCM INCOMPATIBLE | Ť | | G | H | + |
| | | STARTER RELAY CIRCUIT | G | G | G | H | Т |
| | | STARTER RELAY CIRCUIT LOW | _ | G | G | \vdash | + - |
| | | STARTER RELAY CIRCUIT HIGH | _ | G | G | H | + |
| M W | | INTERNAL CONTROL MODULE TORQUE PERFORMANCE | Ť | G | G+ | \Box | + |
| M W | | INTERNAL CONTROL MODULE TORQUE CALCULATION PERFORMANCE | \top | G | | H | + |
| M W | | INTERNAL CONTROL MODULE ENGINE RPM PERFORMANCE | \top | G | | H | + |
| M W | | INTERNAL CONTROL MODULE ENGINE AIR MASS PERFORMANCE | \top | | G*+ | H | + |
| | | INTERNAL CONTROL MODULE BRAKE SIGNAL PERFORMANCE | + | | G | | + |
| | | INTERNAL CONTROL MODULE THROTTLE ACTUATOR CONTROLLER PERFORMANCE | + | | G*+ | H | + |
| M W | P061F | IIINTERINAL CONTROL MODULE TAROTTLE ACTUATOR CONTROLLER FERFORMANCE | | | | | |
| M W | | | + | | G | Ħ | |
| M W | P0620 | GENERATOR CONTROL CIRCUIT | | G | | | |
| M W | P0620 P0622 | | | G | G | | |

| | | | - | _ | | | | |
|--------|--------|---|----------|---|--------|----------|---|--------|
| | | GENERATOR FIELD / "F" TERMINAL CIRCUIT HIGH | 4 | G | G | | _ | |
| М | - | FUEL PUMP "A" CONTROL CIRCUIT / OPEN | G | G | G | | | |
| М | - | FUEL PUMP "A" CONTROL CIRCUIT LOW | | | | | | |
| М | - | FUEL PUMP "A" CONTROL CIRCUIT HIGH | | | | | | |
| М | P062A | FUEL PUMP "A" CONTROL CIRCUIT RANGE PERFORMANCE | | | | | | |
| | P062B | INTERNAL CONTROL MODULE FUEL INJECTOR CONTROL PERFORMANCE | | | G | | | |
| M | P062C | INTERNAL CONTROL MODULE VEHICLE SPEED PERFORMANCE | | | G* | | | |
| M | P062D | FUEL INJECTOR DRIVER CIRCUIT PERFORMANCE BANK 1 | | G | G* | | | |
| M | P062E | FUEL INJECTOR DRIVER CIRCUIT PERFORMANCE BANK 2 | G | G | G* | | | |
| M | P062F | INTERNAL CONTROL MODULE EEPROM ERROR | | | G* | | Т | Γ* |
| М | P0630 | VIN NOT PROGRAMMED OR INCOMPATIBLE - ECM/PCM | G | G | G * | | | |
| M | P0634 | CONTROL MODULE INTERNAL TEMPERATURE "A" TOO HIGH | | | | | Т | Γ* |
| M | P0638 | THROTTLE ACTUATOR CONTROL RANGE/PERFORMANCE - BANK1 | | | G * | | | |
| М | P0639 | THROTTLE ACTUATOR CONTROL RANGE/PERFORMANCE - BANK2 | | | G * | | | |
| | P0640 | INTAKE AIR HEATER CONTROL CIRCUIT | | | | | | |
| M | P0641 | SENSOR REFERENCE VOLTAGE "A" CIRCUIT / OPEN | | | * G | | Т | Γ* |
| M | P0642 | SENSOR REFERENCE VOLTAGE "A" CIRCUIT LOW | G | G | ď | | | |
| М | P0643 | SENSOR REFERENCE VOLTAGE "A" CIRCUIT HIGH | G | G | G * | | | |
| | P0645 | A/C CLUTCH (ACC) RELAY CONTROL CIRCUIT | G | G | G | | | |
| | P0646 | A/C CLUTCH (ACC) RELAY CONTROL CIRCUIT LOW | G | G | G | | | |
| | P0647 | A/C CLUTCH (ACC) RELAY CONTROL CIRCUIT HIGH | G | G | G | | | |
| | P0649 | CRUISE CONTROL LAMP CONTROL CIRCUIT | | | | | | |
| | P064A | FUEL PUMP CONTROL MODULE | | | G | | | |
| М | P064C | GLOW PLUG CONTROL MODULE 1 | | | | | | |
| М | P064D | INTERNAL CONTROL MODULE O2 SENSOR PROCESSOR PERFORMANCE - Bank 1 | G | G | G * | | | |
| М | P064E | INTERNAL CONTROL MODULE O2 SENSOR PROCESSOR PERFORMANCE - Bank 2 | G | G | G * | | | |
| М | P064F | UNAUTHORIZED SOFTWARE / CALIBRATION DETECTED | | | | | | |
| M W | P0652 | SENSOR REFERENCE VOLTAGE "B" CIRCUIT LOW | G | G | G*+ | | | |
| M W | P0653 | SENSOR REFERENCE VOLTAGE "B" CIRCUIT HIGH | G | G | G * + | | | |
| М | P0657 | ACTUATOR SUPPLY VOLTAGE "A" CIRCUIT / OPEN | G | | G * | Т | Т | Γ* |
| М | P0658 | ACTUATOR SUPPLY VOLTAGE "A" CIRCUIT LOW | | | | Т | Т | Γ* |
| М | P0659 | ACTUATOR SUPPLY VOLTAGE "A" CIRCUIT HIGH | | | | Т | Т | Γ* |
| | P065B | GENERATOR CONTROL CIRCUIT RANGE / PERFORMANCE | G | G | G | | | |
| | P065C | GENERATOR MECHANICAL PERFORMANCE | | G | G | | | |
| М | P0660 | INTAKE MANIFOLD TUNING VALVE CONTROL CIRCUIT / OPEN (bank 1) | G | G | G * | | | |
| М | P0661 | INTAKE MANIFOLD TUNING VALVE CONTROL CIRCUIT LOW (bank 1) | | | G * | | | |
| М | - | INTAKE MANIFOLD TUNING VALVE CONTROL CIRCUIT HIGH (bank 1) | | | G * | | | |
| | P0663 | INTAKE MANIFOLD TUNING VALVE CONTROL CIRCUIT / OPEN (bank 2) | G | G | G | | | |
| | P0666 | CONTROL MODULE INTERNAL TEMPERATURE SENSOR "A" CIRCUIT | | | | | 1 | Т |
| М | - | CONTROL MODULE INTERNAL TEMPERATURE SENSOR "A" RANGE / PERFORMANCE | 1 | | | | T | Γ* |
| | | CONTROL MODULE INTERNAL TEMPERATURE SENSOR "A" CIRCUIT LOW | 1 | | G | | 1 | |
| | | CONTROL MODULE INTERNAL TEMPERATURE SENSOR "A" CIRCUIT HIGH | _ | | G | | 1 | |
| М | | CYLINDER 1 GLOW PLUG CIRCUIT LOW | _ | | | | 1 | |
| М | - | CYLINDER 1 GLOW PLUG CIRCUIT HIGH | 1 | | | | 1 | \neg |
| М | - | CYLINDER 2 GLOW PLUG CIRCUIT LOW | 1 | | | | + | |
| М | - | CYLINDER 2 GLOW PLUG CIRCUIT HIGH | 1 | | | | \top | \neg |
| М | - | CYLINDER 3 GLOW PLUG CIRCUIT LOW | 1 | | | | \top | \neg |
| М | | CYLINDER 3 GLOW PLUG CIRCUIT HIGH | 1 | | | | + | |
| М | | GLOW PLUG CONTROL MODULE 1 CONTROL CIRCUIT / OPEN | \dashv | | | H | 1 | - |
| M | | CYLINDER 1 - GLOW PLUG CIRCUIT / OPEN | \dashv | | | H | 1 | - |
| M | 1 | CYLINDER 2 - GLOW PLUG CIRCUIT / OPEN | _ | | | H | + | - |
| М | - | CYLINDER 3 - GLOW PLUG CIRCUIT / OPEN | _ | | | H | + | \neg |
| M | - | CYLINDER 4 - GLOW PLUG CIRCUIT / OPEN | \dashv | | | \Box | + | \neg |
| М | - | CYLINDER 5 - GLOW PLUG CIRCUIT / OPEN | + | | | \vdash | + | \neg |
| 1 | 1.0070 | 5.1515 SEOT 1 E00 ON CONT 7 OF E11 | | 1 | | \vdash | $-\!$ | |
| М | P0676 | CYLINDER 6 - GLOW PLUG CIRCUIT / OPEN | | | | | | |
| M M | | CYLINDER 6 - GLOW PLUG CIRCUIT / OPEN CYLINDER 7 - GLOW PLUG CIRCUIT / OPEN | | | | \dashv | _ | _ |

| М | P0678 | CYLINDER 8 - GLOW PLUG CIRCUIT / OPEN | | | | | |
|-----|-------|---|-----|---|-------|---|-------|
| М | P067A | CYLINDER 4 GLOW PLUG CIRCUIT LOW | | | | | |
| М | P067B | CYLINDER 4 GLOW PLUG CIRCUIT HIGH | | | | | |
| М | P067C | CYLINDER 5 GLOW PLUG CIRCUIT LOW | | | | | |
| M | P067D | CYLINDER 5 GLOW PLUG CIRCUIT HIGH | | | | | |
| M | P067E | CYLINDER 6 GLOW PLUG CIRCUIT LOW | | | | | |
| М | P067F | CYLINDER 6 GLOW PLUG CIRCUIT HIGH | | | | | |
| M | P0683 | GLOW PLUG CONTROL MODULE 1 TO PCM COMMUNICATION CIRCUIT | | | | | |
| М | P0684 | GLOW PLUG CONTROL MODULE 1 TO PCM COMMUNICATION CIRCUIT RANGE / PERF. | | | | | |
| | P0685 | ECM / PCM POWER RELAY CONTROL CIRCUIT / OPEN | G | G | G | | |
| | P0686 | ECM / PCM POWER RELAY CONTROL CIRCUIT LOW | G | G | G | | |
| | P0687 | ECM / PCM POWER RELAY CONTROL CIRCUIT HIGH | G | G | G | | |
| | P0689 | ECM / PCM POWER RELAY SENSE CIRCUIT LOW | | | G | | |
| М | P068A | ECM / PCM POWER RELAY DE-ENERGIZED - TOO EARLY | | | ď | | |
| М | P068C | CYLINDER 7 GLOW PLUG CIRCUIT LOW | | | | | |
| М | P068D | CYLINDER 7 GLOW PLUG CIRCUIT HIGH | | | | | |
| М | P068E | CYLINDER 8 GLOW PLUG CIRCUIT LOW | | | | | |
| М | P068F | CYLINDER 8 GLOW PLUG CIRCUIT HIGH | | | | | |
| М | P0690 | ECM / PCM POWER RELAY SENSE CIRCUIT HIGH | | | G | | |
| М | P0691 | FAN 1 CONTROL CIRCUIT LOW | G | G | G | | |
| М | P0692 | FAN 1 CONTROL CIRCUIT HIGH | G | G | G | | |
| | P06A0 | VARIABLE A/C COMPRESSOR CONTROL CIRCUIT | | G | G | | |
| | P06A1 | VARIABLE A/C COMPRESSOR CONTROL CIRCUIT LOW | | G | G | | |
| | P06A2 | VARIABLE A/C COMPRESSOR CONTROL CIRCUIT HIGH | | G | G | | |
| М | P06A6 | SENSOR REFERENCE VOLTAGE "A" CIRCUIT RANGE / PERFORMANCE | | | | Т | T * |
| М | P06A7 | SENSOR REFERENCE VOLTAGE "B" CIRCUIT RANGE / PERFORMANCE | | | | Т | T * |
| М | P06A8 | SENSOR REFERENCE VOLTAGE "C" CIRCUIT RANGE / PERFORMANCE | | | | Т | T * |
| M W | P06AF | TORQUE MANAGEMENT SYSTEM - FORCED ENGINE SHUTDOWN | G | G | G*+ | | |
| М | P06B1 | SENSOR POWER SUPPLY "A" CIRCUIT LOW | | | | | T * |
| М | P06B2 | SENSOR POWER SUPPLY "A" CIRCUIT HIGH | | | | | T * |
| М | P06B4 | SENSOR POWER SUPPLY "B" CIRCUIT LOW | | | | | T * |
| М | P06B5 | SENSOR POWER SUPPLY "B" CIRCUIT HIGH | | | | | T * |
| М | P06B6 | INTERNAL CONTROL MODULE KNOCK/COMBUSTION VIBRATION SENSOR PROCESSOR 1 PERFORMAN | ICE | G | G * | | |
| М | P06B8 | INTERNAL CONTROL MODULE NON-VOLATILE RANDOM ACCESS MEMORY (NVRAM) ERROR | | | G * | | T * |
| М | P06B9 | CYLINDER 1 - GLOW PLUG CIRCUIT RANGE / PERFORMANCE | | | | | |
| М | P06BA | CYLINDER 2 - GLOW PLUG CIRCUIT RANGE / PERFORMANCE | | | | | |
| М | P06BB | CYLINDER 3 - GLOW PLUG CIRCUIT RANGE / PERFORMANCE | | | | | |
| М | P06BC | CYLINDER 4 - GLOW PLUG CIRCUIT RANGE / PERFORMANCE | | | | | |
| М | P06BD | CYLINDER 5 - GLOW PLUG CIRCUIT RANGE / PERFORMANCE | | | | | |
| М | P06BE | CYLINDER 6 - GLOW PLUG CIRCUIT RANGE / PERFORMANCE | | | | | |
| М | P06BF | CYLINDER 7 - GLOW PLUG CIRCUIT RANGE / PERFORMANCE | | | | | |
| М | P06C0 | CYLINDER 8 - GLOW PLUG CIRCUIT RANGE / PERFORMANCE | | | | | |
| М | P06D1 | INTERNAL CONTROL MODULE IGNITION COIL CONTROL MODULE PERFORMANCE | | G | G* | | |
| | P06DA | ENGINE OIL PRESSURE CONTROL CIRCUIT / OPEN | G | G | G | | |
| | P06DB | ENGINE OIL PRESSURE CONTROL CIRCUIT LOW | G | G | G | | |
| | P06DC | ENGINE OIL PRESSURE CONTROL CIRCUIT HIGH | G | G | G | | |
| | P06DD | ENGINE OIL PRESSURE CONTROL CIRCUIT PERFORMANCE / STUCK OFF | | G | G | | |
| М | P06DF | GLOW PLUG CONTROL MODULE 1 MEMORY CHECKSUM ERROR | | | | | |
| | P06E9 | ENGINE STARTER PERFORMANCE | | | G | | |
| М | P06EA | NOx SENSOR PROCESSOR PERFORMANCE (Bank 1 Sensor 1) | | | | | |
| | P0700 | TRANSMISSION CONTROL SYSTEM (MIL requested) | G | G | G | | |
| M W | P0701 | TRANSMISSION CONTROL SYSTEM RANGE / PERFORMANCE | | | G * + | | T * + |
| M W | P0702 | TRANSMISSION CONTROL SYSTEM ELECTRICAL | G | | G * | Т | T * + |
| М | P0703 | BRAKE SWITCH "B" INPUT CIRCUIT | G | G | G * | | |
| М | P0704 | CLUTCH SWITCH INPUT CIRCUIT | | | G | | |
| M W | P0705 | TRANSMISSION RANGE SENSOR CIRCUIT "A" (PRNDL INPUT) | G | | G * | H | T * + |
| | | - / | • | - | | | |

| М | | TRANSMISSION RANGE SENSOR "A" CIRCUIT RANGE / PERFORMANCE | _ | G | G * | | Т | T * |
|----------------|-------|---|--------|----------|---------|---|---|-------|
| M W | P0707 | TRANSMISSION RANGE SENSOR "A" CIRCUIT LOW | _ | G | G * + | | | T * + |
| M W | P0708 | TRANSMISSION RANGE SENSOR "A" CIRCUIT HIGH | G | G | G * + | | | T * + |
| M W | P0709 | TRANSMISSION RANGE SENSOR "A" CIRCUIT INTERMITTENT | | | G * | T | Т | T + |
| M O/D W | | TRANSMISSION FLUID TEMPERATURE (TFT) SENSOR "A" CIRCUIT | _ | G | | | | T * |
| | | TRANSMISSION FLUID TEMPERATURE SENSOR "A" CIRCUIT RANGE / PERFORMANCE | _ | | G * ^ | | | T * + |
| M O/D W | P0712 | TRANSMISSION FLUID TEMPERATURE (TFT) SENSOR "A" CIRCUIT LOW | _ | | G * + ^ | | | T * + |
| M O/D W | P0713 | TRANSMISSION FLUID TEMPERATURE (TFT) SENSOR "A" CIRCUIT HIGH INPUT | G | G | G * + ^ | | | T * + |
| M | P0714 | TRANSMISSION FLUID TEMPERATURE (TFT) SENSOR "A" CIRCUIT INTERMITTENT | | | G * | | | T * |
| M W | P0715 | INPUT / TURBINE SHAFT SPEED (TSS) SENSOR "A" CIRCUIT | | G | G * + | Т | | T * |
| M | P0716 | INPUT / TURBINE SHAFT SPEED (TSS) SENSOR "A" CIRCUIT RANGE PERFORMANCE | | | G * | | | T * |
| M O/D W | P0717 | INPUT / TURBINE SHAFT SPEED (TSS) SENSOR "A" CIRCUIT NO SIGNAL | | G | G ^ + | | | T * + |
| M O/D W | P0718 | INPUT / TURBINE SHAFT SPEED (TSS) SENSOR "A" CIRCUIT INTERMITTENT | | G | | | | T + |
| M W | P0720 | OUTPUT SHAFT SPEED (OSS) SENSOR CIRCUIT | | | G * + | Τ | | T * |
| M O/D W | P0721 | OUTPUT SHAFT SPEED (OSS) SENSOR CIRCUIT RANGE / PERFORMANCE | | | G ^ + | | | T * |
| M O/D W | P0722 | OUTPUT SHAFT SPEED (OSS) SENSOR CIRCUIT NO SIGNAL | | | G ^ + | | | T * + |
| M W | P0723 | OUTPUT SHAFT SPEED (OSS) SENSOR CIRCUIT INTERMITTENT | | | G | | | T * + |
| М | | ENGINE SPEED INPUT CIRCUIT (RPM) | | | G * | | | |
| | P0726 | ENGINE SPEED INPUT CIRCUIT RANGE PERFORMANCE | | | G | | | Т |
| | P0727 | ENGINE SPEED INPUT CIRCUIT NO SIGNAL | | | G | | | T |
| M O/D W | P0729 | GEAR 6 INCORRECT RATIO | | | G * ^ + | | | T * + |
| M | P072B | STUCK IN REVERSE | | | | | | T * |
| M | | STUCK IN GEAR 1 | | | G * | | | T * |
| M | P072D | STUCK IN GEAR 2 | | | G * | | | T * |
| M | | STUCK IN GEAR 3 | | | G * | | | T * |
| М | | STUCK IN GEAR 4 | | | G * | | | T * |
| M O/D | | INCORRECT GEAR RATIO | | | G * | | | T * |
| | | GEAR 1 (1GR) INCORRECT RATIO | | | G * + ^ | | | T * + |
| | | GEAR 2 (2GR) INCORRECT RATIO | | | G * + ^ | | | T * + |
| | | GEAR 3 (3GR) INCORRECT RATIO | | | G * + ^ | | | T * + |
| | | GEAR 4 (4GR) INCORRECT RATIO | | | G * + ^ | | | T * + |
| _ | | GEAR 5 (5GR) INCORRECT RATIO | | | G * + ^ | | | T * + |
| M | | REVERSE INCORRECT RATIO | | _ | G * | | | T * |
| M | | TCM ENGINE SPEED OUTPUT CIRCUIT | - | G | G * | | | T 4 |
| M | | STUCK IN GEAR 5 | | | G * | | | T * |
| M | | STUCK IN GEAR 6 | | | G * | | | T * |
| W | | UNABLE TO ENGAGE REVERSE | | | G | | | T + |
| W | | UNABLE TO ENGAGE GEAR 1 | _ | | G | | | T + |
| | | TORQUE CONVERTER CLUTCH (TCC) SOLENOID CIRCUIT / OPEN | G G | | G * + ^ | | | T * |
| | | TORQUE CONVERTER CLUTCH (TCC) SOLENOID CIRCUIT PERF. OR STUCK OFF | G | _ | G * + ^ | | | T * |
| M W M O/D W | | TORQUE CONVERTER CLUTCH (TCC) SOLENOID CIRCUIT STUCK ON TORQUE CONVERTER CLUTCH (TCC) SOLENOID CIRCUIT ELECTRICAL | G | + | G*+ | | | T * |
| M O/D W | | TORQUE CONVERTER CLUTCH (TCC) SOLENOID CIRCUIT INTERMITTENT | G | \vdash | G * | | | T * |
| M | | PRESSURE CONTROL SOLENOID "A" | + | | G* | _ | | |
| M | | PRESSURE CONTROL SOLENOID "A" PERFORMANCE OR STUCK OFF | + | | G* | _ | | T * |
| M | | PRESSURE CONTROL SOLENOID "A" STUCK ON | 1 | | G* | | | T * |
| W O/D | | PRESSURE CONTROL SOLENOID 'A STOCK ON PRESSURE CONTROL SOLENOID "A" ELECTRICAL | t | | G + ^ | | | |
| M W | | UNABLE TO ENGAGE GEAR 2 | ╁ | H | G*+ | | | T + |
| | | UNABLE TO ENGAGE GEAR 3 | 1 | | G*+ | | | T + |
| - | | UNABLE TO ENGAGE GEAR 4 | t | | G*+ | | | T + |
| - | | UNABLE TO ENGAGE GEAR 5 | t | | G*+ | | | T + |
| | | UNABLE TO ENGAGE GEAR 6 | t | | G*+ | | | T + |
| М | | SHIFT SOLENOID "A" | G | H | G * | | | |
| М | | SHIFT SOLENOID "A" PERFORMANCE OR STUCK OFF | Ť | | G * | | | T * |
| М | | SHIFT SOLENOID "A" STUCK ON | t | | G * | | | T * |
| | | SHIFT SOLENOID "A" ELECTRICAL | G | | G * + ^ | | | |
| | l | | - | | | _ | - | |

| | r <u> </u> | | | | | | |
|---------|------------|---|----------|---|---------|---|--------|
| W | | SHIFT SOLENOID "A" INTERMITTENT | | | G+ | | |
| M | P0755 | SHIFT SOLENOID "B" | G | | G * | | |
| М | P0756 | SHIFT SOLENOID "B" PERFORMANCE OR STUCK OFF | | | G * | | T * |
| M | | SHIFT SOLENOID "B" STUCK ON | <u> </u> | | G * | | T * |
| M O/D W | P0758 | SHIFT SOLENOID "B" ELECTRICAL | G | | G * + ^ | | |
| W | P0759 | SHIFT SOLENOID "B" INTERMITTENT | | | G + | | |
| M | P0760 | SHIFT SOLENOID "C" | G | | G * | | |
| M | P0761 | SHIFT SOLENOID "C" PERFORMANCE OR STUCK OFF | | | G * | | T * |
| M | P0762 | SHIFT SOLENOID "C" STUCK ON | | | G * | | T * |
| M O/D W | P0763 | SHIFT SOLENOID "C" ELECTRICAL | G | | G * + ^ | | |
| W | P0764 | SHIFT SOLENOID "C" INTERMITTENT | | | G + | | |
| M | P0765 | SHIFT SOLENOID "D" | G | | G * | | |
| M | P0766 | SHIFT SOLENOID "D" PERFORMANCE OR STUCK OFF | | | G * | | T * |
| M | P0767 | SHIFT SOLENOID "D" STUCK ON | | | G * | | T * |
| M O/D W | P0768 | SHIFT SOLENOID "D" ELECTRICAL | G | | G * + ^ | | |
| W | P0769 | SHIFT SOLENOID "D" INTERMITTENT | | | G + | | |
| M | P0770 | SHIFT SOLENOID "E" | G | | G * | | T * |
| М | P0771 | SHIFT SOLENOID "E" PERFORMANCE OR STUCK OFF | | | G * | | T * |
| М | P0772 | SHIFT SOLENOID "E" STUCK ON | | | G * | | T * |
| M O/D W | P0773 | SHIFT SOLENOID "E" ELECTRICAL | G | | G * + ^ | | |
| W | P0774 | SHIFT SOLENOID "E" INTERMITTENT | | | G + | | Т |
| M | P0775 | PRESSURE CONTROL SOLENOID "B" | | | G * | | |
| М | P0776 | PRESSURE CONTROL SOLENOID "B" PERFORMANCE OR STUCK OFF | | | G * | | T * |
| M | P0777 | PRESSURE CONTROL SOLENOID "B" STUCK ON | | | G * | | T * |
| O/D | P0778 | PRESSURE CONTROL SOLENOID "B" ELECTRICAL | | | G ^ | | |
| O/D | P0779 | PRESSURE CONTROL SOLENOID "B" INTERMITTENT | G | | G ^ | | |
| М | P0780 | SHIFT MALFUNCTION | | | G * | | T * |
| M O/D | P0781 | 1-2 SHIFT | | | G ^ | | T * |
| M O/D | P0782 | 2-3 SHIFT | | | G ^ | | T * |
| M O/D | P0783 | 3-4 SHIFT | | | G ^ | | T * |
| М | P0784 | 4-5 SHIFT | | | G * | | T * |
| М | P0790 | NORMAL / PERFORMANCE SWITCH CIRCUIT | | | G | | T * |
| M O/D | P0791 | INTERMEDIATE SHAFT SPEED (ISS) SENSOR "A" CIRCUIT | | G | G ^ | | T * |
| М | P0792 | INTERMEDIATE SHAFT SPEED (ISS) SENSOR "A" CIRCUIT RANGE PERFORMANCE | | | G * | | T * |
| O/D | P0793 | INTERMEDIATE SHAFT SPEED (ISS) SENSOR "A" CIRCUIT NO SIGNAL | | | | | |
| M O/D | P0794 | INTERMEDIATE SHAFT SPEED (ISS) SENSOR "A" CIRCUIT INTERMITTENT | | | G ^ | | T * |
| M | P0795 | PRESSURE CONTROL SOLENOID "C" | | | G * | | |
| М | P0796 | PRESSURE CONTROL SOLENOID "C" PERFORMANCE OR STUCK OFF | G | | G * | | T * |
| М | P0797 | PRESSURE CONTROL SOLENOID "C" STUCK ON | G | | G * | | T * |
| O/D | P0798 | PRESSURE CONTROL SOLENOID "C" ELECTRICAL | | | G ^ | | |
| O/D | P0799 | PRESSURE CONTROL SOLENOID "C" INTERMITTENT | G | | G ^ | | |
| М | P07A2 | TRANSMISSION FRICTION ELEMENT "A" PERFORMANCE / STUCK OFF | | | | | T * |
| М | P07A3 | TRANSMISSION FRICTION ELEMENT "A" STUCK ON | | | | | T * |
| М | P07A4 | TRANSMISSION FRICTION ELEMENT "B" PERFORMANCE / STUCK OFF | | | | | T * |
| M W | P07A5 | TRANSMISSION FRICTION ELEMENT "B" STUCK ON | | | G + | | T * |
| W | P07A8 | TRANSMISSION FRICTION ELEMENT "D" PERFORMANCE / STUCK OFF | | | G + | | |
| W | P07A9 | TRANSMISSION FRICTION ELEMENT "D" STUCK ON | | | G + | | |
| W | P07AA | TRANSMISSION FRICTION ELEMENT "E" PERFORMANCE / STUCK OFF | | | G + | | |
| | P0801 | REVERSE INHIBIT CONTROL CIRCUIT / OPEN | G | | G | | |
| | P0803 | UPSHIFT / SKIP SHIFT SOLENIOD CONTROL CIRCUIT | G | | G | | |
| М | P0805 | CLUTCH POSITION SENSOR "A" CIRCUIT | | | | Т | T * |
| М | P0806 | CLUTCH POSITION SENSOR "A" CIRCUIT RANGE / PERFORMANCE | | | | Т | T * |
| М | P0809 | CLUTCH POSITION SENSOR "A" CIRCUIT INTERMITTENT | | | | Т | T * |
| | P0810 | CLUTCH POSITION CONTROL ERROR | | | | | Т |
| М | P0811 | EXCESSIVE CLUTCH A SLIPPAGE | Ī | | | | T * |
| | P0812 | REVERSE INPUT CIRCUIT | 1 | | G | | \top |
| | • | | • | | | | |

| | D0010 | DEVENOS OUTRUT OIDOUT | - | | | | T - |
|-------|-------|--|--------|-----------|----------|----------|-----|
| W | | REVERSE OUTPUT CIRCUIT | - | | | | T + |
| | | TRANSMISSION RANGE DISPLAY CIRCUIT | _ | | G | | |
| W | | UPSHIFT SWITCH CIRCUIT | _ | G | G+ | | - |
| W | | DOWNSHIFT SWITCH CIRCUIT | G | G | G + | | T |
| W | | STARTER DISABLE CIRCUIT / OPEN | _ | | | | T + |
| | | DRIVELINE DISCONNECT SWITCH INPUT CIRCUIT | G | | | | T |
| W | | UP AND DOWN SHIFT SWITCH TO TRANSMISSION RANGE CORRELATION | - | | | | T+ |
| | | STARTER DISABLE CIRCUIT LOW | - | | | | T |
| | | STARTER DISABLE CIRCUIT HIGH | - | | | | T |
| | | PARK INPUT CIRCUIT | - | | | | T |
| М | | EXCESSIVE CLUTCH "B" SLIPPAGE | - | | | | T * |
| | | UP AND DOWN SWITCH CIRCUIT | - | | | | T |
| М | | 5 - 6 SHIFT | _ | | _ | | T * |
| | | CLUTCH PEDAL SWITCH "A" CIRCUIT | | G | G | | |
| | | CLUTCH PEDAL SWITCH "B" CIRCUIT | _ | G | G | | T. |
| M O/D | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "A" CIRCUIT | G | G | G | | T * |
| M | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "A" CIRCUIT RANGE / PERFORMANCE | - | | G | | T * |
| M | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "A" CIRCUIT LOW | - | | | | T * |
| М | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "A" CIRCUIT HIGH | + | \vdash | | \vdash | T * |
| M 0/5 | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "A" CIRCUIT INTERMITTENT | + | \vdash | G | \vdash | |
| M O/D | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "B" CIRCUIT | + | \vdash | - | \vdash | T * |
| M | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "B" CIRCUIT RANGE / PERFORMANCE | - | | G | | |
| M | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "B" CIRCUIT LOW | - | | | | T * |
| M | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "B" CIRCUIT HIGH | - | | 0.+ | | T * |
| М | | PARK / NEUTRAL SWITCH INPUT CIRCUIT | + | G | G* | | |
| | | PARK / NEUTRAL SWITCH INPUT CIRCUIT LOW | + | G | G | | + - |
| | | GEAR SHIFT CONTROL MODULE "A" PERFORMANCE | - | | G | | Т |
| w | | GEAR SHIFT CONTROL MODULE "A" COMMUNICATION CIRCUIT TRANSMISSION ELLID RESSURE | + | | G | | |
| VV | | TRANSMISSION FLUID PRESSURE TRANSMISSION FLUID PRESSURE LOW | + | | G+ G | H | |
| O/D | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "C" CIRCUIT | + | | G | | |
| M | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "C" CIRCUIT RANGE / PERFORMANCE | + | | G | | |
| O/D | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "D" CIRCUIT | + | H | u | | |
| M | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "D" CIRCUIT RANGE / PERFORMANCE | + | | | | |
| М | | CLUTCH POSITION SENSOR "B" CIRCUIT | G | | G * | | |
| М | | CLUTCH POSITION SENSOR "B" CIRCUIT RANGE / PERFORMANCE | G | + | G * | | |
| М | | CLUTCH POSITION SENSOR "B" CIRCUIT INTERMITTENT | G | + | G* | | |
| М | | TCM POWER INPUT SIGNAL LOW | G | 4—4 | G * | | |
| М | | TCM POWER INPUT SIGNAL HIGH | G | + | G * | | |
| | | TCM POWER INPUT SIGNAL INTERMITTENT | + | H | 3 | Т | Т |
| | | TRANSMISSION COMPONENT SLIPPING | + | H | G | H | + - |
| | | TRANSMISSION FLUID DETERIORATED | + | \vdash | G | \vdash | |
| м | | CLUTCH "A" ACTUATOR CONTROL CIRCUIT / OPEN | + | H | G* | Т | T * |
| w | | CLUTCH "A" ACTUATOR CONTROL CIRCUIT RANGE PERFORMANCE | + | H | <u> </u> | Ť | T + |
| м | | CLUTCH "A" ACTUATOR CONTROL CIRCUIT LOW | + | H | G * | T | T * |
| М | | CLUTCH "A" ACTUATOR CONTROL CIRCUIT HIGH | \top | \dagger | G * | T | T * |
| М | | CLUTCH "B" ACTUATOR CONTROL CIRCUIT / OPEN | T | T | | T | T * |
| W | | CLUTCH "B" ACTUATOR CONTROL CIRCUIT RANGE PERFORMANCE | \top | \dagger | | T | T + |
| М | | CLUTCH "B" ACTUATOR CONTROL CIRCUIT LOW | T | T | | Т | T * |
| М | | CLUTCH "B" ACTUATOR CONTROL CIRCUIT HIGH | T | T | | T | T * |
| | | GEAR SHIFT LOCK SOLENIOD / ACTUATOR CIRCUIT "B" LOW | T | T | G | H | T |
| | | GEAR SHIFT LOCK SOLENIOD / ACTUATOR CIRCUIT "B" HIGH | \top | \dagger | G | \vdash | T |
| | | GEAR SHIFT LOCK SOLENIOD / ACTUATOR CIRCUIT "A" LOW | T | T | G | H | T |
| | P0931 | GEAR SHIFT LOCK SOLENIOD / ACTUATOR CIRCUIT "A" HIGH | \top | \dagger | G | \vdash | T |
| | | HYDRAULIC PRESSURE SENSOR CIRCUIT | G | \vdash | G | \vdash | + - |
| | | HYDRAULIC OIL TEMPERATURE SENSOR CIRCUIT | G | + | G | \vdash | |
| | P0937 | HYDRAULIC OIL TEMPERATURE SENSOR CIRCUIT | G | Ш | G | | |

| | Doogo | LIVED ALL LO OIL TEMPEDATURE CENCOR CIRCUIT LOW | 10 | 1 | _ | | |
|---------|-------|---|----------|----------|----------|----------|----------------|
| | | HYDRAULIC OIL TEMPERATURE SENSOR CIRCUIT LOW | G | _ | G | | |
| | | HYDRAULIC OIL TEMPERATURE SENSOR CIRCUIT HIGH | G | | G | | |
| M | | HYDRAULIC PRESSURE UNIT | | | | | T * |
| M O/D | | PRESSURE CONTROL SOLENOID "A" CONTROL CIRCUIT / OPEN | G | | G * ^ | | T * |
| M W | | PRESSURE CONTROL SOLENOID "A" CONTROL CIRCUIT RANGE PERFORMANCE | G | | G+ | _ | T * + |
| M W | | PRESSURE CONTROL SOLENOID "A" CONTROL CIRCUIT LOW | G | _ | G* | T | T*+ |
| M W | | PRESSURE CONTROL SOLENOID "A" CONTROL CIRCUIT HIGH | G | _ | G* | Т | T*+ |
| M O/D | | PRESSURE CONTROL SOLENOID "B" CONTROL CIRCUIT / OPEN | G | | G ^ | \vdash | T * |
| M | | PRESSURE CONTROL SOLENOID "B" CONTROL CIRCUIT RANGE PERFORMANCE | | | G* | \vdash | T * |
| M | | PRESSURE CONTROL SOLENOID "B" CONTROL CIRCUIT LOW | G | _ | G* | \vdash | T * |
| M O/D | | PRESSURE CONTROL SOLENOID "B" CONTROL CIRCUIT HIGH | G | | G ^ | \vdash | T * |
| | | PRESSURE CONTROL SOLENOID "C" CONTROL CIRCUIT / OPEN | G | + | G ^ | \vdash | T * |
| M | | PRESSURE CONTROL SOLENOID "C" CONTROL CIRCUIT LOW | G | - | G* | \vdash | T * |
| | | PRESSURE CONTROL SOLENOID "C" CONTROL CIRCUIT HIGH | G | | G ^ | \vdash | T * |
| | | SHIFT SOLENOID "A" CONTROL CIRCUIT RANGE / PERFORMANCE | | | G * | + | T * |
| M W | | SHIFT SOLENOID "A" CONTROL CIRCUIT LOW | G | - | G*+ | T | T*+ |
| M W | | SHIFT SOLENOID "A" CONTROL CIRCUIT HIGH | G | | G*+ | Т | T*+ |
| | | SHIFT SOLENOID "B" CONTROL CIRCUIT RANGE / PERFORMANCE | | | G* | + | T * |
| M W | | SHIFT SOLENOID "B" CONTROL CIRCUIT LOW | G | 4 | G*+ | T | T*+ |
| M W | | SHIFT SOLENOID "B" CONTROL CIRCUIT HIGH | G | \vdash | G*+ | Т | T*+ |
| | | SHIFT SOLENOID "C" CONTROL CIRCUIT RANGE / PERFORMANCE | | | G*+ | + | T*+ |
| M W | | SHIFT SOLENOID "C" CONTROL CIRCUIT LOW | G | - | G*+ | T | T*+ |
| M W | | SHIFT SOLENOID "C" CONTROL CIRCUIT HIGH | G | | G*+ | Т | |
| M O/D W | | SHIFT SOLENOID "D" CONTROL CIRCUIT RANGE / PERFORMANCE | _ | | G*+ | + | T*+ |
| M W | | SHIFT SOLENOID "D" CONTROL CIRCUIT LOW | G | _ | G*+ | T | T*+ |
| | | SHIFT SOLENOID "D" CONTROL CIRCUIT HIGH | G | | G*+ | Т | T*+ |
| M W | | SHIFT SOLENOID "E" CONTROL CIRCUIT RANGE / PERFORMANCE SHIFT SOLENOID "E" CONTROL CIRCUIT LOW | G | | | Т | T*+ |
| M W | | SHIFT SOLENOID "E" CONTROL CIRCUIT HIGH | G | - | G*+ | <u>'</u> | T*+ |
| O/D | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "E" CIRCUIT | G | | G*+ | - | ' + |
| M | | TRANSMISSION FLUID PRESSURE SENSOR / SWITCH "E" CIRCUIT RANGE / PERFORMANCE | - | | | - | |
| M W | | SHIFT SOLENOID "F" CONTROL CIRCUIT RANGE / PERFORMANCE | + | | G*+ | \vdash | T*+ |
| M W | | SHIFT SOLENOID "F" CONTROL CIRCUIT LOW | + | | G*+ | Т | T*+ |
| M W | | SHIFT SOLENOID "F" CONTROL CIRCUIT HIGH | - | | G*+ | T | T*+ |
| 101 00 | | MOTOR ELECTRONICS COOLANT TEMPERATURE SENSOR CIRCUIT | - | | G | ÷ | + + + |
| | | MOTOR ELECTRONICS COOLANT TEMPERATURE SENSOR CIRCUIT RANGE / PERFORMANCE | - | | <u> </u> | H | Т |
| | | MOTOR ELECTRONICS COOLANT TEMPERATURE SENSOR CIRCUIT LOW | G | G | G | H | + |
| | | MOTOR ELECTRONICS COOLANT TEMPERATURE SENSOR CIRCUIT HIGH | G | | G | \vdash | _ |
| | | MOTOR ELECTRONICS COOLANT PUMP "A" CONTROL CIRCUIT / OPEN | _ | G | G | | |
| | | DC / DC CONVERTER STATUS CIRCUIT / OPEN | | G | G | \vdash | + |
| М | | DC / DC CONVERTER STATUS CIRCUIT LOW | _ | G | G | \vdash | 1 |
| | | HIGH VOLTAGE SYSTEM INTER-LOCK CIRCUIT | Ť | <u> </u> | | \vdash | Т |
| | | HIGH VOLTAGE SYSTEM INTER-LOCK CIRCUIT LOW | \top | | | \Box | T |
| М | | DC / DC CONVERTER STATUS CIRCUIT HIGH | G | G | G | | + - |
| | | DC / DC CONVERTER ENABLE CIRCUIT / OPEN | _ | G | G | | + |
| | | DC / DC CONVERTER ENABLE CIRCUIT LOW | | G | G | | + |
| | | DC / DC CONVERTER ENABLE CIRCUIT HIGH | _ | G | G | H | 1 |
| | | ENGINE MOUNT CONTROL "A" CIRCUIT / OPEN | _ | G | G | | + |
| | | MOTOR TORQUE SENSOR CIRCUIT RANGE / PERFORMANCE | _ | G | G | H | + |
| | | GENERATOR CONTROL MODULE | Ť | | - | H | Т |
| | | DRIVE MOTOR "A" CONTROL MODULE | 十 | | | H | T |
| | | BATTERY ENERGY CONTROL MODULE | 十 | | G | H | + |
| | | GENERATOR TORQUE SENSOR CIRCUIT RANGE / PERFORMANCE | G | G | G | \Box | _ |
| | | HYBRID / EV BATTERY POWER OFF CIRCUIT | <u> </u> | | G | | |
| | | HYBRID / EV BATTERY POWER OFF CIRCUIT LOW | 十 | | G | | |
| | | DRIVE MOTOR "A" TEMPERATURE SENSOR CIRCUIT | \top | H | | \Box | Т |
| | | | | - | | - | |

| | IVE MOTOR "A" OVER TEMPERATURE | L | Ц | | | Ш | T |
|--|---|----------|----------|---|------------|-----------|---|
| | NERATOR TEMPERATURE SENSOR CIRCUIT | L | Щ | | | Ш | T |
| P0A3B GE | NERATOR OVER TEMPERATURE | | G | G | | | T |
| P0A3C DR | IVE MOTOR "A" INVERTER OVER TEMPERATURE | | | | | | T |
| P0A3E GE | NERATOR INVERTER OVER TEMPERATURE | | | | | | T |
| P0A44 DR | IVE MOTOR "A" POSITION SENSOR CIRCUIT OVERSPEED | | | | | | T |
| P0A50 GE | NERATOR POSITION SENSOR CIRCUIT OVERSPEED | | | G | | | |
| P0A59 GE | NERATOR CURRENT SENSOR CIRCUIT | | G | G | | | |
| P0A5A GE | NERATOR CURRENT SENSOR CIRCUIT RANGE / PERFORMANCE | | G | G | | | |
| P0A5B GE | NERATOR CURRENT SENSOR CIRCUIT LOW | | G | G | | | |
| P0A5C GE | NERATOR CURRENT SENSOR CIRCUIT HIGH | | G | G | | | |
| P0A78 DR | IVE MOTOR "A" INVERTER PERFORMANCE | | | | | | 7 |
| P0A7A GE | NERATOR INVERTER PERFORMANCE | | | | | | 1 |
| P0A7C MC | TOR ELECTRONICS OVER TEMPERATURE | | | G | | | |
| + + | BRID / EV BATTERY PACK STATE OF CHARGE LOW | | | | | t | - |
| | PLACE HYBRID / EV BATTERY PACK | | | | lacksquare | H | - |
| - - - - - - - - - - | BRID / EV BATTERY PACK COOLING FAN 1 CONTROL CIRCUIT / OPEN | 1 | | | | | - |
| | BRID / EV BATTERY PACK COOLING FAN 1 PERFORMANCE / STUCK OFF | - | | | | | - |
| | VOLT POWER MODULE SYSTEM VOLTAGE | | | | | H | |
| | | - | | | | \vdash | |
| | IVE MOTOR "A" PERFORMANCE | | | | - | ┝ | |
| | BRID GENERATOR PERFORMANCE | | | | | | |
| | BRID / EV BATTERY TEMPERATURE SENSOR "A" CIRCUIT LOW | | | | | Ш | |
| P0A9E HY | BRID / EV BATTERY TEMPERATURE SENSOR "A" CIRCUIT HIGH | | | | | | |
| P0AA1 HY | BRID / EV BATTERY POSITIVE CONTACTOR CIRCUIT STUCK CLOSED | | | | | Ш | |
| P0AA2 HY | BRID / EV BATTERY POSITIVE CONTACTOR CIRCUIT STUCK OPEN | | | | | | |
| P0AA4 HY | BRID / EV BATTERY NEGATIVE CONTACTOR CIRCUIT STUCK CLOSED | | | | | | |
| P0AA5 HY | BRID / EV BATTERY NEGATIVE CONTACTOR CIRCUIT STUCK OPEN | | | | | | |
| P0AA6 HY | BRID / EV BATTERY VOLTAGE SYSTEM ISOLATION FAULT | | | | | i | |
| P0AA7 HY | BRID / EV BATTERY VOLTAGE ISOLATION SENSOR CIRCUIT | | | | | | |
| P0AA9 HY | BRID / EV BATTERY VOLTAGE ISOLATION SENSOR CIRCUIT LOW | | | | | | |
| P0AAA HY | BRID / EV BATTERY VOLTAGE ISOLATION SENSOR CIRCUIT HIGH | | | | | | |
| P0AAE HY | BRID / EV BATTERY PACK AIR TEMPERATURE SENSOR "A" CIRCUIT LOW | | | | | | |
| P0AAF HY | BRID / EV BATTERY PACK AIR TEMPERATURE SENSOR "A" CIRCUIT HIGH | | | | | | |
| P0ABC HY | BRID / EV BATTERY PACK VOLTAGE SENSE "A" CIRCUIT LOW | | | | 1 | | |
| | BRID / EV BATTERY PACK VOLTAGE SENSE "A" CIRCUIT HIGH | | | | | h | |
| - - - - - - - - - - | BRID / EV BATTERY PACK CURRENT SENSOR "A" CIRCUIT RANGE / PERFORMANCE | 1 | | | | \vdash | |
| | BRID / EV BATTERY PACK CURRENT SENSOR "A" CIRCUIT LOW | | | | | \vdash | |
| | BRID / EV BATTERY PACK CURRENT SENSOR "A" CIRCUIT HIGH | - | | | | | |
| | BRID / EV BATTERY TEMPERATURE SENSOR "B" CIRCUIT LOW | - | | | | - | |
| | | - | | | | \vdash | |
| | BRID / EV BATTERY TEMPERATURE SENSOR "B" CIRCUIT HIGH | - | | | | \vdash | |
| - - - - - - - - - - | BRID / EV BATTERY TEMPERATURE SENSOR "C" CIRCUIT LOW | | | | - | \vdash | |
| | BRID / EV BATTERY TEMPERATURE SENSOR "C" CIRCUIT HIGH | - | | | - | | |
| _+ | BRID / EV BATTERY POSITIVE CONTACTOR CONTROL CIRCUIT / OPEN | | | | <u> </u> | | |
| P0ADA HY | BRID / EV BATTERY POSITIVE CONTACTOR CONTROL CIRCUIT RANGE / PERFORMANCE | | | | | | |
| - - - - - - - - - - | BRID / EV BATTERY POSITIVE CONTACTOR CONTROL CIRCUIT HIGH | <u> </u> | | | | \sqcup | |
| P0ADD HY | BRID / EV BATTERY NEGATIVE CONTACTOR CONTROL CIRCUIT / OPEN | <u> </u> | | | L | Ш | |
| P0ADE HYE | BRID / EV BATTERY NEGATIVE CONTACTOR CONTROL CIRCUIT RANGE / PERFORMANCE | L | | | L | Ш | |
| P0AE0 HY | BRID / EV BATTERY NEGATIVE CONTACTOR CONTROL CIRCUIT HIGH | L | | | L | | |
| P0AE1 HY | BRID / EV BATTERY PRECHARGE CONTACTOR CIRCUIT | | | | | LΤ | |
| P0AE5 HYE | BRID / EV BATTERY PRECHARGE CONTACTOR CONTROL CIRCUIT RANGE / PERFORMANCE | | | | | П | |
| P0AE7 HY | BRID / EV BATTERY PRECHARGE CONTACTOR CONTROL CIRCUIT HIGH | | | | Ī | П | |
| P0AEA HY | BRID / EV BATTERY TEMPERATURE SENSOR "D" CIRCUIT LOW | T | Ħ | | | \Box | |
| + + | BRID / EV BATTERY TEMPERATURE SENSOR "D" CIRCUIT HIGH | | Ħ | | T | \sqcap | |
| + + | BRID / EV BATTERY SYSTEM VOLTAGE HIGH | H | \Box | | t | \vdash | |
| | BRID / EV BATTERY PACK SENSOR MODULE | H | H | | t | \forall | |
| 1 0/11 0 111 | BRID / EV BATTERY PACK TEMPERATURE TOO LOW | 1 | \vdash | | Ͱ | \vdash | |

| | P0B0D ELECTRIC TRANSMISSION FLUID PUMP MOTOR CONTROL MODULE | T | $ \rfloor^{\! \lceil}$ | G | LT | |
|---|---|---|------------------------|-----|----------------------|---------------|
| | P0B10 HYBRID / EV BATTERY PACK CURRENT SENSOR "B" CIRCUIT LOW | | | | | Т |
| | P0B12 HYBRID / EV BATTERY PACK CURRENT SENSOR "B" CIRCUIT INTERMITTENT / ERRATI | С | | | | Т |
| | P0B1B HYBRID / EV BATTERY PACK VOLTAGE SENSE "C" CIRCUIT LOW | | | | | Т |
| | P0B1C HYBRID / EV BATTERY PACK VOLTAGE SENSE "C" CIRCUIT HIGH | | | | | Т |
| М | P0B24 HYBRID / EV BATTERY "A" VOLTAGE UNSTABLE | | | G * | | T * |
| | P0B25 HYBRID / EV BATTERY "A" VOLTAGE LOW | | | | | Т |
| | P0B36 HIGH VOLTAGE SERVICE DISCONNECT CIRCUIT HIGH | | \dagger | | | T |
| | P0B37 HIGH VOLTAGE SERVICE DISCONNECT OPEN | | \dagger | | | Т |
| | P0B3D HYBRID / EV BATTERY VOLTAGE SENSE "A" CIRCUIT LOW | | \dashv | | | T |
| | P0B3E HYBRID / EV BATTERY VOLTAGE SENSE "A" CIRCUIT HIGH | | \dagger | | H | T |
| | P0B42 HYBRID / EV BATTERY VOLTAGE SENSE "B" CIRCUIT LOW | | \dashv | | | T |
| | P0B43 HYBRID / EV BATTERY VOLTAGE SENSE "B" CIRCUIT HIGH | | + | | | |
| | P0B47 HYBRID / EV BATTERY VOLTAGE SENSE "C" CIRCUIT LOW | | + | | | <u>'</u> Т |
| | P0B47 HTBRID / EV BATTERY VOLTAGE SENSE "C" CIRCUIT HIGH | | + | | | ' T |
| | | | - | | \vdash | <u>'</u> |
| | P0B4C HYBRID / EV BATTERY VOLTAGE SENSE "D" CIRCUIT LOW | | + | | \vdash | |
| | P0B4D HYBRID / EV BATTERY VOLTAGE SENSE "D" CIRCUIT HIGH | | + | | \dashv | T |
| | P0B51 HYBRID / EV BATTERY VOLTAGE SENSE "E" CIRCUIT LOW | | + | | ${oldsymbol{arphi}}$ | T |
| | P0B52 HYBRID / EV BATTERY VOLTAGE SENSE "E" CIRCUIT HIGH | | \downarrow | | \dashv | T |
| | P0B56 HYBRID / EV BATTERY VOLTAGE SENSE "F" CIRCUIT LOW | | _ | _ | ${oldsymbol{arphi}}$ | T |
| | P0B57 HYBRID / EV BATTERY VOLTAGE SENSE "F" CIRCUIT HIGH | | \downarrow | | Н | T |
| | P0B5B HYBRID / EV BATTERY VOLTAGE SENSE "G" CIRCUIT LOW | | _ | | | Т |
| | P0B5C HYBRID / EV BATTERY VOLTAGE SENSE "G" CIRCUIT HIGH | | _ | | | Т |
| | P0B60 HYBRID / EV BATTERY VOLTAGE SENSE "H" CIRCUIT LOW | | | | | Т |
| | P0B61 HYBRID / EV BATTERY VOLTAGE SENSE "H" CIRCUIT HIGH | | | | | Т |
| | P0B65 HYBRID / EV BATTERY VOLTAGE SENSE "I" CIRCUIT LOW | | | | | Т |
| | P0B66 HYBRID / EV BATTERY VOLTAGE SENSE "I" CIRCUIT HIGH | | | | | Т |
| | P0B6A HYBRID / EV BATTERY VOLTAGE SENSE "J" CIRCUIT LOW | | | | | Т |
| | P0B6B HYBRID / EV BATTERY VOLTAGE SENSE "J" CIRCUIT HIGH | | | | | Т |
| | P0B6F HYBRID / EV BATTERY VOLTAGE SENSE "K" CIRCUIT LOW | | | | | Т |
| | P0B70 HYBRID / EV BATTERY VOLTAGE SENSE "K" CIRCUIT HIGH | | | | | Т |
| | P0B74 HYBRID / EV BATTERY VOLTAGE SENSE "L" CIRCUIT LOW | | | | | Т |
| | P0B75 HYBRID / EV BATTERY VOLTAGE SENSE "L" CIRCUIT HIGH | | | | | Т |
| | P0B79 HYBRID / EV BATTERY VOLTAGE SENSE "M" CIRCUIT LOW | | | | | Т |
| | P0B7A HYBRID / EV BATTERY VOLTAGE SENSE "M" CIRCUIT HIGH | | | | | Т |
| | P0B7E HYBRID / EV BATTERY VOLTAGE SENSE "N" CIRCUIT LOW | | | | | Т |
| | P0B7F HYBRID / EV BATTERY VOLTAGE SENSE "N" CIRCUIT HIGH | | | | | Т |
| | P0B83 HYBRID / EV BATTERY VOLTAGE SENSE "O" CIRCUIT LOW | | 1 | | | Т |
| | P0B84 HYBRID / EV BATTERY VOLTAGE SENSE "O" CIRCUIT HIGH | | † | | | Т |
| | P0B88 HYBRID / EV BATTERY VOLTAGE SENSE "P" CIRCUIT LOW | | \dagger | | H | T |
| | P0B89 HYBRID / EV BATTERY VOLTAGE SENSE "P" CIRCUIT HIGH | | + | | H | T |
| | P0B8D HYBRID / EV BATTERY VOLTAGE SENSE "Q" CIRCUIT LOW | | \dashv | | | T T |
| | P0B8E HYBRID / EV BATTERY VOLTAGE SENSE "Q" CIRCUIT HIGH | | + | | | <u> </u> |
| | P0B92 HYBRID / EV BATTERY VOLTAGE SENSE 'R' CIRCUIT LOW | | + | | | <u>'</u> |
| | | | - | | \vdash | |
| | P0B93 HYBRID / EV BATTERY VOLTAGE SENSE "R" CIRCUIT HIGH | | - | _ | | T |
| | P0B97 HYBRID / EV BATTERY VOLTAGE SENSE "S" CIRCUIT LOW | | _ | | \vdash | T |
| | P0B98 HYBRID / EV BATTERY VOLTAGE SENSE "S" CIRCUIT HIGH | | _ | | \vdash | T |
| | P0B9C HYBRID / EV BATTERY VOLTAGE SENSE "T" CIRCUIT LOW | | _ | _ | ${oldsymbol{arphi}}$ | T |
| | P0B9D HYBRID / EV BATTERY VOLTAGE SENSE "T" CIRCUIT HIGH | | \downarrow | | ${f H}$ | T |
| | P0BA1 HYBRID / EV BATTERY VOLTAGE SENSE "U" CIRCUIT LOW | | _ | | \sqcup | Т |
| | P0BA2 HYBRID / EV BATTERY VOLTAGE SENSE "U" CIRCUIT HIGH | | \perp | | Ц | Т |
| | P0BA6 HYBRID / EV BATTERY VOLTAGE SENSE "V" CIRCUIT LOW | | \downarrow | | Ц | Т |
| | P0BA7 HYBRID / EV BATTERY VOLTAGE SENSE "V" CIRCUIT HIGH | | | | Ц | Т |
| | P0BAB HYBRID / EV BATTERY VOLTAGE SENSE "W" CIRCUIT LOW | | | | | Т |
| | P0BAC HYBRID / EV BATTERY VOLTAGE SENSE "W" CIRCUIT HIGH | | | | | Т |
| | P0BB0 HYBRID / EV BATTERY VOLTAGE SENSE "X" CIRCUIT LOW | | T | | | Т |

| | | HYBRID / EV BATTERY VOLTAGE SENSE "X" CIRCUIT HIGH | | | | | | Т |
|-----|-------|---|----|---|----------|-----------|---|-----|
| | | HYBRID / EV BATTERY VOLTAGE SENSE "Y" CIRCUIT LOW | | | | | | Т |
| | P0BB6 | HYBRID / EV BATTERY VOLTAGE SENSE "Y" CIRCUIT HIGH | | | | | | Т |
| | P0BBA | HYBRID / EV BATTERY VOLTAGE SENSE "Z" CIRCUIT LOW | | | | | | Т |
| | P0BBB | HYBRID / EV BATTERY VOLTAGE SENSE "Z" CIRCUIT HIGH | | | | | | Т |
| | P0BC4 | HYBRID / EV BATTERY TEMPERATURE SENSOR "E" CIRCUIT LOW | | | | | | Т |
| | P0BC5 | HYBRID / EV BATTERY TEMPERATURE SENSOR "E" CIRCUIT HIGH | | | | | | Т |
| | P0C27 | ELECTRIC TRANSMISSION FLUID PUMP MOTOR CONTROL MODULE | | | G | | | |
| | P0C28 | ELECTRIC TRANSMISSION FLUID PUMP MOTOR CURRENT LOW | | | G | | | |
| | P0C29 | ELECTRIC TRANSMISSION FLUID PUMP MOTOR CURRENT HIGH | | | G | | | |
| | P0C2A | ELECTRIC TRANSMISSION FLUID PUMP MOTOR STALLED | | | G | | | |
| | P0C2C | ELECTRIC TRANSMISSION FLUID PUMP CONTROL MODULE FEEDBACK SIGNAL RANGE / PERFORMAN | CE | | G | | | |
| | P0C2D | ELECTRIC TRANSMISSION FLUID PUMP CONTROL MODULE FEEDBACK SIGNAL LOW | | | G | | | |
| | P0C2E | ELECTRIC TRANSMISSION FLUID PUMP CONTROL MODULE FEEDBACK SIGNAL HIGH | | | G | | | |
| W | P0C2F | INTERNAL CONTROL MODULE DRIVE MOTOR/GENERATOR-ENGINE SPEED SENSOR PERFORMANCE | | | | | | T + |
| | P0C32 | HYBRID / EV BATTERY COOLING SYSTEM PERFORMANCE | | | G | | | |
| | P1000 | OBD SYSTEMS READINESS TEST NOT COMPLETE | G | G | G | | | Т |
| | P1001 | KOER NOT ABLE TO COMPLETE, KOER ABORTED | Ī | G | G | | Т | |
| | P1008 | COMBUSTION ENGINE PRODUCING INSUFFICIENT TORQUE | T | | G | | l | |
| М | P100F | WASTEGATE CONTROL PRESSURE / BARO CORRELATION | | | G * | Ħ | | |
| М | P1011 | WASTEGATE CONTROL PRESSURE SENSOR CIRCUIT RANGE / PERFORMANCE | T | | G * | Ħ | | |
| М | | WASTEGATE CONTROL PRESSURE SENSOR CIRCUIT LOW | T | | G * | | t | |
| М | P1013 | WASTEGATE CONTROL PRESSURE SENSOR CIRCUIT HIGH | l | | G * | | | |
| | P1014 | WASTEGATE CONTROL PRESSURE SENSOR CIRCUIT INTERMITTENT / ERRATIC | | | G | | | |
| М | P1015 | WASTEGATE CONTROL PRESSURE LOWER THAN EXPECTED | l | | G * | | | |
| М | P1016 | WASTEGATE CONTROL PRESSURE HIGHER THAN EXPECTED | | | G * | | | |
| | P101A | ALTERNATIVE FUEL RAIL TEMPERATURE SENSOR "B" CIRCUIT | | | G | | | |
| М | P1048 | ALTERNATIVE FUEL DELIVERY ERROR | | | G * | | | |
| | P1100 | MASS AIR FLOW (MAF) SENSOR CIRCUIT INTERMITTENT | | | G | | | |
| | | MASS AIR FLOW (MAF) SENSOR OUT OF SELF-TEST RANGE | G | G | G | | | |
| М | | MASS AIR FLOW (MAF) SENSOR IN RANGE BUT LOWER THAN EXPECTED | | | G * | | | |
| М | | MASS AIR FLOW (MAF) SENSOR IN RANGE BUT HIGHER THAN EXPECTED | | | G * | | | |
| | | DUAL ALTERNATOR UPPER FAULT | | | | | | |
| | | DUAL ALTERNATOR LOWER FAULT | t | | | Ħ | | |
| М | | DUAL ALTERNATOR LOWER CIRCUIT | | | | | | |
| | | DUAL ALTERNATOR BATTERY LAMP CIRCUIT | l | | | | | |
| | | INTAKE AIR TEMPERATURE 2 (IAT2) CIRCUIT INTERMITTENT | l | | G | | | |
| | 1 | INTAKE AIR TEMPERATURE CIRCUIT (D/C) OPEN / SHORT | H | | G | \forall | + | |
| | | SYSTEM PASS | H | | J | \forall | + | |
| | | INTAKE AIR TEMPERATURE (IAT) CIRCUIT INTERMITTENT | H | | G | \forall | + | |
| | | INTAKE AIR TEMPERATURE CIRCUIT (L/C) OPEN / SHORT | H | | G | \forall | + | |
| М | | INTAKE AIR TEMPERATURE 2 (IAT2) CIRCUIT LOW (Super / Turbo Charged Engines) | G | G | G* | \forall | | |
| M | | INTAKE AIR TEMPERATURE 2 (IAT2) CIRCUIT HIGH (Super / Turbo Charged Engines) | _ | G | G* | \forall | - | |
| | | ENGINE COOLANT TEMPERATURE (ECT) SENSOR OUT OF SELF-TEST RANGE | _ | G | G | H | + | |
| | | ENGINE COOLANT TEMPERATURE (ECT) SENSOR CIRCUIT INTERMITTENT | Ĕ | _ | G | \forall | - | |
| М | | MANIFOLD AIR TEMPERATURE (IAT2) CIRCUIT LOW | H | | J | H | + | |
| M | | MANIFOLD AIR TEMPERATURE (IAT2) CIRCUIT HIGH | H | H | | \forall | - | |
| M | 1 | THROTTLE POSITION SENSOR "A" (TP-A) OUT OF RANGE LOW (Ratch too low) | G | G | G * | \dashv | - | |
| M | | THROTTLE POSITION SENSOR "A" (TP-A) INCONSISTENT WITH MAF / MAP SENSOR | H | ٦ | G* | \vdash | + | |
| 141 | | PEDAL POSITION SENSOR "A" (PP-A) CIRCUIT RANGE / PERFORMANCE | ┢ | | G | \vdash | + | |
| | | PEDAL POSITION SENSOR "A" (PP-A) CIRCUIT LOW | C | G | G | \vdash | + | |
| М | | | ч | u | G* | \vdash | + | |
| IVI | | THROTTLE POSITION SENSOR "A" (TP-A) IN RANGE BUT LOWER THAN EXPECTED | | _ | | \vdash | - | |
| | | PEDAL POSITION SENSOR "A" (PP-A) CIRCUIT HIGH | G | G | G G* | \vdash | - | |
| M | | THROTTLE POSITION SENSOR "A" (TP-A) IN RANGE BUT HIGHER THAN EXPECTED | | _ | G^ | \vdash | + | |
| | | THROTTLE POSITION SENSOR "A" (TP-A) OUT OF SELF-TEST RANGE | G | G | | \vdash | - | |
| | P1125 | THROTTLE POSITION SENSOR "A" (TP-A) INTERMITTENT | 1 | Ш | G | LL | | |

| | 1 _ | | | | | | |
|---|--------------|---|--------|---|----------|--|--|
| | - | THROTTLE POSITION (NARROW RANGE) SENSOR CIRCUIT | 4 | | G | igspace | _ |
| | + | EXHAUST TEMPERATURE OUT OF RANGE, 02 SENSOR TESTS NOT COMPLETED | 4 | G | | igspace | _ |
| | | UPSTREAM HO2S SENSORS SWAPPED (from bank to bank) | 4 | G | G | | |
| | _ | DOWNSTREAM HO2S SENSORS SWAPPED (from bank to bank) | 1 | G | G | igspace | |
| М | P1130 | LACK OF HO2S-11 SWITCHES - FUEL TRIM AT LIMIT (bank 1, sensor 1) | _ | | G * | Ш | |
| М | P1131 | LACK OF HO2S-11 SWITCHES - SENSOR INDICATES LEAN (bank 1, sensor 1) | | G | G * | | |
| M | P1132 | LACK OF HO2S-11 SWITCHES - SENSOR INDICATES RICH (bank 1, sensor 1) | | G | G * | Ш | |
| | P1133 | BANK 1 FUEL CONTROL SHIFTED LEAN (FAOSC) | | | G | | |
| | P1134 | BANK 1 FUEL CONTROL SHIFTED RICH (FAOSC) | | | G | | |
| | P1135 | PEDAL POSITION SENSOR "A" (PP-A) CIRCUIT INTERMITTENT | G | G | G | | |
| | P1135 | HO2S-11 HEATER CIRCUIT LOW (bank 1, sensor 1) | | | G | | |
| | P1136 | HO2S-11 HEATER CIRCUIT HIGH (bank 1, sensor 1) | | | G | | |
| | P1137 | LACK OF HO2S-12 SWITCHES - SENSOR INDICATES LEAN (bank 1, sensor 2) | | G | G | | |
| | P1138 | LACK OF HO2S-12 SWITCHES - SENSOR INDICATES RICH (bank 1, sensor 2) | | G | G | | |
| | P1139 | WATER IN FUEL INDICATOR CIRCUIT | | | | | |
| | P1140 | WATER IN FUEL CONDITION | | | | | |
| | P1141 | FUEL RESTRICTION INDICATOR CIRCUIT | | | | | |
| | P1141 | HO2S-12 HEATER CIRCUIT LOW (bank 1, sensor 2) | T | | G | | 1 |
| | _ | FUEL RESTRICTION CONDITION | 1 | П | | 厂 | 1 |
| | P1142 | HO2S-12 HEATER CIRCUIT HIGH (bank 1, sensor 2) | 1 | | G | 广 | 1 |
| | _ | LACK OF HO2S SWITCHES, HO2S-13 INDICATES LEAN (bank 1, sensor 3) | 1 | П | G | 广 | + |
| | - | LACK OF HO2S SWITCHES, HO2S-13 INDICATES RICH (bank 1, sensor 3) | T | | G | 一十 | 1 |
| | | CALCULATED TORQUE ERROR | T | | G | | Т |
| | | GENERATOR 2 CONTROL CIRCUIT | T | | | | + |
| М | - | GENERATOR 2 MONITOR CIRCUIT HIGH | + | | | | - |
| M | | LACK OF HO2S-21 SWITCHES - FUEL TRIM AT LIMIT (bank 2, sensor 1) | + | | G * | | + |
| M | - | LACK OF HO2S-21 SWITCHES - SENSOR INDICATES LEAN (bank 2, sensor 1) | + | G | G * | | + |
| M | | LACK OF HO2S-21 SWITCHES - SENSOR INDICATES RICH (bank 2, sensor 1) | ╁ | G | G * | | + |
| | | BANK 2 FUEL CONTROL SHIFTED LEAN (FAOSC) | + | ŭ | G | | + |
| | _ | BANK 2 FUEL CONTROL SHIFTED RICH (FAOSC) | ╁ | | G | \vdash | + |
| | | ALTERNATIVE FUEL CONTROL MODULE HAS ACTIVATED THE MIL | ╁ | | G | | + |
| | + | FUEL SELECT SWITCH CIRCUIT | ╁ | | G | | + |
| | - | LACK OF HO2S-22 SWITCHES - SENSOR INDICATES LEAN (bank 2, sensor 2) | + | G | <u>u</u> | | + |
| | - | LACK OF HO2S-22 SWITCHES - SENSOR INDICATES RICH (bank 2, sensor 2) | ╁ | G | | | + |
| | | | ╁ | G | | | + |
| | - | LOW FUEL LEVEL - FORCED LIMITED POWER | + | | | | _ |
| | - | THROTTLE ACTUATOR CONTROL THROTTLE BODY AIR FLOW TRIM AT MAX LIMIT | ╂ | | G | | - |
| | | FUEL RAIL PRESSURE SENSOR IN RANGE BUT LOW | ╂ | | G | | - |
| | | FUEL RAIL PRESSURE SENSOR IN RANGE BUT HIGH | + | Н | G | \vdash | + |
| | 1 | FEEDBACK A/F MIXTURE CONTROL HO2S-12 (bank 1, sensor 2) | + | H | G | \vdash | _ |
| | | ENGINE SHUT OFF SOLENOID | + | H | ^ | \vdash | _ |
| | _ | FEEDBACK A/F MIXTURE CONTROL HO2S-11 (bank 1, sensor 1) | + | H | G | \vdash | _ |
| | | ROTOR SENSOR | + | Н | | $\vdash \vdash$ | - |
| | - | ROTOR CONTROL | + | Н | | $\vdash \vdash$ | + |
| | | ROTOR CALIBRATION | _ | Ш | | \vdash | |
| | | FEEDBACK A/F MIXTURE CONTROL HO2S-21 (bank 2, sensor 1) | _ | Ш | G | \vdash | |
| | | CAM SENSOR | 1 | Ш | | igspace | |
| | | CAM CONTROL | \bot | | | igspace | |
| | | CAM CALIBRATION | | Ш | | \sqcup | <u> </u> |
| | P1177 | SYNCHRONIZATION | 1 | Ш | | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | <u> </u> |
| | P1178 | BOLTUP LIMITS | ┸ | | | Ш | |
| | P117A | ENGINE OIL OVERTEMPERATURE - FORCED LIMITED POWER | | | G | \Box | |
| | P117B | EXHAUST GAS TEMPERATURE SENSOR CORRELATION - Bank 1 | | | | $\Box \Box$ | |
| | P117F | FUEL PRESSURE REGULATOR CONTROL EXCEEDED LEARNING LIMITS | | | | | |
| | P1180 | FUEL DELIVERY SYSTEM - LOW | Ī | | G | 厂厂 | |
| | P1181 | FUEL DELIVERY SYSTEM - HIGH | 1 | | G | 厂厂 | |
| | P1182 | FUEL SHUT OFF SOLENOID CIRCUIT | T | | G | П | 1 |

| | D4400 | ENOINE OF TEMPERATURE (FOT) OFNOOR ORDOUT | - | | 0 + | | 1 |
|---|-------|--|-------------------------|---|-----|-----------------|---|
| М | 1 | ENGINE OIL TEMPERATURE (EOT) SENSOR CIRCUIT ENGINE OIL TEMPERATURE (EOT) SENSOR CIRCUIT OUT OF SELF-TEST RANGE | _ | G | G * | $\vdash \vdash$ | |
| | | | G | G | | $\vdash \vdash$ | + |
| | _ | FUEL PUMP TEMPERATURE SENSOR HIGH FUEL PUMP TEMPERATURE SENSOR LOW | + | | | \vdash | + |
| | | VARIANT SELECTION | - | | | | + |
| | | CALIBRATION MEMORY | + | | | | + |
| | 1 | PUMP SPEED SIGNAL | - | | G | | + |
| | | CALIBRATION RESISTOR OUT OF RANGE | + | | G | | + |
| | | KEY LINE VOLTAGE | + | | δ | | + |
| | | TP (CONTROLLED) CIRCUIT | 1 | | G | | + |
| | | V EXTERNAL | 1 | | σ | | + |
| | | EGR DRIVER OVER CIRCUIT | 1 | | | | + |
| | | ECM / PCM A/D CONVERTER | - | | G | | + |
| | _ | SCP HBCC CHIP FAILED TO INITIALIZE | + | | J | H | 1 |
| | | BARO SENSOR CIRCUIT | 1 | | G | | + |
| | | KEY OFF VOLTAGE HIGH | - | | 5 | | + |
| М | _ | STARTER SWITCH CIRCUIT | + | | G * | H | 1 |
| | | KEY OFF VOLTAGE LOW | + | | J | \vdash | + |
| | | MILEAGE SWITCH CIRCUIT | + | T | G | \vdash | + |
| | | PUMP ROTOR CONTROL UNDERFUELING | $^{+}$ | | 5 | \vdash | + |
| М | _ | CYLINDER 1 INJECTOR CIRCUIT OPEN / SHORTED | + | | | \vdash | + |
| M | | CYLINDER 2 INJECTOR CIRCUIT OPEN / SHORTED | + | | | | |
| М | | CYLINDER 3 INJECTOR CIRCUIT OPEN / SHORTED | + | | | | |
| М | | CYLINDER 4 INJECTOR CIRCUIT OPEN / SHORTED | + | | | | |
| М | _ | CYLINDER 5 INJECTOR CIRCUIT OPEN / SHORTED | 1 | | | | + |
| М | | CYLINDER 6 INJECTOR CIRCUIT OPEN / SHORTED | 1 | | | | + |
| М | | CYLINDER 7 INJECTOR CIRCUIT OPEN / SHORTED | 1 | | | | |
| М | _ | CYLINDER 8 INJECTOR CIRCUIT OPEN / SHORTED | | | | | + |
| М | _ | INJECTOR CONTROL PRESSURE PEAK DELTA TEST FAULT | | | | | + |
| | 1 | SECONDARY FUEL INJECTOR INSUFFICIENT FLOW, BANK 1 | | G | | | + |
| | P120B | SECONDARY FUEL INJECTOR EXCESSIVE FLOW, BANK 1 | | G | | | |
| | P120C | SECONDARY FUEL INJECTOR INSUFFICIENT FLOW, BANK 2 | | G | | | |
| | P120D | SECONDARY FUEL INJECTOR EXCESSIVE FLOW, BANK 2 | | G | | | |
| | P120F | FUEL PRESSURE REGULATOR EXCESSIVE VARIATION | | | | | |
| М | P1210 | INJECTOR CONTROL PRESSURE HIGHER THAN DESIRED (engine off) | | | | | |
| М | P1211 | INJECTOR CONTROL PRESSURE HIGHER / LOWER THAN DESIRED (engine running) | | | | | |
| | P1212 | INJECTOR CONTROL PRESSURE LOWER THAN DESIRED (engine crank or run) | | | | | |
| | P1213 | START INJECTOR CIRCUIT | | | G | \sqcap | |
| | P1214 | PEDAL POSITION SENSOR "B" (PP-B) CIRCUIT INTERMITTENT | | G | G | П | |
| | | PEDAL POSITION SENSOR "C" (PP-C) CIRCUIT LOW | | G | G | \sqcap | |
| | P1216 | PEDAL POSITION SENSOR "C" (PP-C) CIRCUIT HIGH | G | G | G | | |
| | P1217 | PEDAL POSITION SENSOR "C" (PP-C) CIRCUIT INTERMITTENT | G | G | G | П | |
| | P1218 | CID HIGH | | | | | |
| | P1219 | CID LOW | | | | | |
| | P1220 | SERIES THROTTLE CONTROL SYSTEM | G | G | G | | |
| | P1221 | TRACTION CONTROL SYSTEM | | | G | $\Box \Box$ | |
| | | PEDAL POSITION SENSOR "B" (PP-B) CIRCUIT LOW | G | G | G | Ш | |
| | P1222 | TRACTION CONTROL OUTPUT CIRCUIT | | | G | | |
| | P1223 | PEDAL POSITION SENSOR "B" (PP-B) CIRCUIT HIGH | G | G | G | Ш | |
| | P1224 | THROTTLE POSITION SENSOR "B" (TP-B) OUT OF SELF-TEST RANGE | G | G | | Ш | |
| | P1226 | CONTROL SLEEVE SENSOR CIRCUIT | $oldsymbol{\mathbb{I}}$ | | G | | |
| M | P1227 | WASTGATE FAILED CLOSED (Over Pressure) | | | G * | | |
| M | P1228 | WASTGATE FAILED OPEN (Under Pressure) | | | G * | Ш | |
| | P1229 | CHARGE AIR COOLER (CAC) PUMP DRIVER | G | G | G | $\Box \Box$ | |
| | P1230 | FUEL PUMP LOW SPEED MALFUNCTION [VLCM] | G | | G | | |
| - | P1231 | FUEL PUMP SECONDARY CIRCUIT LOW, HIGH SPEED [VLCM] | G | | G | | |

| | T = 1 | Fa | | | | | |
|-------------|-------|---|---|----------|-----|-----------------|-----------|
| | | FUEL PUMP SPEED PRIMARY CIRCUIT (Two Speed Fuel Pump) | _ | G | G | \sqcup | + |
| М | | FUEL PUMP DRIVER MODULE DISABLED OR OFF LINE (Fuel Pump Driver Module) | G | _ | G* | | |
| М | | FUEL PUMP DRIVER MODULE DISABLED OR OFF LINE (Fuel Pump Driver Module) | G | | G* | | |
| М | | FUEL PUMP CONTROL OUT OF RANGE (Fuel Pump Driver Module / VLCM) | G | G | G* | | + |
| М | | FUEL PUMP CONTROL OUT OF RANGE (Fuel Pump Driver Module) | | G | G * | | |
| М | | FUEL PUMP SECONDARY CIRCUIT (Fuel Pump Driver Module) | G | G | G* | | + |
| М | | FUEL PUMP SECONDARY CIRCUIT (Fuel Pump Driver Module) | | G | G* | | + |
| | | SPEED FUEL PUMP POSITIVE FEED | | | G | | + |
| | | COLD START TURBOCHARGER PROTECTION - FORCED LIMITED POWER | | | | <u> </u> | + |
| М | | SECOND FUEL PUMP FAULT OR GROUND FAULT | | | G * | <u> </u> | + |
| | | ALTERNATOR LOAD HIGH INPUT | | G | G | <u> </u> | + |
| | | ALTERNATOR LOAD LOW INPUT | | G | G | <u> </u> | 1 |
| <u> </u> | | ALTERNATOR LOAD INPUT | - | G | G | <u> </u> | - |
| M | | TURBO BOOST PRESSURE LOW | - | | | <u> </u> | - |
| M | | TURBO BOOST PRESSURE NOT DETECTED | - | | G | <u> </u> | - |
| М | | WASTEGATE CONTROL VALVE PERFORMANCE | - | | • | $\vdash \vdash$ | _ |
| | | FUEL PRESSURE REGULATOR CONTROL SOLENOID | - | | G | $\vdash \vdash$ | _ |
| | | AIR MIXTURE SOLENOID CIRCUIT | + | \vdash | G | $\vdash \vdash$ | + |
| | | PEDAL CORRELATION PDS1 AND LPDS HIGH | + | H | | $\vdash \vdash$ | + |
| | | PEDAL CORRELATION PDS1 AND LPDS LOW | + | H | | $\vdash \vdash$ | + |
| | | PEDAL CORRELATION PDS2 AND LPDS HIGH PEDAL CORRELATION PDS2 AND LPDS LOW | + | H | | $\vdash \vdash$ | + |
| | | PEDAL CORRELATION PDS2 AND LPDS LOW PEDAL CORRELATION PDS1 AND HPDS | + | H | | $\vdash \vdash$ | + |
| | | PEDAL CORRELATION PDS1 AND HPDS PEDAL CORRELATION PDS2 AND HPDS | 1 | | | - | + |
| | | | - | | | $\vdash \vdash$ | + |
| | | PEDAL CORRELATION PDS1 AND PDS2 THEFT DETECTED, VEHICLE IMMOBILIZED | ┢ | | G | <u> </u> | + |
| М | | CYLINDER #1 - HIGH TO LOW SIDE SHORT | G | G | G* | <u> </u> | + |
| M | | CYLINDER #2 - HIGH TO LOW SIDE SHORT | | G | G* | - | + |
| M | | CYLINDER #3 - HIGH TO LOW SIDE SHORT | _ | G | G* | | + |
| M | | CYLINDER #4 - HIGH TO LOW SIDE SHORT | | G | G* | | + |
| M | | CYLINDER #5 - HIGH TO LOW SIDE SHORT | | G | G* | - | + |
| М | | CYLINDER #6 - HIGH TO LOW SIDE SHORT | | G | G* | | + |
| М | | CYLINDER #7 - HIGH TO LOW SIDE SHORT | _ | G | G* | | + |
| М | | CYLINDER #8 - HIGH TO LOW SIDE SHORT | | G | G* | | + |
| М | | ENGINE RPM OR VEHICLE SPEED LIMITER REACHED | ď | u | G | | T * |
| М | | CYLINDER #1 - HIGH TO LOW SIDE OPEN | G | G | G* | | + • |
| М | | CYLINDER #2 - HIGH TO LOW SIDE OPEN | _ | G | G * | | |
| M | | CYLINDER #3 - HIGH TO LOW SIDE OPEN | | G | G* | $\vdash \vdash$ | + |
| M | | CYLINDER #4 - HIGH TO LOW SIDE OPEN | _ | G | G* | | + |
| M | | CYLINDER #5 - HIGH TO LOW SIDE OPEN | | G | G * | | + |
| М | | CYLINDER #6 - HIGH TO LOW SIDE OPEN | | G | G * | \vdash | + - 1 |
| M | | CYLINDER #7 - HIGH TO LOW SIDE OPEN | _ | G | G * | \vdash | + 1 |
| M | | CYLINDER #8 - HIGH TO LOW SIDE OPEN | _ | G | G * | \Box | + |
| | | CONTROL SLEEVE SENSOR CIRCUIT RANGE / PERFORMANCE | Ť | - | G | | + |
| | | ABORTED KOER - FUEL PRESSURE FAILURE | 1 | \Box | - | | + |
| | | ABORTED CAMSHAFT POSITION TIMING KOER - ENGINE OIL TEMPERATURE OUT OF RANGE | | G | | | + |
| | | MANIFOLD ABSOLUTE PRESSURE SENSOR OUT OF SELF TEST RANGE | T | G | | | + |
| М | | INJECTOR CONTROL PRESSURE (ICP) SENSOR CIRCUIT LOW | T | | | | + |
| М | | INJECTOR CONTROL PRESSURE (ICP) SENSOR CIRCUIT HIGH | T | | | | + |
| М | | INJECTOR CONTROL PRESSURE (ICP) HIGHER THAN DESIRED (engine running) | t | | | | \dagger |
| <u> </u> | | INJECTOR PRESSURE REGULATOR (IPR) CONTROL CIRCUIT | T | | | | † † |
| | | ABORTED KOER - INJECTOR CONTROL PRESSURE FAILURE | T | H | | | + |
| | | CYLINDER HEAD OVER TEMPERATURE (CHT) CONDITION | G | G | G | | 1 |
| | | FUEL PULSEWIDTH IN RANGE BUT LOWER THAN EXPECTED | Ť | | G | | + |
| | | FUEL PULSEWIDTH IN RANGE BUT HIGHER THAN EXPECTED | T | \Box | G | 一 | + |
| | | CYLINDER HEAD TEMPERATURE (CHT) SENSOR OUT OF SELF-TEST RANGE | G | G | | \vdash | + 1 |
| <u> </u> | 00 | | | | | \vdash | |

| | D4 000 | OVENIDED LIEAD TEMPEDATURE (OUT) OFNICOD ORDOUT LIIOU | | | 0 + | _ |
|---|--------|---|--------|-----------------|---------|---|
| M | | CYLINDER HEAD TEMPERATURE (CHT) SENSOR CIRCUIT HIGH | G | G | G * | _ |
| M | 1 | CYLINDER HEAD TEMPERATURE (CHT) SENSOR CIRCUIT INTERMITTENT / ERRATIC | _ | | G * | |
| M | | CYLINDER HEAD TEMPERATURE (CHT) SENSOR CIRCUIT LOW | G | G | G * | _ |
| M | | INJECTOR HIGH SIDE SHORT TO GROUND OR VBATT - (bank 1) (right) | | | | |
| М | | INJECTOR HIGH SIDE SHORT TO GROUND OR VBATT - (bank 2) (left) | _ | | | |
| | | INJECTOR HIGH SIDE OPEN - (bank 1) (right) | | | | |
| | | INJECTOR HIGH SIDE OPEN - (bank 2) (left) | | | | _ |
| M | 1 | INJECTOR MULTIPLE FAULTS - (bank 1) (right) | | | | |
| М | | INJECTOR MULTIPLE FAULTS - (bank 2) (left) | - | | | _ |
| | | INJECTOR HIGH SIDE SWITCHES SHORTED TOGETHER | - | | 0 | _ |
| | + | INJECTOR DRIVER MODULE (IDM) FAILURE | | | G G* | |
| М | | CYLINDER HEAD OVER TEMPERATURE (CHT) PROTECTION ACTIVE | | G | G " | |
| | | BOOST CALIBRATION FAULT | | | | |
| | | BOOST CALIBRATION HIGH | _ | | | _ |
| | | BOOST CALIBRATION LOW | - | | | |
| | | EXHAUST GAS RECIRCULATION (EGR) CALIBRATION FAULT | - | | | |
| | | EXHAUST GAS RECIRCULATION (EGR) CALIBRATION HIGH | + | \vdash | | _ |
| | | EXHAUST GAS RECIRCULATION (EGR) CALIBRATION LOW | \bot | \vdash | | _ |
| | | KICKDOWN RELAY PULL-IN CIRCUIT | \bot | \vdash | | _ |
| | | KICKDOWN RELAY HOLD CIRCUIT | \bot | \vdash | | |
| M | + | MISFIRE MONITOR HARDWARE - CMP MISALIGNED, CKP / CMP NOISE, PCM AICE CHIP | \bot | \vdash | G * | _ |
| M | | KNOCK SENSOR 3 CIRCUIT | - | | G * | _ |
| М | | KNOCK SENSOR 4 CIRCUIT | - | | G * | _ |
| | | ENGINE KNOCK / COMBUSTION PERFORMANCE | - | | G | _ |
| | | ENGINE KNOCK / COMBUSTION PERFORMANCE - FORCED LIMITED POWER | - | | G | _ |
| М | | IONIZATION MISFIRE DETECTION MODULE FAULT | | G | G * | _ |
| М | 1 | IONIZATION MISFIRE DETECTION MODULE COMMUNICATION FAULT | _ | G | G * | _ |
| | 1 | INJECTION PUMP TIMING ACTUATOR CIRCUIT | _ | | G | |
| М | | INJECTOR DRIVER MODULE CODES DETECTED | | | | _ |
| | | INJECTOR CIRCUIT / INJECTOR DRIVER MODULE CODES NOT RETRIEVED | | | | |
| | | INJECTOR TIMING PISTON POSITION SENSOR CIRCUIT | | | G | |
| | | INJECTOR TIMING PISTON POSITION SENSOR CIRCUIT RANGE / PERFORMANCE | | | G | _ |
| М | | TURBOCHARGER / SUPERCHARGER BOOST CONTROL "A" ELECTRICAL | | | | _ |
| М | | TURBOCHARGER / SUPERCHARGER BOOST CONTROL "A" PERFORMANCE | _ | | | _ |
| | | TURBOCHARGER / SUPERCHARGER BOOST CONTROL "A" VOLTAGE | _ | | | _ |
| | | TURBOCHARGER / SUPERCHARGER BOOST HIGH SIDE CONTROL CIRCUIT / OPEN | _ | | | |
| М | | EGR THROTTLE POSITION SENSOR MINIMUM / MAXIMUM STOP PERFORMANCE | _ | | | |
| М | | EGR POSITION SENSOR A MINIMUM / MAXIMUM STOP PERFORMANCE | - | | | _ |
| М | | CRANKSHAFT / CAMSHAFT SENSOR RANGE / PERFORMANCE | \bot | \vdash | G * | _ |
| | | THROTTLE POSITION OUTPUT CIRCUIT | \bot | \vdash | 0 + | _ |
| М | | CAMSHAFT POSITION SENSOR "B" (CMP-B) CIRCUIT | _ | \vdash | G * | _ |
| | + | CYLINDER DISCRIMINATION SIGNAL (from CMP sensor) | _ | \vdash | G | 4 |
| M | 1 | IGNITION DIAGNOSTIC MONITOR (IDM) INPUT CIRCUIT | _ | $\vdash \vdash$ | G * | 4 |
| M | 1 | IGNITION COIL "A" PRIMARY CIRCUIT | _ | $\vdash \vdash$ | G* | 4 |
| M | + | IGNITION COIL "B" PRIMARY CIRCUIT | + | H | G* | 4 |
| M | 1 | IGNITION COIL "C" PRIMARY CIRCUIT | + | H | G * | 4 |
| M | 1 | IGNITION COIL "D" PRIMARY CIRCUIT | + | H | G * | 4 |
| M | | IGNITION DIAGNOSTIC MONITOR (IDM) INDICATES ENGINE NOT TURNING | + | H | G * | 4 |
| М | | IGNITION DIAGNOSTIC MONITOR (IDM) PULSEWIDTH NOT DEFINED | + | \vdash | G * | 4 |
| | + | IGNITION DIAGNOSTIC MONITOR (IDM) SIGNAL OUT OF SELF-TEST RANGE (no CPU OK) | G | H | O + | 4 |
| M | | SPARK OUTPUT CIRCUIT (SPOUT) | + | \vdash | G * | |
| М | | IGNITION COIL PRIMARY CIRCUIT | _ | Н | G * | 4 |
| | | ENGINE TEMPERATURE LIGHT CIRCUIT | \bot | \sqcup | G | _ |
| | + | FUEL INJECTOR CONTROL MODULE SYSTEM VOLTAGE LOW | | \sqcup | | _ |
| | | FUEL INJECTOR CONTROL MODULE SYSTEM VOLTAGE HIGH | _ | Щ | | _ |
| М | P1380 | CAMSHAFT POSITION ACTUATOR CIRCUIT (bank 1) (CPC-1) | G | G | G * | |

| _ | D/CT: | OAMOUAET POOLTION THUNG OVER ARVANCER # 1 10 /070 :: | | _ 1 | | | - 1 | |
|---------------|--------|---|---|----------|-----|----------|-----|--|
| | | CAMSHAFT POSITION TIMING OVER ADVANCED (bank 1) (CPC-1) | | G | G * | | | |
| | | CAMSHAFT POSITION TIMING SOLENOID # 1 CIRCUIT | | | G | | | |
| | | CAMSHAFT POSITION TIMING OVER RETARDED (bank 1) (CPC-1) | | G | G * | | _ | |
| - | | VARIABLE VALVE TIMING SOLENOID A CIRCUIT | _ | | G | | _ | |
| - | | CAMSHAFT POSITION ACTUATOR CIRCUIT (bank 2) (CPC-2) (new P0020) | G | G | G * | | _ | |
| | | CAMSHAFT POSITION TIMING OVER ADVANCED (bank 2) (CPC-2) | | G | G* | | | |
| | | CAMSHAFT POSITION TIMING SOLENOID # 2 CIRCUIT | | | G | | _ | |
| | | CAMSHAFT POSITION TIMING OVER RETARDED (bank 2) (CPC-2) | | G | G* | | | |
| - | | GLOW PLUG CIRCUIT HIGH SIDE, LOW INPUT | | | | | | |
| - | | GLOW PLUG CONTROL MODULE SYSTEM VOLTAGE | | | | | | |
| | | TURBOCHARGER / SUPERCHARGER BOOST CONTROL "A" TEMPERATURE TOO HIGH | _ | | | | | |
| | | OCTANE ADJUST (OCTADJ) SERVICE PIN IN USE / CIRCUIT OPEN | G | | | | | |
| | | GLOW PLUG CIRCUIT LOW (bank 1) | | | | | _ | |
| - | | GLOW PLUG CIRCUIT HIGH (bank 1) | | | | | _ | |
| | | GLOW PLUG CIRCUIT LIGH (bank 2) | | | | | _ | |
| - | | GLOW PLUG CIRCUIT HIGH (bank 2) | | | | | _ | |
| | | GLOW PLUG MONITOR FAULT (bank 1) (right) | | | | | _ | |
| | | GLOW PLUG MONITOR FAULT (bank 2) (left) | _ | G | | Т | т | |
| | | SYSTEM VOLTAGE OUT OF SELF-TEST RANGE CLOW BLUG CIRCUIT HIGH SIDE HIGH INDUT | G | u | | I | ı | |
| | | GLOW PLUG CIRCUIT HIGH SIDE, HIGH INPUT DIFFERENTIAL PRESSURE FEEDBACK EGR (DPFE) CIRCUIT LOW | _ | G | G * | \vdash | | |
| | | DIFFERENTIAL PRESSURE FEEDBACK EGR (DPFE) CIRCUIT LOW DIFFERENTIAL PRESSURE FEEDBACK EGR (DPFE) CIRCUIT HIGH | | G | G* | | | |
| | | EXHAUST GAS RECIRCULATION (EGR) METERING ORIFICE RESTRICTED | G | G | G* | | | |
| - | | EXHAUST GAS RECIRCULATION VALVE POSITION SENSOR CIRCUIT | | | G | | | |
| - | | DIFFERENTIAL PRESSURE FEEDBACK (DPFE) SENSOR HOSES REVERSED | | | G* | | | |
| | | EGR TEMPERATURE (EGRT) SENSOR CIRCUIT | | | G* | | | |
| | | DIFF. PRESSURE FEEDBACK (DPFE) SENSOR UPSTREAM HOSE OFF OR PLUGGED | | | G* | | | |
| | | DIFF. PRESSURE FEEDBACK (DPFE) SENSOR DOWNSTREAM HOSE OFF OR PLUGGED | | | G* | | | |
| | | | | | G* | | | |
| - | | EXHAUST GAS RECIRCULATION (EGR) NO FLOW DETECTED (stuck closed or inoperative) EXHAUST GAS RECIRCULATION (EGR) FLOW OUT OF SELF-TEST RANGE | | G | G | | | |
| | | EGR VACUUM REGULATION (EVR.) SOLENOID CIRCUIT | G | G | G * | | | |
| | | EXHAUST GAS RECIRCULATION VALVE CIRCUIT | G | G | G | | | |
| | | AIR CLEANER INLET CONTROL CIRCUIT | G | G | G | | | |
| | | SECONDARY AIR INJECTION (AIR) INCORRECT DOWNSTREAM FLOW DETECTED | u | G | G* | | | |
| | | EXHAUST GAS RECIRCULATION (EGR) VALVE FROZEN | | u | G | | | |
| | | SECONDARY AIR INJECTION (AIR) MONITOR CIRCUIT LOW | - | G | G* | | | |
| | | SECONDARY AIR INJECTION (AIR) MONITOR CIRCUIT HIGH | _ | G | G * | | | |
| | | AIR PUMP CIRCUIT | ч | ч | G | | | |
| | | PORT AIR CONTROL | | | G | | | |
| - | | PORT AIR CONTROL PORT AIR RELIEF CIRCUIT | | \vdash | G | \vdash | + | |
| | | SPLIT AIR # 1 CIRCUIT | | | G | | | |
| | | SPLIT AIR # 2 CIRCUIT | | H | G | H | _ | |
| | | MISFIRE MONITOR DISABLED, UNABLE TO LEARN WHEEL PROFILE | | | G * | \vdash | - | |
| | | THERMOSTAT HEATER CONTROL CIRCUIT | G | G | G * | \vdash | - | |
| | | A/C EVAPORATOR AIR TEMPERATURE CIRCUIT LOW | | G | G | \vdash | - | |
| | | A/C EVAPORATOR AIR TEMPERATURE CIRCUIT HIGH | _ | G | G | H | | |
| | | FLOOR TEMP SWITCH CIRCUIT | Ť | | G | H | | |
| | | EVAPORATIVE EMISSION (EVAP) SYSTEM CONTROL LEAK DETECTED (small leak) | | H | G | H | | |
| | | EVAPORATIVE EMISSION (EVAP) SYSTEM CONTROL VALVE (low / no flow) | | H | G * | H | | |
| | | EVAPORATIVE EMISSION (EVAP) SYSTEM PURGE FLOW SENSOR CIRCUIT LOW | | | G * | | 1 | |
| | | EVAPORATIVE EMISSION (EVAP) SYSTEM PURGE FLOW SENSOR CIRCUIT HIGH | | | G * | | 1 | |
| - | | EVAPORATIVE VACUUM SOLENOID CIRCUIT | | | G | H | 1 | |
| | | EVAPORATIVE CHECK SOLENOID CIRCUIT | | H | G | H | | |
| | | EVAPORATIVE EMISSION (EVAP) SYSTEM PURGE VAPOR LINE RESTRICTED / BLOCKED | | H | G * | H | | |
| | | EVAPORATIVE EMISSION (EVAP) SYSTEM SECONDARY PURGE VAPOR LINE RESTRICTED / BLOCKED | | | G * | | | |
| M | F 144D | | | | | | | |

| | I D. 150 | ANARYS TO BUSER UR SUST TANKANOUNA | 1 | | 0 + | | | |
|-----|---|--|--------|----------|-----|-----------------|---------|---|
| M | | UNABLE TO BLEED UP FUEL TANK VACUUM | +- | | G * | igdash | \perp | |
| М | - | EVAPORATIVE EMISSION (EVAP) SYSTEM VENT CONTROL CIRCUIT | G | G | G * | | | |
| | P1452 | UNABLE TO BLEED UP FUEL TANK VACUUM | | | G | | | |
| | P1455 | EVAPORATIVE EMISSION (EVAP) SYSTEM CONTROL LEAK DETECTED (gross leak / no flow) | | | G | | | |
| | P1455 | FUEL TANK LEVEL SENSOR CIRCUIT | | | G | | | |
| | P1456 | FUEL TANK TEMPERATURE (FTT) SENSOR CIRCUIT | | | G | | | |
| | P1457 | UNABLE TO PULL FUEL TANK VACUUM | | | G | | | |
| | P1457 | PURGE SOLENOID CONTROL SYSTEM | | | G | | | |
| | P1458 | IGNITION TIMING CONTROL SOLENOID | | | G | | | |
| | P1459 | A/C RECIRCULATION SWITCH OUT OF SELF-TEST RANGE | G | G | | | | |
| | P145B | A/C DEMAND NOT ACTIVE DURING SELF-TEST | | | | | | |
| | P145E | PCV HEATER CONTROL "B" CIRCUIT | G | | | | | |
| | P1460 | WIDE OPEN THROTTLE A/C CUTOUT CIRCUIT | G | G | G | | | |
| | P1461 | A/C PRESSURE SENSOR (ACPS) CIRCUIT HIGH | G | G | G | | | |
| | P1462 | A/C PRESSURE SENSOR (ACPS) CIRCUIT LOW | G | G | G | | | |
| | P1463 | A/C PRESSURE SENSOR INSUFFICIENT PRESSURE CHANGE | | | G | | | |
| | P1464 | A/C DEMAND (ACD) OUT OF SELF-TEST RANGE | G | G | G | | | |
| | P1465 | A/C RELAY CIRCUIT | 1 | | G | | | |
| | P1466 | A/C REFRIGERANT TEMPERATURE SENSOR CIRCUIT | T | П | G | Ħ | \top | |
| | P1469 | RAPID A/C CYCLING | T | П | G | | | |
| | P1473 | FAN CIRCUIT (FC) OPEN [VLCM] | G | | G | Ħ | T | |
| | 1 | FAN CONTROL (FC) PRIMARY CIRCUIT | _ | G | G | | \top | |
| | P1475 | FAN RELAY (LOW) CIRCUIT | t | | G | | | |
| | | FAN RELAY (HIGH) CIRCUIT | T | | G | | | |
| | + | ADDITIONAL FAN RELAY CIRCUIT | G | G | G | | | |
| | | HIGH FAN CONTROL (HFC) PRIMARY CIRCUIT | | G | G | H | | |
| | + | FAN SECONDARY LOW WITH LOW FAN ON | G | | G | | | |
| | 1 | FAN SECONDARY LOW WITH HIGH FAN ON | | G | G | H | | |
| | 1 | FAN CIRCUIT SHORTED TO GROUND [VLCM] | Ť | G | G | H | | |
| | | FAN DRIVER CIRCUIT OPEN TO POWER GROUND [VLCM] | + | G | G | | | |
| | | EGRV CIRCUIT | ╁╴ | | G | \vdash | | |
| | + | EGRA CIRCUIT | + | | G | | | |
| М | + | EXHAUST GAS RECIRCULATION CHECK SOLENOID CIRCUIT | ╁╴ | | G* | \vdash | | |
| | <u> </u> | EXHAUST (muffler) BYPASS CONTROL CIRCUIT | G | G | G | | | |
| | | POSITIVE CRANKCASE VENTILATION (PCV) HEATER CONTROL CIRCUIT | _ | G | G | \vdash | | |
| | - | SECONDARY AIR RELIEF SOLENOID CIRCUIT | Ť | _ | G | \vdash | | |
| | | SECONDARY SWITCH SOLENOID CIRCUIT | + | | G | | | |
| | <u> </u> | APLSOL SOLENOID CIRCUIT | + | H | G | \vdash | + | |
| | | RCNT SOLENOID CIRCUIT | + | H | G | \vdash | + | |
| | - | SPCUT SOLENOID CIRCUIT | + | H | G | \vdash | + | |
| | + | TCSPL SOLENOID GINGGIN | + | H | G | \vdash | + | |
| М | - | EGR STEPPER MOTOR 1 CONTROL CIRCUIT LOW / HIGH | t | H | G* | $\vdash \vdash$ | + | |
| M | - | EGR STEPPER MOTOR 2 CONTROL CIRCUIT LOW / HIGH | T | H | G* | \vdash | + | |
| M | + | EGR STEPPER MOTOR 3 CONTROL CIRCUIT LOW / HIGH | + | H | G* | \vdash | + | |
| M | | EGR STEPPER MOTOR 4 CONTROL CIRCUIT LOW / HIGH | + | H | G* | \vdash | + | |
| IVI | | VEHICLE SPEED SENSOR (VSS) | + | H | G | \vdash | + | |
| | | VEHICLE SPEED SENSOR (VSS) OUT OF SELF-TEST RANGE | C | G | G | \vdash | Т | |
| O/D | | VEHICLE SPEED SENSOR (VSS) INTERMITTENT | + | u | G ^ | \vdash | + | |
| טוכ | | INVALID TEST - AUXILIARY POWER CONTROL MODULE FUNCTIONING | + | \vdash | ų, | \vdash | + | + |
| М | - | IDLE AIR CONTROL (IAC) CIRCUIT (new P0511) | _ | G | G * | \vdash | + | + |
| | | IDLE AIR CONTROL (IAC) CIRCUIT (new POSTT) IDLE AIR CONTROL (IAC) SYSTEM AT ADAPTIVE CLIP | G | G | G* | $\vdash \vdash$ | + | |
| M | + | | + | | | \vdash | + | |
| M | 1 | IDLE AIR CONTROL (IAC) UNDER SPEED ERROR | + | | G * | \vdash | + | |
| М | 1 | IDLE AIR CONTROL (IAC) UNDER SPEED ERROR | + | H | G * | $\vdash \vdash$ | + | |
| | | IDLE UP SOLENOID 1 CIRCUIT | 1 | Н | G | $\vdash \vdash$ | \perp | |
| | | IDLE UP SOLENOID 2 CIRCUIT | \bot | Н | G | lacksquare | + | |
| | P1510 | IDLE SIGNAL CIRCUIT | | | G | | \perp | |

| | 1 = | | _ | | | | |
|-----|-------|---|--------------|---|----------|--------------|-------|
| | | IDLE SWITCH (ELECTRIC CONTROL THROTTLE) CIRCUIT | | | G | | |
| | | INTAKE MANIFOLD RUNNER CONTROL STUCK CLOSED (bank 1) (vacuum IMRC) | - | | G | | |
| | | INTAKE MANIFOLD RUNNER CONTROL STUCK CLOSED (bank 2) (vacuum IMRC) | | | G | | |
| | | ELECTRIC CURRENT CIRCUIT | 1 | | G | | |
| М | | INTAKE MANIFOLD RUNNER CONTROL (IMRC) INPUT ERROR (bank 1) | | G | G * | | |
| М | | INTAKE MANIFOLD RUNNER CONTROL (IMRC) INPUT ERROR (bank 2) | | G | G * | | |
| М | | INTAKE MANIFOLD RUNNER CONTROL STUCK OPEN (bank 1) (electric IMRC) | | G | G * | | |
| | | INTAKE MANIFOLD RUNNER CONTROL STUCK CLOSED (bank 1) (electric IMRC) | | G | G | | |
| М | | INTAKE MANIFOLD RUNNER CONTROLLER PERFORMANCE | | G | G * | | |
| М | | INTAKE MANIFOLD RUNNER CONTROL (IMRC) CONTROL CIRCUIT | G | G | G * | | |
| | | VARIABLE RESONANCE INDUCTION SYSTEM SOLENOID #1 CIRCUIT | | | G | | |
| | | VARIABLE RESONANCE INDUCTION SYSTEM SOLENOID # 2 CIRCUIT | | | G | | |
| | | IVC SOLENOID CIRCUIT | | | G | | |
| | | VARIABLE INTAKE SOLENOID CIRCUIT | _ | | G | | |
| | | AIR BYPASS VALVE | | | G | | |
| | | AIR BYPASS SYSTEM | - | | G | | |
| | | BYPASS AIR SOLENOID (ACCELERATE WARM-UP) CIRCUIT | - | | G | | |
| | | SUBSIDIARY THROTTLE VALVE SOLENOID CIRCUIT | _ | | G | | |
| | | SCAIR SOLENOID CIRCUIT | 1 | | G | $oxed{oxed}$ | + |
| | | A/C CLUTCH CIRCUIT OPEN [VLCM] | G | G | G | oxdot | |
| | | INVALID TEST - ACCELERATOR PEDAL MOVEMENT | 1 | | - | | |
| | | INTAKE MANIFOLD COMMUNICATION CONTROL CIRCUIT (bank 2) | G | | G | | - |
| М | | AIR ASSISTED INJECTOR CIRCUIT | _ | | G * | | _ |
| | | RESTRAINT DEPLOYMENT INDICATOR CIRCUIT | G | G | G | - | _ |
| | | PARKING BRAKE SWITCH CIRCUIT | _ | | G * | - | 1 |
| M | | INTAKE MANIFOLD RUNNER CONTROL STUCK OPEN (bank 1) (vacuum IMRC) | _ | G | | | 1 |
| М | | INTAKE MANIFOLD RUNNER CONTROL STUCK OPEN (bank 2) (vacuum IMRC) | G | G | G* | - | + |
| | | A/C CLUTCH CIRCUIT OVER CURRENT / SHORT [VLCM] AIR BYPASS VALVE CIRCUIT | G | | G | | 1 |
| М | | PRIMARY PCM ID CIRCUIT (DUAL PCM APPLICATION) | G | G | G* | | 1 |
| IVI | | ENGINE AIR FILTER RESTRICTION | u | u | G | | + |
| | | INTAKE MANIFOLD COMMUNICATION CONTROL CIRCUIT (bank 1) | G | | G | \vdash | + |
| | | POWER STEERING PRESSURE (PSP) SENSOR OUT OF SELF-TEST RANGE | | G | G | | 1 |
| М | | CYLINDER 1 INJECTOR CIRCUIT RANGE / PERFORMANCE | \mathbf{I} | Ĕ | <u> </u> | | |
| M | | CYLINDER 2 INJECTOR CIRCUIT RANGE / PERFORMANCE | ╫ | | | | 1 |
| M | | CYLINDER 3 INJECTOR CIRCUIT RANGE / PERFORMANCE | ╫ | | | | |
| M | | CYLINDER 4 INJECTOR CIRCUIT RANGE / PERFORMANCE | ╫ | | | | 1 |
| M | | CYLINDER 5 INJECTOR CIRCUIT RANGE / PERFORMANCE | ╫ | | | | |
| M | | CYLINDER 6 INJECTOR CIRCUIT RANGE / PERFORMANCE | 1 | | | | |
| М | | CYLINDER 7 INJECTOR CIRCUIT RANGE / PERFORMANCE | 1 | | | | |
| М | P1558 | CYLINDER 8 INJECTOR CIRCUIT RANGE / PERFORMANCE | | | | | |
| | | BRAKE LINE PRESSURE SENSOR CIRCUIT | G | G | G | | |
| М | P1562 | PCM B+ VOLTAGE LOW (KAM POWER) | T | | G * | | |
| | | SPEED CONTROL COMMAND SWITCH OUT OF RANGE HIGH | G | G | G | | |
| | P1566 | SPEED CONTROL COMMAND SWITCH OUT OF RANGE LOW | T | G | G | | 1 |
| М | P1566 | TCM B+ VOLTAGE LOW | Ī | | G * | | |
| | P1567 | SPEED CONTROL OUTPUT CIRCUIT | | | G | | |
| | P1568 | SPEED CONTROL UNABLE TO HOLD SPEED | G | | | | |
| | P1569 | INTAKE MANIFOLD RUNNER CONTROL CIRCUIT LOW | | | G | | |
| | P1570 | INTAKE MANIFOLD RUNNER CONTROL CIRCUIT HIGH | | | G | | |
| | P1572 | BRAKE PEDAL SWITCH CIRCUIT | | | G | | |
| М | P1573 | THROTTLE POSITION NOT AVAILABLE | G | G | G * | | Т |
| | P1574 | THROTTLE POSITION SENSOR OUTPUTS DISAGREE | G | G | G | | |
| | P1575 | PEDAL POSITION OUT OF SELF-TEST RANGE | G | | | | |
| M W | P1576 | PEDAL POSITION NOT AVAILABLE | G | G | G * | | T * + |
| | P1577 | PEDAL POSITION SENSOR OUTPUTS DISAGREE | G | G | G | | |
| | | | | - | | | |

| М | P1580 | ELECTRONIC THROTTLE MONITOR (ETM) PCM OVERRIDE | G | G | G * | | $\overline{}$ |
|-----|----------|--|---|----------|-------|-----------------------|---------------|
| | P1581 | ELECTRONIC THROTTLE MONITOR (ETM) MALFUNCTION | G | G | G | | |
| | P1582 | ELECTRONIC THROTTLE MONITOR (ETM) DATA AVAILABLE | G | G | G | | |
| | P1583 | ELECTRONIC THROTTLE MONITOR (ETM) CRUISE DISABLEMENT | G | G | G | | |
| | P1584 | THROTTLE CONTROL (TCU) DETECTED ETB MALFUNCTION | G | G | G | | |
| М | P1585 | THROTTLE CONTROL (TCU) MALFUNCTION | G | G | G * | | |
| М | P1586 | ELECTRONIC THROTTLE TO PCM COMMUNICATION ERROR | G | G | G * | | |
| М | P1587 | THROTTLE CONTROL (TCU) MODULATED COMMAND MALFUNCTION | G | G | G * | | |
| M W | P1588 | THROTTLE CONTROL (TCU) DETECTED LOSS OF RETURN SPRING | G | G | G * + | | |
| М | P1589 | THROTTLE CONTROL (TCU) UNABLE TO CONTROL TO DESIRED THROTTLE ANGLE | G | G | G * | | |
| | P1594 | FORCED ENGINE SHUTDOWN - REMOTE START SYSTEM FAULT, NO UNATTENDED VEHICLE TIMEOUT | | | G | | |
| | P1595 | FORCED ENGINE SHUTDOWN - REMOTE START SYSTEM FAULT, TRANSMISSION RANGE NOT IN PARK | | | G | | |
| М | P1600 | LOSS OF KAM POWER, CIRCUIT OPEN | | | G | | |
| М | P1601 | ECM / TCM SERIAL COMMUNICATION ERROR | | | G * | | |
| | P1602 | IMMOBILIZER / ECM COMMUNICATION ERROR | | | G | | |
| | P1603 | EEPROM MALFUNCTION | | | G | | |
| | P1603 | ID NUMBER UNREGISTERED | | | G | | |
| | P1604 | CODE WORD UNREGISTERED | | | G | | |
| | P1605 | KEEP ALIVE MEMORY TEST FAILURE | G | | | | |
| | P1608 | PCM INTERNAL CIRCUIT | | | G | | |
| | P1609 | PCM INTERNAL CIRCUIT | | | G | | |
| | | CONTROL MODULE VEHICLE OPTIONS RECONFIGURATION ERROR | | Ш | G | | |
| | P160B | GENERATOR MISMATCH WITH VEHICLE CONFIGURATION | | | G | | |
| М | P160C | CONTROL MODULE SOFTWARE PERFORMANCE | | | | | |
| М | P160D | CONTROL MODULE INTERNAL VOLTAGE PERFORMANCE | G | G | G * | | |
| | P160E | PCM / ECM / TCM NON-VOLATILE RANDOM ACCESS MEMORY (NVRAM) ERROR | | | G | | |
| | P160F | PCM / ECM / TCM NON-VOLATILE RANDOM ACCESS MEMORY (NVRAM) PERFORMANCE | | | G | | |
| | P1610 | INTERACTIVE REPROGRAMMING CODE - REPLACE MODULE (used with P1615/17/19/20) | | | | | |
| | P1611 | INTERACTIVE REPROGRAMMING CODE - DIAGNOSE FURTHER (used with P1616/18) | | | | | |
| | | INTERACTIVE REPROGRAMMING CODE - ERASE ERROR | | | | | |
| | P1616 | INTERACTIVE REPROGRAMMING CODE - ERASE ERROR, LOW VOLTAGE | | | | | |
| | P1617 | INTERACTIVE REPROGRAMMING CODE - BLOCK PROGRAM ERROR | | | | | |
| | P1618 | INTERACTIVE REPROGRAMMING CODE - BLOCK PROGRAM ERROR, LOW VOLTAGE | | | | | |
| | P161A | INCORRECT RESPONSE FROM IMMOBILIZER CONTROL MODULE | | | G | | |
| | | IMMOBILIZER CODE WORDS DO NOT MATCH | | | G | | |
| | | IMMOBILIZER ID DOES NOT MATCH | | | G | | |
| | | IMMOBILIZER CODE WORD / ID NUMBER WRITE FAILURE | | Ш | G | oxdapsilon | |
| | | ANTI-THEFT SYSTEM | | | G | oxdot | |
| | | FAN DRIVER CIRCUIT OPEN TO POWER B+ [VLCM] | | G | | oxdapsilon | \bot |
| | | A/C CIRCUIT OPEN TO POWER B+ [VLCM] | G | \sqcup | G | oxdot | |
| | - | MODULE SUPPLY VOLTAGE OUT OF RANGE | _ | Ш | | $\sqcup \!\!\! \perp$ | Т |
| W | | INTERNAL CONTROL MODULE CRUISE CONTROL PERFORMANCE | _ | Ш | G + | $\sqcup \!\!\! \perp$ | \bot |
| W | | INTERNAL CONTROL MODULE PTO CONTROL PERFORMANCE | _ | Ш | | $\sqcup \!\!\! \perp$ | \bot |
| | | STARTER MOTOR DISABLED - ENGINE CRANK TIME TOO LONG | _ | Ш | G | $\sqcup \!\!\! \perp$ | \bot |
| | | ALTERNATOR REGULATOR # 1 CONTROL CIRCUIT | | Н | G | oxdapsilon | + |
| | - | ALTERNATOR REGULATOR # 2 CONTROL CIRCUIT | Ļ | | G | \vdash | |
| М | | KEEP ALIVE POWER VOLTAGE TOO LOW | G | G | G * | $\vdash \vdash$ | |
| | 1 | GENERATOR CONTROL SYSTEM - OVER CHARGE | _ | \sqcup | G | $\vdash \vdash$ | |
| М | | DATA OUTPUT LINK CIRCUIT | | \sqcup | | \vdash | 4 |
| | | GENERATOR CONTROL SYSTEM - NO CHARGE | | Н | G | \vdash | + |
| M | | TIRE / AXLE OUT OF ACCEPTABLE RANGE | Ļ | \sqcup | G * | $\vdash \vdash$ | T * |
| M | | INDUCTIVE SIGNATURE CHIP COMMUNICATION ERROR | G | Н | G * | \vdash | T * |
| М | - | VEHICLE ID BLOCK CORRUPTED, NOT PROGRAMMED | | Н | G * | \vdash | + |
| | - | GENERATOR "B" CONTROL CIRCUIT | | Н | | \vdash | + |
| | | GENERATOR "B" FIELD TERMINAL CIRCUIT | _ | \sqcup | | $\vdash \vdash$ | |
| | P163C | GENERATOR "B" FIELD TERMINAL CIRCUIT LOW | | Ш | | Ш | |

| | I | | | 1 | | | | |
|----------|-------|--|--------------|---|-------|---|------------------|-------|
| | | GENERATOR "B" FIELD TERMINAL CIRCUIT HIGH | _ | | | | | |
| M | | TRANSMISSION CONTROL MODULE PROGRAMMING ERROR | _ | | G * | | | T * |
| M | P163F | TRANSMISSION ID BLOCK CORRUPTED, NOT PROGRAMMED | | | G * | | | T * |
| M | | POWERTRAIN DTC's AVAILABLE IN ANOTHER CONTROL MODULE (Ref. Pid 0946) | | | G * | | | |
| М | | CAN LINK CIRCUIT | _ | G | G * | | Ш | |
| М | P1643 | CAN LINK ENGINE CONTROL MODULE / TRANS. CONTROL MODULE CIRCUIT/NETWORK | G | G | G * | | Ш | |
| | P1645 | FUEL PUMP RESISTOR SWITCH CIRCUIT | | | G | | Ш | |
| | | LINEAR O2 SENSOR CONTROL CHIP (Bank 1) | | G | G | | Ш | |
| | | LINEAR O2 SENSOR CONTROL CHIP (Bank 2) | G | G | G | | | |
| | | FUEL INJECTOR PUMP MODULE | | | G | | | |
| | | O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT PERFORMANCE (BANK 1 SENSOR 1) | _ | G | G | | | |
| | | O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT PERFORMANCE (BANK 2 SENSOR 1) | G | G | G | | | |
| | | ALL WHEEL DRIVE ID BLOCK CORRUPTED, NOT PROGRAMMED | | | | | | |
| | | POWER STEERING PRESSURE (PSP) SWITCH OUT OF SELF-TEST RANGE | G | G | G | | | |
| | | POWER STEERING PRESSURE (PSP) SWITCH INPUT | | | G | | | |
| | | IDLE AIR CONTROL MONITOR DISABLED BY PSPS FAILED ON | - | | G | | Ш | |
| М | | CAN LINK PCM / PCM CIRCUIT / NETWORK | - | G | G * | | Щ | |
| M W | | CAN LINK CHIP MALFUNCTION | G | G | G * | | Щ | T + |
| | | PCM / ECM / TCM VEHICLE OPTIONS ERROR | ┺ | 1 | G | | ${f ar{\sqcup}}$ | |
| | | OUTPUT CIRCUIT CHECK (OCC) CIRCUIT HIGH | \bot | | | | Щ | |
| | | OUTPUT CIRCUIT CHECK (OCC) CIRCUIT LOW | 1 | 1 | | | ${igspace}$ | |
| | | EDU_EN OUTPUT CIRCUIT | 1 | 1 | | | ${igspace}$ | |
| | | FUEL DEMAND COMMAND SIGNAL (FDCS) OUTPUT CIRCUIT | - | | | | | |
| | | CYLINDER ID CIRCUIT | - | | | | | |
| | | PCM / IDM COMMUNICATIONS ERROR | - | | | | | |
| M | | ELECTRONIC FEEDBACK SIGNAL NOT DETECTED | 1 | | C * . | | | |
| M W | | CONTROL MODULE SOFTWARE CORRUPTED LOW OIL PRESSURE LAMP CONTROL CIRCUIT | + | | G*+ | | | |
| | | NON-OEM CALIBRATION DETECTED | - | | | | | |
| | | METERING OIL PUMP FAILURE | - | | G | | | |
| | | METERING OIL PUMP FAILURE | ╂ | | G | | H | |
| | | METERING OIL PUMP FAILURE | 1 | | G | | | |
| | | METERING OIL PUMP TEMPERATURE SENSOR CIRCUIT | \mathbf{I} | | G | | | |
| - | | METERING OIL PUMP POSITION SENSOR CIRCUIT | 1 | | G | | | |
| - | | METERING OIL PUMP STEPPING MOTOR CONT. CIRCUIT | 1 | | G | | | |
| - | | METERING OIL PUMP STEPPING MOTOR CONT. CIRCUIT | 1 | | G | | | |
| - | | METERING OIL PUMP STEPPING MOTOR CONT. CIRCUIT | 1 | | G | | | |
| | | METERING OIL PUMP STEPPING MOTOR CONT. CIRCUIT | T | H | G | | \vdash | |
| | | OIL PRESSURE CONTROL SOLENOID CIRCUIT | T | | G | | H | |
| М | | WASTEGATE SOLENOID CIRCUIT | 1 | 1 | G | | | |
| | P1691 | TURBO PRESSURE CONTROL SOLENOID CIRCUIT | 1 | 1 | G | | | |
| | | TURBO CONTROL SOLENOID CIRCUIT | T | | G | | | |
| | P1693 | TURBO CHARGE CONTROL CIRCUIT | Ī | | G | | | |
| | P1694 | TURBO CHARGE RELIEF CIRCUIT | | | G | | П | |
| | P1698 | COLD START FUEL PUMP PRIMARY CIRCUIT / OPEN | G | G | G | | | |
| | P169D | COLD START FUEL PUMP SECONDARY CIRCUIT LOW | G | G | G | | | |
| | P169E | COLD START FUEL PUMP SECONDARY CIRCUIT HIGH | G | G | G | | | |
| M O/D W | P1700 | TRANSMISSION INDETERMINATE FAILURE (failed to neutral) | | | G * ^ | | | T * + |
| W | P1701 | REVERSE ENGAGEMENT ERROR | | | G | | Ш | T + |
| W O/D | P1702 | TRANSMISSION RANGE SENSOR CIRCUIT INTERMITTENT | G | _ | G + ^ | | Ш | |
| | | BRAKE SWITCH OUT OF SELF-TEST RANGE | _ | G | G | | Ш | |
| | P1704 | TRANSMISSION RANGE CKT. NOT INDICATING PARK / NEUTRAL DURING SELF-TEST | G | - | | | Ш | |
| | P1705 | TRANSMISSION RANGE CKT. NOT INDICATING PARK / NEUTRAL DURING SELF-TEST | G | G | G | Т | Т | |
| O/D | P1706 | HIGH VEHICLE SPEED OBSERVED IN PARK | | | G | | Ш | |
| | | TRANSFER CASE NUETRAL or PARK NEUTRAL INDICATION CIRCUIT | G | G | G | | Ш | |
| <u> </u> | P1708 | CLUTCH SWITCH CIRCUIT | | | G | | Ш | |

| | 1 | | | | | | |
|---------|-------|---|---|----------|---------|-----------------|--|
| | | PARK NEUTRAL POSITION (PNP) SWITCH OUT OF SELF-TEST RANGE | G | | G | | |
| М | P170C | CLUTCH "A" ENGAGEMENT TIME PERFORMANCE | | | | | T * |
| М | P170D | CLUTCH "B" ENGAGEMENT TIME PERFORMANCE | | | | | T * |
| | P170E | CLUTCH DELIVERED TORQUE PERFORMANCE | | | | | Т |
| | P170F | CLUTCH PRESSURE RELEASE VALVE FAILED | | | | | Т |
| М | P1710 | TRANSMISSION CONTROL MODULE SOLENOID / INTERNAL GROUND CIRCUIT | G | G | G | | T * |
| | P1711 | TRANSMISSION FLUID TEMPERATURE (TFT) SENSOR OUT OF SELF-TEST RANGE | G | G | | | |
| W | P1712 | TRANSMISSION TORQUE REDUCTION REQUEST SIGNAL | | | G + | | |
| O/D | P1713 | TRANSMISSION FLUID TEMPERATURE SENSOR IN RANGE FAILURE [< 50 Deg. F.] | | | G ^ | | |
| М | P1714 | SHIFT SOLENOID "A" INDUCTIVE SIGNATURE | | | G * | | |
| М | P1715 | SHIFT SOLENOID "B" INDUCTIVE SIGNATURE | | | G * | | |
| М | P1716 | SHIFT SOLENOID "C" INDUCTIVE SIGNATURE | | | G * | | |
| М | P1717 | SHIFT SOLENOID "D" INDUCTIVE SIGNATURE | | | G * | | |
| O/D | P1718 | TRANSMISSION FLUID TEMPERATURE SENSOR IN RANGE FAILURE [> 250 Deg. F.] | | | G ^ | | |
| М | P1719 | ENGINE TORQUE SIGNAL | | | G | | T * |
| М | P171A | SHIFT FORK "A" STUCK, MOVEMENT ON SHIFT FORK "B" | | | | | T * |
| м | + | SHIFT FORK "A" STUCK, MOVEMENT ON SHIFT FORK "C" | | | | | T * |
| М | - | SHIFT FORK "B" STUCK, MOVEMENT ON SHIFT FORK "C" | 1 | | | | T * |
| M | + | SHIFT FORK "B" STUCK, MOVEMENT ON SHIFT FORK "D" | 1 | | | \vdash | T * |
| М | | SHIFT FORK "C" STUCK, MOVEMENT ON SHIFT FORK "A" | 1 | | | \vdash | T * |
| М | | SHIFT FORK "C" STUCK, MOVEMENT ON SHIFT FORK "D" | 1 | | | \vdash | T * |
| | | VEHICLE SPEED (METER) CIRCUIT | 1 | | G | \vdash | T * |
| | | GEAR 1 INCORRECT RATIO | 1 | | G | | |
| | 1 | GEAR 2 INCORRECT RATIO | 1 | | G | | |
| | | GEAR 3 INCORRECT RATIO | 1 | | G | | |
| | | GEAR 4 INCORRECT RATIO | + | | G | | |
| | 1 | INSUFFICIENT ENGINE SPEED INCREASE DURING SELF-TEST | ╂ | | ч | | |
| | + | INSUFFICIENT ENGINE SPEED DECREASE DURING SELF-TEST | + | | | | |
| O/D | + | COAST CLUTCH SOLENOID INDUCTIVE SIGNATURE | - | | G ^ | | |
| O/D | | TRANSMISSION SLIP | 1 | | G ^ | | 1 |
| O/D | 1 | 4x4L SWITCH | ╂ | | G^ | | - |
| | 1 | | + | | G A | | T * |
| M | | SHIFT FORK "D" STUCK, MOVEMENT ON SHIFT FORK "B" SHIFT FORK "D" STUCK, MOVEMENT ON SHIFT FORK "C" | ╂ | | | | T * |
| M | + | | - | | | | T * |
| M | + | SHIFT FORK "A" / "B" DIRECTION CONTROL VALVE STUCK ON | - | | | | T * |
| M | + | SHIFT FORK "A" / "B" DIRECTION CONTROL VALVE STUCK OFF | | | | | |
| M | | SHIFT FORK "C" / "D" DIRECTION CONTROL VALVE STUCK ON | | | | | T * |
| М | | SHIFT FORK "C" / "D" DIRECTION CONTROL VALVE STUCK OFF | 1 | | | | T * |
| | | 1-2 SHIFT MALFUNCTION | - | | G | | |
| ļ | | 2-3 SHIFT MALFUNCTION | 1 | \vdash | G | $\vdash \vdash$ | <u> </u> |
| ļ | | 3-4 SHIFT MALFUNCTION | 1 | 1 | G | | <u> </u> |
| | + | FIRST GEAR SWITCH CIRCUIT FAILURE | 1 | 1 | G | | <u> </u> |
| | - | SECOND GEAR SWITCH CIRCUIT FAILURE | ┺ | | G | | ļ |
| | | LOCKUP SOLENOID | 1 | \vdash | G | $\vdash \vdash$ | <u> </u> |
| | | SHIFT TIME ERROR | 1 | | G | lacksquare | <u> </u> |
| | + | SLIP SOLENOID | 1 | | G | | <u> </u> |
| М | | TORQUE CONVERTER CLUTCH (TCC) SOLENOID INDUCTIVE SIGNATURE | 1 | | G * | | <u> </u> |
| | | TORQUE CONVERTER CLUTCH (TCC) SOLENOID CONTROL ERROR | _ | Ш | G | | ļ |
| | | TORQUE CONVERTER SOLENOID CIRCUIT OPEN | _ | \sqcup | G | | |
| М | | TORQUE CONVERTER CLUTCH (TCC) SOLENOID CIRCUIT FAILED ON | _ | \sqcup | G * | | |
| | | TORQUE CONVERTER SOLENOID CIRCUIT SHORT | | | G | | |
| O/D | P1743 | TORQUE CONVERTER CLUTCH (TCC) SOLENOID CIRCUIT FAILED ON | | | G ^ | | |
| | P1743 | TORQUE CONVERTER CLUTCH SOLENOID CIRCUIT | | | G | | |
| M W O/D | P1744 | TORQUE CONVERTER CLUTCH (TCC) SOLENOID CIRCUIT PERFORMANCE | | | G * + ^ | | |
| | P1744 | TORQUE CONVERTER CLUTCH SOLENOID CIRCUIT | | | G | | |
| | P1745 | LINE PRESSURE SOLENOID | | | G | | |
| O/D | P1746 | PRESSURE CONTROL SOLENOID "A" OPEN CIRCUIT | G | | G ^ | | |
| | | | | • | | | - |

| M O/D | P1747 | PRESSURE CONTROL SOLENOID "A" SHORT CIRCUIT | G | | G * ^ | |
|-------|-------|---|---|---|-------|----|
| O/D | | PRESSURE CONTROL SOLENOID "A" | Ť | | G | |
| | P1749 | PRESSURE CONTROL SOLENOID "A" FAILED LOW | t | | G | 1 |
| | P174E | OUTPUT SHAFT SPEED / ABS WHEEL SPEED CORRELATION | t | | G | |
| | P174F | TRACTION CONTROL ENABLE / DISABLE SWITCH LAMP CIRCUIT | T | | | |
| | P1750 | CLUTCH ADAPTIVE LEARNING NOT DONE | t | | | Т |
| O/D | P1751 | SHIFT SOLENOID "A" PERFORMANCE | t | | G ^ | |
| | P1751 | SHIFT SOLENOID "A" CIRCUIT OPEN | T | | G | 1 |
| | P1752 | SHIFT SOLENOID "A" CIRCUIT SHORT | T | | G | 1 |
| O/D | P1754 | COAST CLUTCH SOLENOID CIRCUIT | G | | G ^ | 1 |
| O/D | P1756 | SHIFT SOLENOID "B" PERFORMANCE | t | | G ^ | 1 |
| | P1756 | SHIFT SOLENOID "B" CIRCUIT OPEN | t | | G | 1 |
| | P1757 | SHIFT SOLENOID "B" CIRCUIT SHORT | T | | G | |
| | P1759 | 2-4 BRAKE FAILSAFE VALVE MALFUNCTION | t | | G | |
| | P175A | TRANSMISSION FLUID OVER TEMPERATURE - ELECTRIC TRANSMISSION FLUID PUMP DISABLED | t | | G | 1 |
| O/D | P1760 | PRESSURE CONTROL SOLENOID A SHORT CIRCUIT INTERMITTENT | T | | G ^ | 1 |
| O/D | P1761 | SHIFT SOLENOID "C" PERFORMANCE | t | | G ^ | 1 |
| М | P1762 | OVERDRIVE BAND FAILED OFF | Ī | | G * | |
| | P1763 | LOW AND REVERSE BRAKE PRESSURE SWITCH CIRCUIT | Ī | | G | |
| | P1764 | LOW AND REVERSE BRAKE FAILSAFE VALVE MALFUNCTION | | | G | |
| | P1765 | TIMING SOLENOID CIRCUIT | Ī | | G | |
| O/D | P1766 | SHIFT SOLENOID "D" PERFORMANCE | | | G ^ | |
| O/D | P1767 | TORQUE CONVERTER CLUTCH CIRCUIT | | | G ^ | |
| | P1768 | PERFORMANCE / NORMAL / WINTER MODE INPUT | G | | G | |
| | P176C | TRANSMISSION RANGE SELECTOR LOCK CONTROL ERROR | | | | Т |
| | P1770 | CLUTCH SOLENOID CIRCUIT | | | G | |
| | P1771 | THROTTLE POSITION SENSOR CIRCUIT HIGH | | | G | |
| | P1772 | THROTTLE POSITION SENSOR CIRCUIT LOW | | | G | |
| | P1773 | CAN LINK PCM / FUEL FIRED HEATER MALFUNCTION | | | | |
| | P1775 | TORQUE DOWN SIGNAL #1 CIRCUIT | | | G | |
| | P1776 | TORQUE DOWN SIGNAL #2 CIRCUIT | | | G | |
| | P1777 | TORQUE DOWN RESPONSE SIGNAL CIRCUIT | | | G | |
| | P1779 | TRANSMISSION CONTROL INDICATOR LIGHT (TCIL) CIRCUIT | G | | G | |
| | P1780 | TRANSMISSION CONTROL SWITCH (O/D CANCEL) CIRCUIT OUT OF SELF-TEST RANGE | | G | G | |
| | P1781 | 4x4L CIRCUIT OUT OF SELF-TEST RANGE | G | | | |
| | P1782 | PERFORMANCE / ECONOMY SWITCH CIRCUIT OUT OF SELF-TEST RANGE | | G | | |
| W O/D | P1783 | TRANSMISSION OVER TEMPERATURE CONDITION | | | G + ^ | Τ^ |
| | P1784 | TRANSMISSION MECHANICAL FAILURE - FIRST AND REVERSE | | | G | |
| | P1785 | TRANSMISSION MECHANICAL FAILURE - FIRST AND SECOND | | | G | |
| | P1786 | 3-2 DOWNSHIFT ERROR | | | G | |
| | P1787 | 2-1 DOWNSHIFT ERROR | | | G | |
| O/D | P1788 | PRESSURE CONTROL SOLENOID "B" OPEN CIRCUIT | G | | G ^ | |
| O/D | P1789 | PRESSURE CONTROL SOLENOID "B" SHORT CIRCUIT | G | | G ^ | |
| | | TP (MECHANICAL) CIRCUIT | | | G | |
| | P1791 | TP (ELECTRIC) CIRCUIT | | | G | |
| | P1792 | BAROMETER PRESSURE CIRCUIT | | | G | |
| | | INTAKE AIR VOLUME CIRCUIT | G | G | G | |
| | P1794 | BATTERY VOLTAGE CIRCUIT | | | G | |
| М | P1795 | INCONSISTENT CAN LEVEL | G | G | G * | |
| | P1795 | IDLE SWITCH CIRCUIT | | | G | |
| | P1796 | KICK DOWN SWITCH CIRCUIT | | | G | |
| | P1797 | CLUTCH PEDAL POSITION SWITCH / NEUTRAL SWITCH CIRCUIT | | | G | |
| | P1798 | COOLANT TEMPERATURE CIRCUIT | | | G | |
| _ | P1799 | HOLD SWITCH CIRCUIT | | | G | |
| М | P179A | CAN ECM / TURBOCHARGER BOOST CONTROL "A" ACTUATOR CIRCUIT MALFUNCTION | | Ĺ | | |
| М | P179B | CAN ECM / TURBOCHARGER BOOST CONTROL "A" ACTUATOR CIRCUIT - INVALID DATA RECEIVED | | | | |

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|-----------|---|---|---|---|---|----------|--|
| | TRANSMISSION CLUTCH INTERLOCK SAFETY SWITCH CIRCUIT FAILURE | _ | G | G | | \sqcup | |
| | TRANSMISSION CLUTCH INTERLOCK SAFETY SWITCH OPEN CIRCUIT | - | G | G | | Щ | |
| P1802 | TRANSMISSION CLUTCH INTERLOCK SAFETY SWITCH SHORT CIRCUIT TO BATTERY | G | _ | G | | Ш | |
| | TRANSMISSION CLUTCH INTERLOCK SAFETY SWITCH SHORT CIRCUIT TO GROUND | G | - | G | | Ш | |
| | 4-WHEEL DRIVE HIGH INDICATOR CIRCUIT FAILURE | G | _ | G | | Ш | |
| P1805 | 4-WHEEL DRIVE HIGH INDICATOR OPEN CIRCUIT | G | - | G | | Ш | |
| | 4-WHEEL DRIVE HIGH INDICATOR SHORT CIRCUIT TO BATTERY | G | - | G | | Ш | |
| | 4-WHEEL DRIVE HIGH INDICATOR SHORT CIRCUIT TO GROUND | G | _ | G | | Ш | |
| | 4-WHEEL DRIVE LOW INDICATOR CIRCUIT FAILURE | _ | G | G | | oxdot | |
| | 4-WHEEL DRIVE LOW INDICATOR OPEN CIRCUIT | + | G | G | | oxdot | |
| | 4-WHEEL DRIVE LOW INDICATOR SHORT CIRCUIT TO BATTERY | G | _ | G | | oxdot | |
| | 4-WHEEL DRIVE LOW INDICATOR SHORT CIRCUIT TO GROUND | G | _ | G | | oxdot | |
| | 4-WHEEL DRIVE MODE SELECT CIRCUIT FAILURE | G | _ | G | | oxdot | |
| | 4-WHEEL DRIVE MODE SELECT OPEN CIRCUIT | G | | G | | oxdot | |
| | 4-WHEEL DRIVE MODE SELECT SHORT CIRCUIT TO BATTERY | G | _ | G | | Ш | |
| P1815 | 4-WHEEL DRIVE MODE SELECT SHORT CIRCUIT TO GROUND | G | - | G | | Ш | |
| P1816 | TRANSMISSION NEUTRAL SAFETY SWITCH CIRCUIT FAILURE | G | - | G | | Ш | |
| P1817 | TRANSMISSION NEUTRAL SAFETY SWITCH OPEN CIRCUIT | G | _ | G | | Ш | |
| P1818 | TRANSMISSION NEUTRAL SAFETY SWITCH SHORT CIRCUIT TO BATTERY | G | _ | G | | Ш | |
| P1819 | TRANSMISSION NEUTRAL SAFETY SWITCH SHORT CIRCUIT TO GROUND | G | - | G | | Ш | |
| | CLUTCH CONTROL SYSTEM PERFORMANCE | _ | G | G | | Ш | |
| P1820 | TRANSFER CASE CLOCKWISE SHIFT RELAY COIL CIRCUIT FAILURE | G | _ | G | | | |
| P1821 | TRANSFER CASE CLOCKWISE SHIFT RELAY COIL OPEN CIRCUIT | G | G | G | | Ш | |
| P1822 | TRANSFER CASE CLOCKWISE SHIFT RELAY COIL SHORT CIRCUIT TO BATTERY | G | G | G | | Ш | |
| P1823 | TRANSFER CASE CLOCKWISE SHIFT RELAY COIL SHORT CIRCUIT TO GROUND | G | G | G | | Ш | |
| P1824 | 4-WHEEL DRIVE CLUTCH RELAY CIRCUIT FAILURE | G | | G | | | |
| P1825 | 4-WHEEL CIRCUIT RELAY OPEN CIRCUIT | G | | G | | Ш | |
| P1826 | 4-WHEEL DRIVE LOW CIRCUIT RELAY CIRCUIT TO BATTERY | G | G | G | | Ш | |
| P1827 | 4-WHEEL DRIVE LOW CLUTCH RELAY CIRCUIT TO GROUND | G | G | G | | Ш | |
| P1828 | TRANSFER CASE COUNTER CLOCKWISE SHIFT RELAY COIL CIRCUIT FAILURE | G | G | G | | Ш | |
| P1829 | TRANSFER CASE COUNTER CLOCKWISE SHIFT RELAY COIL OPEN CIRCUIT | _ | G | G | | Ш | |
| P182A | TRANSFER CASE FLUID TEMPERATURE SENSOR CIRCUIT | G | G | G | | Ш | |
| P182B | TRANSFER CASE FLUID TEMPERATURE SENSOR CIRCUIT RANGE / PERFORMANCE | | | G | | Ш | |
| P182C | TRANSFER CASE FLUID TEMPERATURE SENSOR CIRCUIT LOW | G | G | G | | | |
| P182D | TRANSFER CASE FLUID TEMPERATURE SENSOR CIRCUIT HIGH | G | G | G | | Ш | |
| P182E | TRANSFER CASE FLUID TEMPERATURE SENSOR CIRCUIT INTERMITTENT | G | G | G | | | |
| P1830 | TRANSFER CASE COUNTER CLOCKWISE SHIFT RELAY COIL SHORT CIRCUIT TO BATTERY | G | G | G | | | |
| P1831 | TRANSFER CASE COUNTER CLOCKWISE SHIFT RELAY COIL SHORT CIRCUIT TO GROUND | G | G | G | | | |
| P1832 | TRANSFER CASE DIFFERENTIAL LOCK-UP SOLENOID CIRCUIT FAILURE | | G | G | | | |
| P1833 | TRANSFER CASE DIFFERENTIAL LOCK-UP SOLENOID OPEN CIRCUIT | G | G | G | | | |
| P1834 | TRANSFER CASE DIFFERENTIAL LOCK-UP SOLENOID SHORT CIRCUIT TO BATTERY | G | G | G | | | |
| P1835 | TRANSFER CASE DIFFERENTIAL LOCK-UP SOLENOID SHORT CIRCUIT TO GROUND | G | G | G | | آ_ | |
| P1836 | TRANSFER CASE FRONT SHAFT SPEED SENSOR CIRCUIT FAILURE | G | G | G | | | |
| P1837 | TRANSFER CASE REAR SHAFT SPEED SENSOR CIRCUIT FAILURE | G | G | G | | | |
| P1838 | TRANSFER CASE SHIFT MOTOR CIRCUIT FAILURE | G | G | G | | | |
| P1839 | TRANSFER CASE SHIFT MOTOR OPEN CIRCUIT | G | G | G | | | |
| P183C | TRANSFER CASE COOLING FAN CONTROL CIRCUIT | G | G | G | | | |
| P1840 | TRANSFER CASE SHIFT MOTOR SHORT CIRCUIT TO BATTERY | G | G | G | | | |
| P1841 | TRANSFER CASE SHIFT MOTOR SHORT CIRCUIT TO GROUND | G | G | G | | | |
| P1842 | TRANSFER CASE DIFFERENTIAL LOCK-UP FEEDBACK SWITCH CIRCUIT FAILURE | G | G | G | | | |
| P1843 | TRANSFER CASE DIFFERENTIAL LOCK-UP FEEDBACK SWITCH OPEN CIRCUIT | G | G | G | | 一 | |
| P1844 | TRANSFER CASE DIFFERENTIAL LOCK-UP FEEDBACK SWITCH SHORT CIRCUIT TO BATTERY | G | G | G | | | |
| P1845 | TRANSFER CASE DIFFERENTIAL LOCK-UP FEEDBACK SWITCH SHORT CIRCUIT TO GROUND | G | G | G | | 一 | |
| P1846 | TRANSFER CASE CONTACT PLATE "A" CIRCUIT FAILURE | + | G | G | | | |
| | TRANSFER CASE CONTACT PLATE "A" OPEN CIRCUIT | _ | G | G | | \Box | |
| P1848 | TRANSFER CASE CONTACT PLATE "A" SHORT CIRCUIT TO BATTERY | _ | G | G | | \Box | |
| 1 1040 | THANGE ET GASE CONTACT LATE A SHOTT CIRCUIT TO BATTERT | G | u | ū | Ш | , | |

| | P1849 | TRANSFER CASE CONTACT PLATE "A" SHORT CIRCUIT TO GROUND | G | G | G | | | |
|----------|-------|--|----|----|---|----------|---|-----|
| - | - | TRANSFER CASE CONTACT PLATE "B" CIRCUIT FAILURE | - | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "B" OPEN CIRCUIT | - | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "B" SHORT CIRCUIT TO BATTERY | +- | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "B" SHORT CIRCUIT TO GROUND | _ | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "C" CIRCUIT FAILURE | _ | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "C" OPEN CIRCUIT | _ | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "C" SHORT CIRCUIT TO BATTERY | +- | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "C" SHORT CIRCUIT TO GROUND | 4— | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "D" CIRCUIT FAILURE | +- | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "D" OPEN CIRCUIT | +- | G | G | | | |
| | | DIFFERENTIAL LOCK-UP INPUT SWITCH CIRCUIT HIGH | G | - | G | | | |
| | | DIFFERENTIAL LOCK-UP INDICATOR CIRCUIT LOW | | G | G | | | |
| - | | DIFFERENTIAL LOCK-UP INDICATOR CIRCUIT HIGH | - | G | G | | | |
| - | | DIFFERENTIAL LOCK-UP CONTROL CIRCUIT PERFORMANCE | | G | G | | | |
| | | TRANSFER CASE CONTACT PLATE "D" SHORT CIRCUIT TO BATTERY | _ | G | G | | - | |
| | | TRANSFER CASE CONTACT PLATE "D" SHORT CIRCUIT TO GROUND | +- | G | G | | - | |
| <u> </u> | | TRANSFER CASE CONTACT PLATE DISHORT CIRCUIT TO GROUND TRANSFER CASE CONTACT PLATE POWER CIRCUIT FAILURE | +- | G | G | H | | |
| - | | TRANSFER CASE CONTACT PLATE POWER CIRCUIT FAILURE TRANSFER CASE CONTACT PLATE POWER OPEN CIRCUIT | _ | G | G | \vdash | - | |
| - | | TRANSFER CASE CONTACT PLATE POWER OPEN CIRCUIT TRANSFER CASE CONTACT PLATE POWER SHORT TO BATTERY | | G | G | \vdash | - | |
| - | | TRANSFER CASE CONTACT PLATE POWER SHORT TO BATTERY TRANSFER CASE CONTACT PLATE POWER SHORT TO GROUND | - | G | G | H | | |
| - | | TRANSFER CASE SYSTEM CONCERN - SERVICING REQUIRED | | G | G | H | | |
| - | | TRANSFER CASE SYSTEM CONCERN - SERVICING REQUIRED TRANSFER CASE CONTACT PLATE GENERAL CIRCUIT FAILURE | | G | G | \vdash | - | |
| | | 4-WHEEL DRIVE INDICATOR (LAMP) CIRCUIT FAILURE | | G | G | | | |
| | | | + | G | G | | | |
| М | | 4-WHEEL DRIVE INDICATOR (LAMP) CIRCUIT SHORT TO BATTERY CLUTCH ACTUATOR STUCK | G | G | G | | | T * |
| - IVI | - | DIFFERENTIAL OIL FILTER LEAKAGE | | | G | | | |
| - | | DIFFERENTIAL CONTROL MODULE - SOFTWARE INCOMPATIBILITY | | | G | | | |
| - | | MECHANICAL TRANSFER CASE 4x4 SWITCH CIRCUIT FAILURE | G | G | G | | | |
| | | MECHANICAL TRANSFER CASE 4x4 SWITCH CIRCUIT SHORT TO BATTERY | +- | G | G | | | |
| - | - | MECHANICAL 4-WHEEL DRIVE AXLE LOCK LAMP CIRCUIT FAILURE | 4— | G | G | | | |
| | | MECHANICAL 4-WHEEL DRIVE AXLE LOCK LAMP CIRCUIT SHORT TO BATTERY | +- | G | G | | | |
| | | TRANSFER CASE HALL EFFECT SENSOR POWER CIRCUIT FAILURE | +- | G | G | | | |
| | | TRANSFER CASE HALL EFFECT SENSOR POWER CIRCUIT SHORT TO BATTERY | 4— | G | G | | | |
| | | TRANSFER CASE 2-WHEEL DRIVE SOLENOID CIRCUIT FAILURE | +- | G | G | | | |
| | | TRANSFER CASE 2-WHEEL DRIVE SOLENOID CIRCUIT SHORT TO BATTERY | +- | G | G | | | |
| | | TRANSFER CASE DISENGAGED SOLENOID CIRCUIT FAILURE | G | - | G | | | |
| | | TRANSFER CASE DISENGAGED SOLENOID OPEN CIRCUIT | | G | G | | | |
| | | TRANSFER CASE CONTROL MODULE SYSTEM VOLTAGE LOW - REAR LOCKING DIFFERENTIAL DISABL | _ | Ť | G | | | |
| | | TIRE SIZE OUT OF ACCEPTABLE RANGE - AWD DISABLED / LIMITED FUNCTION | Ĺ | | G | | | |
| | - | TRANSFER CASE DISENGAGED SOLENOID SHORT TO BATTERY | G | G | G | | | |
| | | ENGINE COOLANT LEVEL SWITCH CIRCUIT | +- | G | G | | | |
| | | ENGINE COOLANT LEVEL SWITCH CIRCUIT SHORT TO GROUND | Ť | Ť | G | \vdash | 1 | |
| | | ENGINE COOLANT LEVEL SWITCH CIRCUIT | | | G | | | |
| | | ENGINE COOLANT LEVEL LAMP CIRCUIT SHORT TO GROUND | | | G | \vdash | 1 | |
| | | TRANSFER CASE DISENGAGED SOLENOID SHORT TO GROUND | G | G | G | | | |
| | | 4x4 INITIALIZATION FAILURE | | G | G | | | |
| | - | 4-WHEEL DRIVE CONTROL SOLENOID CIRCUIT FAILURE | | | G | | | |
| | - | DIFFERENTIAL OIL TEMPERATURE SENSOR CIRCUIT FAILURE | G | G | G | H | 1 | |
| | | OIL PRESSURE PUMP PERFORMANCE | G | _ | G | | | |
| | | DIFFERENTIAL OIL TEMPERATURE TOO HIGH / TOO LOW | É | | G | | | |
| | - | ALL WHEEL DRIVE CLUTCH CONTROL CIRCUIT | G | G | G | | | |
| | | ALL WHEEL DRIVE RELAY MODULE COMMUNICATION CIRCUIT | - | G | G | | | |
| | | ALL WHEEL DRIVE RELAY MODULE FEEDBACK CIRCUIT | +- | G | G | | | |
| | | OIL PRESSURE PUMP CONTROL CIRCUIT | | | G | | | |
| | P1890 | 4-WHEEL DRIVE MODE SELECT RETURN INPUT CIRCUIT FAILURE | G | G | G | | | |
| | | | - | •— | | | | |

| | D4004 | TRANSFER CACE CONTACT DUATE ORGUND RETURN OREN CIRCUIT | 1, | | | | |
|----------|-------|--|----|-----------|-----|-----------------|----------|
| | | TRANSFER CASE CONTACT PLATE GROUND RETURN OPEN CIRCUIT | (| à G | G | | |
| | - | OUTPUT SHAFT SPEED SENSOR CIRCUIT INTERMITTENT | | - | G | | |
| | - | TURBINE SHAFT SPEED SENSOR CIRCUIT INTERMITTENT | | | G | | |
| | P1902 | KICKDOWN SOLENOID RELAY CONTROL CIRCUIT (Allison) | | | | | |
| | P1903 | KICKDOWN SOLENOID CIRCUIT LOW VOLTAGE | | | | | |
| | P1904 | KICKDOWN SOLENOID CIRCUIT HIGH VOLTAGE | | | | | |
| | P1905 | CONTROL MODULE CONFIGURED FOR END-OF-LINE TEST MODE | | | | | Т |
| W | P1910 | REVERSE LAMP CONTROL CIRCUIT / OPEN | C | à | G + | | Т |
| | P1911 | REVERSE LAMP CONTROL CIRCUIT LOW | | | G | | Т |
| | P1912 | REVERSE LAMP CONTROL CIRCUIT HIGH | | | G | | Т |
| | P1919 | ENGINE COOLANT TEMPERATURE SIGNAL | | | G | | Т |
| | P1920 | ENGINE SPEED SIGNAL | | | G | | Т |
| | P1921 | TRANSMISSION RANGE SIGNAL | | | G | | Т |
| М | P1934 | VEHICLE SPEED SIGNAL | | | G * | | Т |
| | P1935 | BRAKE SWITCH / SENSOR SIGNAL | (| G | G | | |
| М | P193B | THROTTLE / PEDAL SIGNAL | | | G * | | T * |
| | | STEERING WHEEL ANGLE SIGNAL | | G | G | | |
| | | CRUISE CONTROL MULTI-FUNCTION INPUT SIGNAL | | G | G | | |
| | _ | A/C CLUTCH REQUEST SIGNAL | - | G | G | \vdash | + |
| | | VEHICLE SPEED SIGNAL INTERMITTENT | | - | G | | Т |
| | | TRANSMISSION ONE WAY CLUTCH PERFORMANCE | | + | u | \vdash | + + |
| | _ | DRIVE MOTOR A SHUTDOWN CIRCUIT | -+ | + | | \vdash | <u>'</u> |
| - | | | | - | | \vdash | |
| | - | GENERATOR SHUTDOWN CIRCUIT | | + | | \vdash | T |
| | - | DESIRED ENGINE SPEED SIGNAL | | - | | \vdash | T |
| | | VEHICLE MODE SIGNAL | | 1 | | $\vdash \vdash$ | T |
| | | INVERTER HIGH VOLTAGE PERFORMANCE | | - | | \vdash | T |
| | | GENERATOR MODE SIGNAL | | + | _ | \sqcup | T |
| | | IMMEDIATE SHUTDOWN SIGNAL "A" | | - | G | \sqcup | Т |
| | _ | HYBRID POWERTRAIN CONTROL MODULE - ENGINE DISABLED | | | G | Ш | |
| | P1A0D | HYBRID POWERTRAIN CONTROL MODULE - GENERATOR DISABLED | | | G | Ш | |
| | P1A0E | HYBRID POWERTRAIN CONTROL MODULE - MOTOR DISABLED | | | G | | |
| | P1A0F | HYBRID POWERTRAIN CONTROL MODULE - VEHICLE DISABLED | | | G | | |
| | P1A10 | HYBRID POWERTRAIN CONTROL MODULE - BATTERY DISABLED | | ╧ | G | | |
| | P1A11 | HYBRID POWERTRAIN CONTROL MODULE - ONE WAY CLUTCH DISABLED | | | G | | |
| | P1A12 | HYBRID POWERTRAIN CONTROL MODULE - GENERATOR BRAKE DISABLED | | | G | | |
| | P1A13 | HYBRID POWERTRAIN CONTROL MODULE - REGENERATIVE BRAKING DISABLED | | | G | | |
| | P1A14 | HYBRID POWERTRAIN CONTROL MODULE - TRANSMISSION DISABLED | | T | G | Ħ | |
| | 1 | IMMEDIATE SHUTDOWN SIGNAL "B" | | + | G | \Box | Т |
| | | VARIABLE VOLTAGE CONTROLLER VOLTAGE CONTROL CIRCUIT | | T | G | \vdash | |
| | | VARIABLE VOLTAGE CONTROLLER PROCESSOR | | \dagger | G | \vdash | |
| | _ | VARIABLE VOLTAGE CONTROLLER INDUCTOR TEMPERATURE SENSOR CIRCUIT | | + | G | \vdash | + |
| - | | VARIABLE VOLTAGE CONTROLLER DRIVER TEMPERATURE SENSOR CIRCUIT | + | + | G | \vdash | + |
| | | VARIABLE VOLTAGE CONTROLLER DRIVER TEMPERATURE VARIABLE VOLTAGE CONTROLLER OVER TEMPERATURE | | + | G | \vdash | + |
| М | _ | | -+ | + | G* | \vdash | + |
| IVI | | BRAKE SYSTEM CONTROL MODULE - FORCED ENGINE RUNNING | | + | | \vdash | + |
| | | HYBRID BATTERY "A" POWER SWITCHING RELAY PERFORMANCE | | + | G | \vdash | + |
| | | HYBRID BATTERY "B" POWER SWITCHING RELAY PERFORMANCE | | - | G | \vdash | |
| M | | DIESEL PARTICULATE FILTER EFFICIENCY BELOW THRESHOLD (BANK 1) | | 1 | | \vdash | 1 |
| M | 1 | INTAKE MANIFOLD RUNNER CONTROL STUCK OPEN (bank 1) | | - | G * | \sqcup | - |
| М | | INTAKE MANIFOLD RUNNER CONTROL STUCK OPEN (bank 2) | | 1 | G * | \sqcup | |
| М | _ | INTAKE MANIFOLD RUNNER CONTROL STUCK CLOSED (bank 1) | | | G * | Ш | |
| | P2007 | INTAKE MANIFOLD RUNNER CONTROL STUCK CLOSED (bank 2) | | | G | | |
| М | P2008 | INTAKE MANIFOLD RUNNER CONTROL CIRCUIT / OPEN (bank 1) | C | G G | G * | | |
| М | P2009 | INTAKE MANIFOLD RUNNER CONTROL CIRCUIT LOW (bank1) | | ╧ | G * | | |
| | P200C | PARTICULATE FILTER OVER TEMPERATURE (BANK 1) | | T | | | |
| М | P200E | CATALYST SYSTEM OVER TEMPERATURE (Bank 1) | | | | | |
| М | P2010 | INTAKE MANIFOLD RUNNER CONTROL CIRCUIT HIGH (bank1) | | | G * | | |

| _ | 1 | | | | | | | |
|--------|-------|--|----------|----|-----|---------------|---|--|
| М | P2014 | INTAKE MANIFOLD RUNNER POSITION SENSOR / SWITCH CIRCUIT (bank 1) | G | G | G * | | | |
| M | P2015 | INTAKE MANIFOLD RUNNER POSITION SENSOR / SWITCH CIRCUIT RANGE / PERFORM (bank 1) | | | G * | | | |
| М | P2016 | INTAKE MANIFOLD RUNNER POSITION SENSOR / SWITCH CIRCUIT LOW (bank 1) | | | G * | | | |
| M | P2017 | INTAKE MANIFOLD RUNNER POSITION SENSOR / SWITCH CIRCUIT HIGH (bank 1) | | | G * | | | |
| M | P2019 | INTAKE MANIFOLD RUNNER POSITION SENSOR / SWITCH CIRCUIT (bank 2) | | G | G * | | | |
| M | P2020 | INTAKE MANIFOLD RUNNER POSITION SENSOR / SWITCH CIRCUIT RANGE / PERFORM (bank 2) | G | G | G * | | | |
| M | P2025 | EVAPORATIVE EMISSIONS (EVAP) FUEL VAPOR TEMPERATURE SENSOR CIRCUIT PERFORMANCE | | G | G * | | | |
| М | P2026 | EVAPORATIVE EMISSIONS (EVAP) FUEL VAPOR TEMPERATURE SENSOR CIRCUIT LOW VOLTAGE | | G | G * | | | |
| М | P2027 | EVAPORATIVE EMISSIONS (EVAP) FUEL VAPOR TEMPERATURE SENSOR CIRCUIT HIGH VOLTAGE | | G | G * | | | |
| | P2029 | FUEL FIRED HEATER DISABLED | | | | | | |
| | P202D | REDUCTANT LEAKAGE | | | | | | |
| | P2030 | FUEL FIRED HEATER PERFORMANCE | | | | | | |
| М | P2031 | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT - BANK 1 SENSOR 1 | | | | | | |
| М | P2032 | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT LOW BANK 1 SENSOR 2 | | | | | | |
| М | P2033 | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT HIGH BANK 1 SENSOR 2 | | | | | | |
| | | REDUCTANT LEVEL SENSOR "A" CIRCUIT | | | | | | |
| | P203B | REDUCTANT LEVEL SENSOR "A" CIRCUIT RANGE / PERFORMANCE | | | | | | |
| M | | REDUCTANT LEVEL SENSOR "A" CIRCUIT LOW | | Щ | | Ш | | |
| M | | REDUCTANT LEVEL SENSOR "A" CIRCUIT HIGH | _ | Щ | | Щ | | |
| M | | REDUCTANT LEVEL TOO LOW | _ | Н | | Н | | |
| M | | REDUCTANT TEMPURATURE SENSOR "A" CIRCUIT RANGE / PERFORMANCE | | H | | Н | | |
| M | | REDUCTANT INJECTION VALVE CIRCUIT / OPEN (Bank 1 Unit 1) REDUCTANT INJECTION VALVE CIRCUIT LOW (Bank 1 Unit 1) | <u> </u> | Н | | \dashv | | |
| M | | , | | | | | | |
| M | | REDUCTANT INJECTION VALVE CIRCUIT HIGH (Bank 1 Unit 1) REDUCTANT PRESSURE SENSOR CIRCUIT RANGE / PERFORMANCE | | | | | | |
| M M | | REDUCTANT PRESSURE SENSOR CIRCUIT LOW | | | | | | |
| M | | REDUCTANT PRESSURE SENSOR CIRCUIT HIGH | | | | | | |
| M | | REDUCTANT SYSTEM PERFORMANCE (Bank 1) | | | | | | |
| M | | REDUCTANT TANK TEMPURATURE SENSOR CIRCUIT LOW | | | | | | |
| M | | REDUCTANT TANK TEMPURATURE SENSOR CIRCUIT HIGH | | | | | | |
| M | | FUEL LEVEL SENSOR "B" CIRCUIT | G | G | G * | | | |
| М | | FUEL LEVEL SENSOR "B" CIRCUIT RANGE / PERFORMANCE | | G | G * | | | |
| М | P2067 | FUEL LEVEL SENSOR "B" CIRCUIT LOW | | G | G * | | | |
| М | P2068 | FUEL LEVEL SENSOR "B" CIRCUIT HIGH | | G | G * | | | |
| | P2070 | INTAKE MANIFOLD TUNING VALVE (IMTV) STUCK OPEN (bank 1) | | G | G | | | |
| | P2071 | INTAKE MANIFOLD TUNING VALVE (IMTV) STUCK CLOSED (bank 1) | | G | G | | | |
| W | P2072 | THROTTLE ACTUATOR CONTROL SYSTEM - ICE BLOCKAGE | | | G + | | | |
| М | P2073 | MANIFOLD ABSOLUTE PRESSURE / MASS AIR FLOW - THROTTLE POSITION CORRELATION AT IDLE | | | | П | | |
| М | P2074 | MANIFOLD ABSOLUTE PRESSURE / MASS AIR FLOW - THROTTLE POSITION CORRELATION AT HIGHEF | R LC | AD | | | | |
| | P2077 | INTAKE MANIFOLD TUNING VALVE POSITION SENSOR / SWITCH CIRCUIT LOW (bank 1) | G | G | G | | | |
| | P2078 | INTAKE MANIFOLD TUNING VALVE POSITION SENSOR / SWITCH CIRCUIT HIGH (bank 1) | G | G | G | | | |
| М | P2079 | INTAKE AIR SYSTEM LEAK | | | G * | | | |
| M | P207F | REDUCTANT QUALITY PERFORMANCE | | Ш | | Щ | | |
| М | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT RANGE / PERFORMANCE BANK 1 SENSOR 1 | | Ш | | Щ | | |
| | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT INTERMITTENT BANK 1 SENSOR 1 | | Ш | | Ш | | |
| M | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT RANGE / PERFORMANCE BANK 2 SENSOR 1 | _ | | | | | |
| M | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT INTERMITTENT BANK 2 SENSOR 1 | _ | Н | | \sqcup | _ | |
| М | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT RANGE / PERFORMANCE BANK 1 SENSOR 2 | _ | Н | | ${oxed}$ | | |
| | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT INTERMITTENT BANK 1 SENSOR 2 | _ | | C + | Н | | |
| M | | (A) CAMSHAFT POSITION ACTUATOR CONTROL CIRCUIT LOW (Bank 1) | - | G | G * | \vdash | | |
| M | | (A) CAMSHAFT POSITION ACTUATOR CONTROL CIRCUIT HIGH (Bank 1) | G | G | G * | Н | | |
| M | | REDUCTANT PUMP "A" CONTROL CIRCUIT / OPEN REDUCTANT PUMP "A" PERFORMANCE / STUCK OFF | \vdash | H | | \forall | - | |
| M M | | REDUCTANT PUMP "A" PERFORMANCE / STUCK OFF REDUCTANT PUMP "A" CONTROL CIRCUIT LOW | \vdash | Н | | ${\mathbb H}$ | | |
| M | | REDUCTANT PUMP "A" CONTROL CIRCUIT LOW REDUCTANT PUMP "A" CONTROL CIRCUIT HIGH | \vdash | Н | | ${\mathbb H}$ | | |
| M | | REDUCTANT POMP A CONTROL CIRCUIT HIGH REDUCTANT INJECTION VALVE STUCK CLOSED (Bank 1 Unit 1) | \vdash | Н | | ${\mathbb H}$ | | |
| IVI | r∠u8E | HEDOCIANT INSECTION VALVE STUCK OFOSED (RSUK I AUIT I) | | Ш | | Ш | | |

| | | | | 1 1 | | | | |
|--------|-------|---|----------|----------|-------|-----------------|----------|-------------------|
| М | | "B" CAMSHAFT POSITION ACTUATOR CONTROL CIRCUIT LOW (Bank 1) | | G | G * | Ш | \bot | |
| М | | "B" CAMSHAFT POSITION ACTUATOR CONTROL CIRCUIT HIGH (Bank 1) | G | G | G* | | | |
| М | | "A" CAMSHAFT POSITION ACTUATOR CONTROL CIRCUIT LOW (Bank 2) | | | G* | | | |
| М | | "A" CAMSHAFT POSITION ACTUATOR CONTROL CIRCUIT HIGH (Bank 2) | - | | G * | Ш | 4 | |
| М | | "B" CAMSHAFT POSITION ACTUATOR CONTROL CIRCUIT LOW (Bank 2) | | | G * | | | |
| М | | "B" CAMSHAFT POSITION ACTUATOR CONTROL CIRCUIT HIGH (Bank 2) | 1 | | G * | Ш | 4 | |
| М | | POST CATALYST FUEL TRIM SYSTEM TOO LEAN (Bank 1) | 1 | G | G * | Ш | 4 | |
| М | | POST CATALYST FUEL TRIM SYSTEM TOO RICH (Bank 1) | 1 | G | G * | Ш | 4 | |
| М | | POST CATALYST FUEL TRIM SYSTEM TOO LEAN (Bank 2) | 1 | | G * | H | 4 | |
| М | | POST CATALYST FUEL TRIM SYSTEM TOO RICH (Bank 2) | 1 | | G * | H | 4 | |
| M | | REDUCTANT TANK HEATER CONTROL PERFORMANCE | 1 | | | H | 4 | |
| M | | REDUCTANT PURGE CONTROL VALVE CIRCUIT / OPEN | 1 | | | H | 4 | |
| M | | REDUCTANT PURGE CONTROL VALVE PERFORMANCE | - | | | \vdash | + | |
| M | | REDUCTANT PURGE CONTROL VALVE CIRCUIT LOW | - | | | \vdash | + | |
| M | | REDUCTANT PURGE CONTROL VALVE CIRCUIT HIGH | - | | | \vdash | + | |
| M | | REDUCTANT HEATER "A" CONTROL CIRCUIT / OPEN | + | | | \vdash | + | |
| M | | REDUCTANT HEATER "A" CONTROL PERFORMANCE | + | | | \vdash | + | |
| M | | REDUCTANT HEATER "A" CONTROL CIRCUIT LOW | \vdash | Н | | \vdash | + | \dashv |
| M | | REDUCTANT HEATER "A" CONTROL CIRCUIT HIGH | + | H | | \vdash | + | |
| M | | REDUCTANT HEATER "B" CONTROL CIRCUIT / OPEN | + | \vdash | | $\vdash \vdash$ | + | |
| M | | REDUCTANT HEATER "B" CONTROL CIRCUIT LOW | \vdash | H | | $\vdash \vdash$ | + | \dashv |
| M | | REDUCTANT HEATER "B" CONTROL CIRCUIT LOW REDUCTANT HEATER "B" CONTROL CIRCUIT HIGH | \vdash | H | | $\vdash \vdash$ | + | \longrightarrow |
| M | | | + | | | \vdash | + | |
| M | | REDUCTANT HEATER "C" CONTROL CIRCUIT / OPEN | + | | | \vdash | + | |
| M M | | REDUCTANT HEATER "C" CONTROL PERFORMANCE REDUCTANT HEATER "C" CONTROL CIRCUIT LOW | +- | | | ┝ | + | |
| M | | | +- | | | ┝ | + | |
| IVI | | REDUCTANT HEATER "C" CONTROL CIRCUIT HIGH EXHAUST GAS TEMPERATURE SENSOR 1/2 CORRELATION (BANK 1) | + | | | \vdash | + | |
| | | EXHAUST GAS TEMPERATURE SENSOR 1/3 CORRELATION (BANK 1) | 1 | | | | + | |
| | | EXHAUST GAS TEMPERATURE SENSOR 2/3 CORRELATION (BANK 1) | ╁ | | | \vdash | + | |
| м | | REDUCTANT PRESSURE TOO LOW | ╁ | | | \vdash | + | |
| M | | REDUCTANT PRESSURE TOO HIGH | + | | | | + | _ |
| M | | SCR NOx CATALYST EFFICIENCY BELOW THRESHOLD (Bank 1) | + | | | | + | _ |
| M W | | THROTTLE ACTUATOR "A" CONTROL MOTOR CIRCUIT / OPEN | G | G | G*+ | | + | |
| M W | | THROTTLE ACTUATOR "A" CONTROL MOTOR CIRCUIT RANGE / PERFORMANCE | +- | G | | | + | |
| M | | THROTTLE ACTUATOR "A" CONTROL MOTOR CIRCUIT LOW | _ | G | G * | | + | |
| М | | THROTTLE ACTUATOR "A" CONTROL MOTOR CIRCUIT HIGH | _ | G | G * | | + | |
| M W | | THROTTLE ACTUATOR CONTROL SYSTEM - FORCED IDLE | Ť | G | G*+ | | + | - |
| M W | | THROTTLE ACTUATOR CONTROL SYSTEM - FORCED ENGINE SHUTDOWN | + | | G*+ | | + | |
| M W | | THROTTLE ACTUATOR CONTROL SYSTEM - FORCED LIMITED POWER | T | | G*+ | | \dashv | |
| M W | | THROTTLE ACTUATOR "A" CONTROL MODULE PROCESSOR | t | H | G*+ | H | + | |
| М | | THROTTLE ACTUATOR "A" CONTROL MODULE PERFORMANCE | 1 | | G * | H | \top | |
| М | | THROTTLE / PEDAL POSITION SENSOR "A" MINIMUM STOP PERFORMANCE | T | G | G*+ | H | \top | |
| M W | | THROTTLE ACTUATOR "A" CONTROL SYSTEM - FORCED LIMITED RPM | T | | G * + | H | \top | \neg |
| M W | | THROTTLE ACTUATOR "A" CONTROL SYSTEM - STUCK OPEN | T | | G * + | П | \top | \neg |
| мw | | THROTTLE ACTUATOR "A" CONTROL SYSTEM - STUCK CLOSED | T | | G * + | ΙT | \top | \neg |
| M W | P2118 | THROTTLE ACTUATOR "A" CONTROL MOTOR CURRENT RANGE / PERFORMANCE | G | G | G * + | ΙT | \top | \neg |
| M W | P2119 | THROTTLE ACTUATOR "A" CONTROL THROTTLE BODY RANGE / PERFORMANCE | G | G | G * + | П | \top | \neg |
| | P2120 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "D" CIRCUIT | Ī | | | П | \top | \neg |
| M W | P2121 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "D" CIRCUIT RANGE / PERFORMANCE | G | G | G * + | П | \top | |
| M W | P2122 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "D" CIRCUIT LOW | G | G | G * + | П | \top | |
| M W | P2123 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "D" CIRCUIT HIGH | G | G | G * + | П | \top | |
| М | P2124 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "D" CIRCUIT INTERMITTENT | G | G | G * | | | \neg |
| | P2125 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "E" CIRCUIT | | | | | | \neg |
| M W | P2126 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "E" CIRCUIT RANGE / PERFORMANCE | G | G | G * + | П | | |
| M W | P2127 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "E" CIRCUIT LOW | G | G | G * + | | | |
| | | | _ | | | | | |

| M W | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "E" CIRCUIT HIGH | | G | | $\perp \!\! \perp$ | |
|--------|--------|---|--------------|---|-------|--------------------|--|
| М | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "E" CIRCUIT INTERMITTENT | G | G | G * | \dashv | |
| | P2130 | THROTTLE / PEDAL POSITION SENSOR / SWITCH "F" CIRCUIT | | | | $oldsymbol{\perp}$ | <u> </u> |
| | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "F" CIRCUIT RANGE / PERFORMANCE | | G | G | $oldsymbol{\perp}$ | <u> </u> |
| | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "F" CIRCUIT LOW | | G | G + | $oldsymbol{\perp}$ | <u> </u> |
| M W | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "F" CIRCUIT HIGH | _ | G | G + | $\perp \perp$ | |
| | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "F" CIRCUIT INTERMITTENT | G | G | G | \vdash | |
| M W | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "A" / "B" VOLTAGE CORRELATION | _ | | G * + | \vdash | |
| | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "A" / "C" VOLTAGE CORRELATION | - | | | \vdash | |
| | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "B" / "C" VOLTAGE CORRELATION | 4 | | | \vdash | |
| M W | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "D" / "E" VOLTAGE CORRELATION | _ | G | G * + | \vdash | |
| W | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "D" / "F" VOLTAGE CORRELATION | _ | G | G+ | \vdash | |
| W | | THROTTLE / PEDAL POSITION SENSOR / SWITCH "E" / "F" VOLTAGE CORRELATION | G | G | G+ | \vdash | |
| M | | EXHAUST GAS RECIRCULIATION VENT CONTROL CIRCUIT LOW | + | | G * | \vdash | |
| M | | EXHAUST GAS RECIRCULIATION VENT CONTROL CIRCUIT HIGH | + | | G * | \vdash | |
| M | | VEHICLE SPEED / WHEEL SPEED CORRELATION | + | | | \vdash | |
| M | | VEHICLE SPEED / OUTPUT SHAFT SPEED CORRELATION | + | H | | \vdash | + |
| | | THROTTLE / PEDAL POSITION SENSOR (A) MAXIMUM STOP PERFORMANCE | _ | G | G+ | \vdash | |
| M W | | THROTTLE ACTUATOR (A) CONTROL SYSTEM - IDLE POSITION NOT LEARNED | G | G | G + | \vdash | |
| M | | SYSTEM TOO LEAN OFF IDLE - BANK 1 | + | H | G * | \vdash | + |
| M | | SYSTEM TOO RICH OFF IDLE - BANK 1 SYSTEM TOO LEAN OFF IDLE - BANK 2 | + | H | G * | \vdash | + |
| M | | SYSTEM TOO LEAN OFF IDLE - BANK 2 SYSTEM TOO RICH OFF IDLE - BANK 2 | + | | G* | \vdash | |
| M | | ENGINE COOLANT TEMPERATURE SENSOR 2 CIRCUIT | + | | G | \vdash | + |
| M M | | ENGINE COOLANT TEMPERATURE SENSOR 2 CIRCUIT RANGE / PERFORMANCE | + | | G | \vdash | + |
| M | | ENGINE COOLANT TEMPERATURE SENSOR 2 CIRCUIT HANGE / PERFORMANCE | G | G | G | \vdash | + |
| M | | ENGINE COOLANT TEMPERATURE SENSOR 2 CIRCUIT HIGH | G | _ | G | \vdash | + |
| IVI | | ENGINE COOLANT TEMPERATURE SENSOR 2 CIRCUIT INTERMITTENT / ERRATIC | _ | G | G | $\vdash \vdash$ | + |
| М | | SYSTEM TOO LEAN AT IDLE - BANK 1 | | u | G* | \vdash | + |
| M | | SYSTEM TOO RICH AT IDLE - BANK 1 | ╁ | | G* | \vdash | + |
| M | | SYSTEM TOO LEAN AT IDLE - BANK 2 | ╁ | | G* | \vdash | + |
| M | | SYSTEM TOO RICH AT IDLE - BANK 2 | + | | G* | \vdash | + |
| M | | O2 SENSOR SIGNAL BIASED / STUCK LEAN (bank 1, sensor 1) | + | G | G* | | + |
| М | | O2 SENSOR SIGNAL BIASED / STUCK RICH (bank 1, sensor 1) | + | G | G * | | + |
| M | | O2 SENSOR SIGNAL BIASED / STUCK LEAN (bank 2, sensor 1) | + | G | G* | | + |
| M | | O2 SENSOR SIGNAL BIASED / STUCK RICH (bank 2, sensor 1) | + | G | G* | | + |
| | | INTAKE AIR TEMPERATURE 1 / 2 CORRELATION | ╁ | | J | | + |
| | | BANK 1 AIR-FUEL RATIO IMBALANCE | ╁ | | G * | | + |
| | | BANK 2 AIR-FUEL RATIO IMBALANCE | T | | G * | | + |
| | | REDUCTANT LEVEL SENSOR "B" CIRCUIT LOW | | | | | 1 |
| | | REDUCTANT LEVEL SENSOR "B" CIRCUIT HIGH | 1 | | | | 1 |
| | | REDUCTANT LEVEL SENSOR "C" CIRCUIT LOW | T | | | 一 | 1 |
| | | REDUCTANT LEVEL SENSOR "C" CIRCUIT HIGH | 1 | П | | \sqcap | 1 |
| М | | NOx SENSOR CIRCUIT (Bank 1 Sensor 1) | | | | | 1 |
| М | | NOx SENSOR CIRCUIT RANGE / PERFORMANCE (Bank 1 Sensor 1) | 1 | П | G | \sqcap | 1 |
| | | NOx SENSOR CIRCUIT LOW (Bank 1 Sensor 1) | G | G | G | \sqcap | 1 |
| | | NOx SENSOR CIRCUIT HIGH (Bank 1 Sensor 1) | | G | G | \sqcap | 1 |
| М | P2209 | NOx SENSOR HEATER SENSE CIRCUIT RANGE / PERFORMANCE (Bank 1 Sensor 1) | 1 | П | | \sqcap | 1 |
| М | P220A | NOx SENSOR SUPPLY VOLTAGE CIRCUIT (Bank 1 Sensor 1) | | | | | 1 |
| М | P220E | NOx SENSOR HEATER CONTROL CIRCUIT RANGE / PERFORMANCE (Bank 1 Sensor 1) | | | | \sqcap | |
| М | P2227 | BAROMETRIC PRESSURE SENSOR "A" CIRCUIT RANGE / PERFORMANCE | G | G | G * | 一 | 1 |
| М | P2228 | BAROMETRIC PRESSURE SENSOR "A" CIRCUIT LOW | _ | G | G * | 一 | 1 |
| М | P2229 | BAROMETRIC PRESSURE SENSOR "A" CIRCUIT HIGH | G | G | G * | | |
| | Daasu | BAROMETRIC PRESSURE SENSOR "A" CIRCUIT INTERMITTENT / ERRATIC | | | | \sqcap | 1 |
| | 1 2230 | | | | | | |
| M | | O2 SENSOR SIGNAL CIRCUIT SHORTED TO HEATER CIRCUIT - BANK1, SENSOR 1 | | G | G * | | |

| М | P2234 | O2 SENSOR SIGNAL CIRCUIT SHORTED TO HEATER CIRCUIT - BANK2, SENSOR 1 | | G | G * | | |
|--------|----------|---|----------|---|------------|---|--|
| М | P2235 | O2 SENSOR SIGNAL CIRCUIT SHORTED TO HEATER CIRCUIT - BANK2, SENSOR 2 | | G | G * | | |
| М | P2237 | O2 SENSOR POSITIVE CURRENT CONTROL CIRCUIT / OPEN - BANK1, SENSOR 1 | | G | G * | | |
| М | - | O2 SENSOR POSITIVE CURRENT CONTROL CIRCUIT / OPEN - BANK2, SENSOR 1 | | G | G * | | |
| М | | O2 SENSOR REFERENCE VOLTAGE CIRCUIT / OPEN - BANK1, SENSOR 1 | | G | G * | | |
| М | P2245 | O2 SENSOR REFERENCE VOLTAGE CIRCUIT LOW - BANK1, SENSOR 1 | | | G * | | |
| М | l | O2 SENSOR REFERENCE VOLTAGE CIRCUIT HIGH - BANK1, SENSOR 1 | | | G * | | |
| М | | O2 SENSOR REFERENCE VOLTAGE CIRCUIT / OPEN - BANK2, SENSOR 1 | | G | G * | | |
| М | | O2 SENSOR NEGATIVE CURRENT CONTROL CIRCUIT / OPEN - BANK1, SENSOR 1 | 1 | G | G * | | |
| М | - | O2 SENSOR NEGATIVE CURRENT CONTROL CIRCUIT / OPEN - BANK2, SENSOR 1 | 1 | G | G * | | |
| М | | SECONDARY AIR INJECTION (AIR) SYSTEM CONTROL "A" CIRCUIT LOW | _ | G | G * | | |
| М | 1 | SECONDARY AIR INJECTION (AIR) SYSTEM CONTROL "A" CIRCUIT HIGH | G | G | G * | | |
| М | | NOx SENSOR CALIBRATION MEMORY (Bank 1 Sensor 1) | 1 | | | | |
| М | | TURBO/SUPER CHARGER BOOST PRESSURE NOT DETECTED - MECHANICAL | 1 | | | | |
| М | | TURBO/SUPER CHARGER BOOST SYSTEM PERFORMANCE | 1 | | | | |
| | | WATER IN FUEL SENSOR CIRCUIT | 1 | | | | |
| | - | WATER IN FUEL CONDITION | - | | | _ | |
| M | l | O2 SENSOR SIGNAL BIASED / STUCK LEAN (bank 1, sensor 2) | 1 | G | G * | | |
| M | - | O2 SENSOR SIGNAL BIASED / STUCK RICH (bank 1, sensor 2) | 1 | G | G* | لــــــــــــــــــــــــــــــــــــــ | |
| M | | O2 SENSOR SIGNAL BIASED / STUCK LEAN (bank 2, sensor 2) | 1 | G | G * | _ | |
| M | | O2 SENSOR SIGNAL BIASED / STUCK RICH (bank 2, sensor 2) | 1 | G | G * | _ | |
| M | | O2 SENSOR SIGNAL BIASED / STUCK LEAN (bank 1, sensor 3) | 1 | G | G * | | |
| M | | O2 SENSOR SIGNAL BIASED / STUCK RICH (bank 1, sensor 3) | <u> </u> | G | G * | | |
| M | - | O2 SENSOR SIGNAL BIASED / STUCK LEAN (bank 2, sensor 3) | - | G | G * | _ | |
| М | | O2 SENSOR SIGNAL BIASED / STUCK RICH (bank 2, sensor 3) | - | G | G * | _ | |
| L | | OXYGEN SENSOR SIGNAL SWAPPED (bank 1, sensor 3 / bank 2, sensor 3) | - | G | 0.1 | _ | |
| M | | INTAKE AIR SYSTEM LEAK | - | | G * | _ | |
| M | | AIR LEAK BETWEEN THROTTLE BODY AND INTAKE VALVE | - | | G * | _ | |
| M | | INJECTOR CONTROL PRESSURE SENSOR CIRCUIT RANGE / PERFORMANCE | - | | | | |
| M | | INJECTOR CONTROL PRESSURE SENSOR CIRCUIT LOW | - | | | _ | |
| M | | INJECTOR CONTROL PRESSURE SENSOR CIRCUIT HIGH | 1 | | | _ | |
| M | | INJECTOR CONTROL PRESSURE TOO HIGH | 1 | | | _ | |
| M | | INJECTOR CONTROL PRESSURE TOO HIGH - ENGINE OFF | 1 | | | _ | |
| M | - | FUEL PRESSURE REGULATOR 1 EXCEEDED LEARNING LIMITS - TOO LOW | - | | | _ | |
| M | - | FUEL PRESSURE REGULATOR 1 EXCEEDED LEARNING LIMITS - TOO HIGH | - | | | _ | |
| M | | INJECTOR CONTROL PRESSURE TOO LOW | 1 | | | _ | |
| W | - | INJECTOR CONTROL PRESSURE TOO LOW - ENGINE CRANKING | 1 | | | _ | |
| L | | INJECTOR CONTROL PRESSURE ERRATIC | - | | 0.* | _ | |
| M | | O2 SENSOR OUT OF RANGE DURING DECELERATION (Bank 1 Sensor1) | - | | G * | | |
| M | | BRAKE PEDAL / ACCELERATOR PEDAL POSITION INCOMPATIBLE | ╂ | | C * | $\dashv\dashv$ | |
| M | l | IGNITION COIL "A" PRIMARY CONTROL CIRCUIT LOW | + | G | G * | $\dashv\dashv$ | |
| M | | IGNITION COIL "A" PRIMARY CONTROL CIRCUIT HIGH | + | G | G * G * | $\dashv \dashv$ | |
| M M | l | IGNITION COIL "B" PRIMARY CONTROL CIRCUIT LOW | + | G | G* | $\dashv \dashv$ | |
| | | IGNITION COIL "B" PRIMARY CONTROL CIRCUIT HIGH IGNITION COIL "C" PRIMARY CONTROL CIRCUIT LOW | ╁ | G | G * | $\dashv\dashv$ | \vdash |
| M M | | IGNITION COIL "C" PRIMARY CONTROL CIRCUIT LOW IGNITION COIL "C" PRIMARY CONTROL CIRCUIT HIGH | ╁ | G | G* | $\dashv \dashv$ | \vdash |
| M | | IGNITION COIL C PRIMARY CONTROL CIRCUIT HIGH IGNITION COIL "D" PRIMARY CONTROL CIRCUIT LOW | ╁ | G | G* | $\dashv \dashv$ | |
| M | 1 | IGNITION COIL DEPRIMARY CONTROL CIRCUIT HIGH | ╁ | G | G* | $\dashv \dashv$ | |
| M | - | IGNITION COIL DE PRIMARY CONTROL CIRCUIT HIGH | ╁ | G | G* | $\dashv \dashv$ | |
| M | | IGNITION COIL E PRIMARY CONTROL CIRCUIT HIGH | + | G | G* | \dashv | |
| M | | IGNITION COIL E PRIMARY CONTROL CIRCUIT HIGH IGNITION COIL 'F" PRIMARY CONTROL CIRCUIT LOW | ╁ | G | G* | $\dashv \dashv$ | |
| M | | IGNITION COIL F PRIMARY CONTROL CIRCUIT LOW IGNITION COIL "F" PRIMARY CONTROL CIRCUIT HIGH | ┢ | G | G * | $\dashv\dashv$ | |
| - | | | ╁ | G | G* | $\dashv \dashv$ | |
| M | | IGNITION COIL "G" PRIMARY CONTROL CIRCUIT LOW | ┢ | G | G* | $\dashv\dashv$ | |
| M M | l | IGNITION COIL "G" PRIMARY CONTROL CIRCUIT HIGH IGNITION COIL "H" PRIMARY CONTROL CIRCUIT LOW | ┢ | G | G* | $\dashv\dashv$ | |
| | | | + | - | | $\dashv\dashv$ | |
| М | P2322 | IGNITION COIL "H" PRIMARY CONTROL CIRCUIT HIGH | <u> </u> | G | G * | | |

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| М | | IGNITION COIL "I" PRIMARY CONTROL CIRCUIT LOW | | G | G * | oxdot | |
| M | P2325 | IGNITION COIL "I" PRIMARY CONTROL CIRCUIT HIGH | | G | G * | \vdash | |
| М | P2327 | IGNITION COIL "J" PRIMARY CONTROL CIRCUIT LOW | | G | G * | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | |
| М | P2328 | IGNITION COIL "J" PRIMARY CONTROL CIRCUIT HIGH | | G | G * | | |
| М | P2400 | EVAPORATIVE EMISSION SYSTEM LEAK DETECTION PUMP CONTROL CIRCUIT / OPEN | | | G * | | |
| М | P2401 | EVAPORATIVE EMISSION SYSTEM LEAK DETECTION PUMP CONTROL CIRCUIT LOW | | | G * | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | |
| М | P2402 | EVAPORATIVE EMISSION SYSTEM LEAK DETECTION PUMP CONTROL CIRCUIT HIGH | | | G * | | |
| M | P2403 | EVAPORATIVE EMISSION SYSTEM LEAK DETECTION PUMP SENSE CIRCUIT / OPEN | | | G * | Ш | |
| М | P2404 | EVAPORATIVE EMISSION SYSTEM LEAK DETECTION PUMP SENSE CIRCUIT RANGE | | | G * | | |
| М | P2405 | EVAPORATIVE EMISSION SYSTEM LEAK DETECTION PUMP SENSE CIRCUIT LOW | | | G * | | |
| М | P2406 | EVAPORATIVE EMISSION SYSTEM LEAK DETECTION PUMP SENSE CIRCUIT HIGH | | | G * | | |
| М | P2407 | EVAPORATIVE EMISSION SYSTEM LEAK DETECTION PUMP SENSE CIRCUIT ERRATIC | | | G * | | |
| М | P2414 | O2 SENSOR EXHAUST SAMPLE ERROR - BANK 1, SENSOR 1 | | | G * | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | |
| M | P2415 | O2 SENSOR EXHAUST SAMPLE ERROR - BANK 2, SENSOR 1 | | | G * | | |
| М | P2418 | EVAPORATIVE EMISSION (EVAP) SYSTEM SWITCHING VALVE CONTROL CIRCUIT / OPEN | G | G | G * | | |
| M | P2425 | EXHAUST GAS RECIRCULATION (EGR) COOLING VALVE CONTROL CIRCUIT / OPEN | | | | | |
| М | P2426 | EXHAUST GAS RECIRCULATION (EGR) COOLING VALVE CONTROL CIRCUIT LOW | | | | | |
| M | | EXHAUST GAS RECIRCULATION (EGR) COOLING VALVE CONTROL CIRCUIT HIGH | | | | ot | |
| М | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT BANK 1 SENSOR 3 | | | | ot | |
| М | P242B | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT RANGE / PERFORMANCE BANK 1 SENSOR 3 | | Ш | | ot | |
| М | P242C | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT LOW BANK 1 SENSOR 3 | | | | ot | |
| M | P242D | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT HIGH BANK 1 SENSOR 3 | | | | | |
| | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT INTERMITTENT / ERRATIC BANK 1 SENSOR 3 | | | | | |
| W | P242F | PARTICULATE FILTER RESTRICTION - ASH ACCUMULATION (Bank 1) | | | | | |
| М | P2448 | SECONDARY AIR INJECTION (AIR) SYSTEM HIGH AIR FLOW BANK 1 | | G | G * | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | |
| М | P244A | PARTICULATE FILTER DIFFERENTIAL PRESSURE TOO LOW (BANK 1) | | | | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | |
| | P244C | EXHAUST TEMPERATURE TOO LOW FOR PARTICULATE FILTER REGENERATION, BANK 1 | | | | \vdash | |
| | P244D | EXHAUST TEMPERATURE TOO HIGH FOR PARTICULATE FILTER REGENERATION, BANK 1 | | | | \vdash | |
| M | | EVAPORATIVE EMISSION (EVAP) SYSTEM SWITCHING VALVE PERFORMANCE / STUCK OPEN | | | G * | oxdot | |
| M | | PARTICULATE FILTER DIFFERENTIAL PRESSURE SENSOR CIRCUIT | | | | $\vdash \vdash$ | + |
| M | | PARTICULATE FILTER DIFFERENTIAL PRESSURE SENSOR CIRCUIT RANGE / PERFORM | | | | $\vdash \vdash$ | |
| M | | PARTICULATE FILTER DIFFERENTIAL PRESSURE SENSOR CIRCUIT LOW | | | | $\vdash \vdash$ | |
| M | | PARTICULATE FILTER DIFFERENTIAL PRESSURE SENSOR CIRCUIT HIGH | | | | $\vdash \vdash$ | |
| M | | PARTICULATE FILTER DIFFERENTIAL PRESSURE SENSOR CIRCUIT INTERMIT / ERRATIC | | | | $\vdash \vdash$ | + |
| M | | EXHAUST GAS RECIRCULATION (EGR) COOLER EFFICIENCY BELOW THRESHOLD | | | | $\vdash \vdash$ | + |
| M W | | PARTICULATE FILTER REGENERATION DURATION (Bank 1) | | | | $\vdash \vdash$ | + |
| M W | | PARTICULATE FILTER REGENERATION FREQUENCY (Bank 1) | | | | $\vdash \vdash$ | + |
| M | | EXHAUST GAS RECIRCULATION (EGR) COOLER BYPASS CONTROL CIRCUIT (bank 1) | | | | $\vdash \vdash$ | + |
| M | | EXHAUST GAS RECIRCULATION (EGR) COOLER BYPASS CONTROL CIRCUIT RANGE / PERFORM (bank | 1) | | | $\vdash \vdash$ | + |
| M | | EXHAUST GAS RECIRCULATION (EGR) COOLER BYPASS CONTROL CIRCUIT LOW (bank 1) | | H | | ++ | + |
| M M | | EXHAUST GAS RECIRCULATION (EGR) COOLER BYPASS CONTROL CIRCUIT HIGH (bank 1) PARTICULATE FILTER RESTRICTION - SOOT ACCUMULATION (Bank 1) | \vdash | H | | $\vdash\vdash$ | + |
| M | | VEHICLE CONDITIONS INCORRECT FOR PARTICULATE FILTER REGENERATION | \vdash | H | | $\vdash\vdash$ | + |
| M W | | PARTICULATE FILTER RESTRICTION - FORCED LIMITED POWER (Bank 1) | \vdash | H | | $\vdash\vdash$ | + |
| M | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT (Bank 1 Sensor 4) | | H | | $\vdash \vdash$ | + |
| M | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT LOW (Bank 1 Sensor 4) | | H | | \vdash | + + |
| M | | EXHAUST GAS TEMPERATURE SENSOR CIRCUIT HIGH (Bank 1 Sensor 4) | H | H | | \vdash | + |
| M | | EXHAUST GAS TEMPERATURE OUT OF RANGE (Bank 1 Sensor 1) | H | H | | \vdash | + + |
| M | | EXHAUST GAS TEMPERATURE OUT OF RANGE (Bank 1 Sensor 2) | H | H | | \sqcap | + |
| М | | EXHAUST GAS TEMPERATURE OUT OF RANGE (Bank 1 Sensor 3) | | H | | 一十 | + |
| М | | EXHAUST GAS TEMPERATURE OUT OF RANGE (Bank 1 Sensor 4) | t | H | | \sqcap | + |
| М | | EXCESSIVE TIME TO ENTER CLOSED LOOP REDUCTANT INJECTION CONTROL | t | H | | \sqcap | + |
| М | | CLOSED LOOP REDUCTANT INJECTION CONTROL AT LIMIT - FLOW TOO LOW | t | H | | \sqcap | 1 |
| М | | CLOSED LOOP REDUCTANT INJECTION CONTROL AT LIMIT - FLOW TOO HIGH | t | H | | \sqcap | 1 |
| М | | EXCESSIVE TIME TO ENTER CLOSED LOOP PARTICULATE FILTER REGENERATION CONTROL | | | | \sqcap | + + |
| М | | CLOSED LOOP PARTICULATE FILTER REGENERATION CONTROL AT LIMIT - FLOW TOO LOW | | | | \sqcap | + + |
| L | · | | | \vdash | | —— | |

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| М | | CLOSED LOOP PARTICULATE FILTER REGENERATION CONTROL AT LIMIT - FLOW TOO HIGH | _ | | | | | |
| М | P24A2 | DIESEL PARTICULATE FILTER REGENERATION INCOMPLETE (Bank 1) | | | | | | |
| | P2500 | GENERATOR LAMP TERMINAL CIRCUIT LOW | | | G | | | |
| | P2501 | GENERATOR LAMP TERMINAL CIRCUIT HIGH | | | G | | | |
| | P2502 | CHARGING SYSTEM VOLTAGE | | | G | | | |
| | P2503 | CHARGING SYSTEM VOLTAGE LOW | | | G | | | |
| | P2504 | CHARGING SYSTEM VOLTAGE HIGH | | | G | | | |
| | P2505 | ECM / PCM POWER INPUT SIGNAL | | | | | | |
| М | P2506 | ECM / PCM POWER INPUT SIGNAL RANGE PERFORMANCE | | | | | | |
| М | P2507 | ECM / PCM POWER INPUT SIGNAL LOW | | | G * | | | |
| M | P2508 | ECM / PCM POWER INPUT SIGNAL HIGH | | | | | | |
| | P250C | ENGINE OIL LEVEL SENSOR CIRCUIT LOW | G | G | G | | | |
| | P250D | ENGINE OIL LEVEL SENSOR CIRCUIT LOW | G | G | G | | | |
| | P250F | ENGINE OIL LEVEL TOO LOW | | | | | | |
| | P2510 | ECM / PCM POWER RELAY SENSE CIRCUIT RANGE PERFORMANCE | | | G | | | |
| W | P2512 | EVENT DATA RECORDER REQUEST CIRCUIT / OPEN | | | G + | | | |
| W | P2513 | EVENT DATA RECORDER REQUEST CIRCUIT LOW | | | G+ | | \Box | |
| W | P2514 | EVENT DATA RECORDER REQUEST CIRCUIT HIGH | | | G + | | | |
| | P2515 | A/C REFRIGERANT PRESSURE SENSOR "B" CIRCUIT | G | G | G | | | |
| | P2517 | A/C REFRIGERANT PRESSURE SENSOR "B" CIRCUIT LOW | G | G | G | | T | |
| | P2521 | A/C REQUEST "A" CIRCUIT HIGH | G | G | G | | | |
| | P2524 | A/C REQUEST "B" CIRCUIT HIGH | G | G | G | | | |
| | P252F | ENGINE OIL LEVEL TOO HIGH | | | | | | |
| | P2530 | IGNITION SWITCH RUN POSITION CIRCUIT | G | G | G | | | |
| | P2531 | IGNITION SWITCH RUN POSITION CIRCUIT LOW | G | G | G | | | |
| | P2532 | IGNITION SWITCH RUN POSITION CIRCUIT LOW | G | G | G | | | |
| | P2533 | IGNITION SWITCH RUN / START POSITION CIRCUIT | G | G | G | | | |
| | P2534 | IGNITION SWITCH RUN / START POSITION CIRCUIT LOW | _ | G | G | | | |
| | P2535 | IGNITION SWITCH RUN / START POSITION CIRCUIT HIGH | _ | G | G | | | |
| | P253F | ENGINE OIL DETERIORATED | | | | | | |
| | P2541 | LOW PRESSURE FUEL SYSTEM SENSOR CIRCUIT LOW | | | | | | |
| | P2542 | LOW PRESSURE FUEL SYSTEM SENSOR CIRCUIT HIGH | | | | | | |
| | P2544 | TORQUE MANAGEMENT REQUEST INPUT SIGNAL "A" | | | | | | Т |
| М | P2545 | TORQUE MANAGEMENT REQUEST INPUT SIGNAL "A" RANGE PERFORMANCE | | | | | | |
| | P2552 | THROTTLE / FUEL INHIBIT "A" CIRCUIT / OPEN | | | | | | |
| | | ENGINE COOLANT LEVEL LOW | | | | | | |
| м | P2563 | TURBOCHARGER BOOST CONTROL POSITION SENSOR "A" CIRCUIT RANGE / PERFORMANCE | | | | | T | |
| | 1 | COOLANT PUMP "A" CONTROL CIRCUIT / OPEN | G | G | G | H | \dashv | |
| М | | EVAPORATIVE EMISSION (EVAP) SYSTEM MONITORING PROCESSOR PERFORMANCE | Ť | | G * | \Box | \dashv | |
| M | + | ECM / PCM ENGINE OFF TIMER PERFORMANCE | \top | | G * | \Box | \dashv | |
| | | A/C REFRIGERANT DISTRIBUTION VALVE CONTROL CIRCUIT / OPEN | G | G | G | \vdash | \top | |
| М | + | CAMSHAFT POSITION OUTPUT CIRCUIT / OPEN | 1 | | | | \top | |
| М | | CRANKSHAFT POSITION OUTPUT CIRCUIT / OPEN | T | | | | \dashv | |
| | | THROTTLE POSITION OUTPUT CIRCUIT / OPEN | T | | | | \dashv | |
| М | | INJECTOR CONTROL PRESSURE REGULATOR / OPEN | \top | | | \vdash | \dashv | |
| М | - | O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT / OPEN (BANK 1 SENSOR 1) | T | | G * | | \dashv | |
| M | | O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT LOW (BANK 1 SENSOR 1) | \top | G | G * | \vdash | \dashv | |
| М | | O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT HIGH (BANK 1 SENSOR 1) | \top | G | G * | \vdash | \dashv | |
| M | | O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT / OPEN (BANK 2 SENSOR 1) | 十 | | G * | H | \dashv | |
| M | | FUEL INJECTOR - PILOT INJECTION NOT LEARNED | \top | | | H | \dashv | |
| M | + | O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT LOW (BANK 2 SENSOR 1) | \top | G | G * | \vdash | \top | |
| M | + | O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT HIGH (BANK 2 SENSOR 1) | + | G | G * | \vdash | + | |
| <u> </u> | 1 | TORQUE MANAGEMENT FEEDBACK SIGNAL "A" | + | _ | G | \vdash | + | Т |
| | 1 | FUEL SHUTOFF VALVE "B" CONTROL CIRCUIT / OPEN | + | \vdash | G | \vdash | \dashv | • |
| м | - | ACTUATOR SUPPLY VOLTAGE "B" CIRCUIT / OPEN | + | \vdash | G* | \vdash | \dashv | |
| — | + | ACTUATOR SUPPLY VOLTAGE "B" CIRCUIT HIGH | + | | ~ | \vdash | + | Т |
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| | | AIR CLEANER INLET CONTROL CIRCUIT LOW | - | | G | | | |
| | | AIR CLEANER INLET CONTROL CIRCUIT HIGH | | | G | | | |
| М | | ACTUATOR SUPPLY VOLTAGE "C" CIRCUIT / OPEN | | | G * | | | T * |
| | | ACTUATOR SUPPLY VOLTAGE "C" CIRCUIT HIGH | | | G | | | Т |
| M | | CYLINDER 1 INJECTOR DATA INCOMPATIBLE | | | | | | |
| M | | CYLINDER 2 INJECTOR DATA INCOMPATIBLE | | | | | | |
| M | | CYLINDER 3 INJECTOR DATA INCOMPATIBLE | | | | | | |
| M | | CYLINDER 4 INJECTOR DATA INCOMPATIBLE | | | | | | |
| M | | CYLINDER 5 INJECTOR DATA INCOMPATIBLE | | | | | | |
| M | | CYLINDER 6 INJECTOR DATA INCOMPATIBLE | | | | | | |
| M | | CYLINDER 7 INJECTOR DATA INCOMPATIBLE | | | | | | |
| M | | CYLINDER 8 INJECTOR DATA INCOMPATIBLE | | | ٠, | | | |
| M W | | INTERNAL CONTROL MODULE TRANSMISSION RANGE SENSOR PERFORMANCE | | G | G * + | | | |
| M W | | INTERNAL CONTROL MODULE CLUTCH PEDAL PERFORMANCE | - | G | G*+ | | | т. |
| W O/D | | TRANSMISSION FRICTION ELEMENT "A" APPLY TIME RANGE / PERFORMANCE | | | G + | | | T + |
| W O/D | | TRANSMISSION FRICTION ELEMENT "B" APPLY TIME RANGE / PERFORMANCE | - | | G + | | | T + |
| W O/D | | TRANSMISSION FRICTION ELEMENT "C" APPLY TIME RANGE / PERFORMANCE | | | G + | | | |
| W O/D | | TRANSMISSION FRICTION ELEMENT "D" APPLY TIME RANGE / PERFORMANCE | - | H | G + | \vdash | | |
| W O/D | | TRANSMISSION FRICTION ELEMENT "E" APPLY TIME RANGE / PERFORMANCE | Ͱ | H | G + | Н | _ | _ |
| W | | TRANSMISSION FRICTION ELEMENT "F" APPLY TIME RANGE / PERFORMANCE | ┡ | \vdash | G + | \vdash | \dashv | T * |
| | | PRESSURE CONTROL SOLENIOD "D" PERFORMANCE / STUCK OFF | ┡ | \vdash | G * | \vdash | \dashv | T * |
| | | PRESSURE CONTROL SOLENIOD "D" STUCK ON | | | - | | | T * |
| | | PRESSURE CONTROL SOLENIOD "D" CIRCUIT RANGE / PERFORMANCE | | | G * | | | T * |
| | | PRESSURE CONTROL SOLENIOD "D" CIRCUIT LOW | - | | G * | | | - |
| | | PRESSURE CONTROL SOLENIOD "D" CIRCUIT HIGH | - | | G * | | | T * |
| | | INTERMEDIATE SHAFT SPEED SENSOR "B" CIRCUIT RANGE / PERFORMANCE | - | | | | | T * |
| М | | INTERMEDIATE SHAFT SPEED SENSOR "B" CIRCUIT INTERMITTENT TRANSMISSION FLUID COOLER CONTROL CIRCUIT / OPEN | - | | G* | | | - |
| | | TRANSMISSION FLUID COOLER CONTROL CIRCUIT FOR THE TRANSMISSION FLUID COOLER CONTROL CIRCUIT LOW | <u> </u> | | G | | | |
| | | TRANSMISSION FLUID COOLER CONTROL CIRCUIT HIGH | ┢ | | | | | |
| M W | | TORQUE CONVERTER CLUTCH PRESSURE CONTROL SOLENIOD CIRCUIT PERF OR STUCK OFF | ┢ | | G*+ | | | T * + |
| M W | | TORQUE CONVERTER CLUTCH PRESSURE CONTROL SOLENIOD CIRCUIT FERF OR STOCK OFF | - | | G*+ | | | T*+ |
| W | | TORQUE CONVERTER CLUTCH PRESSURE CONTROL SOLENIOD STOCK ON TORQUE CONVERTER CLUTCH PRESSURE CONTROL SOLENIOD INTERMITTENT | 1 | | G + | Н | | 1 + |
| M W | | TORQUE CONVERTER CLUTCH PRESSURE CONTROL SOLENIOD CONTROL CIRCUIT RANGE / PERF | 1 | | G*+ | Н | | T * + |
| M W | | TORQUE CONVERTER CLUTCH PRESSURE CONTROL SOLENIOD CONTROL CIRCUIT HIGH | | | G*+ | Т | | T*+ |
| M W | | TORQUE CONVERTER CLUTCH PRESSURE CONTROL SOLENIOD CONTROL CIRCUIT LOW | | | G*+ | - | | T*+ |
| M | | INPUT / TURBINE SHAFT SPEED SENSOR "B" CIRCUIT | 1 | | G * | + T | | T * |
| M | | INPUT / TURBINE SHAFT SPEED SENSOR "B" CIRCUIT RANGE / PERFORMANCE | 1 | | G | ۳ | | T * |
| M | | INPUT / TURBINE SHAFT SPEED SENSOR "B" CIRCUIT NO SIGNAL | 1 | | ď | | | T * |
| W | | INPUT / TURBINE SHAFT SPEED SENSOR "B" CIRCUIT INTERMITTENT | 1 | | | | | T+ |
| М | | TORQUE CONVERTER TEMPERATURE TOO HIGH | 1 | | G * | | | T |
| W | | CLUTCH TEMPERATURE TOO HIGH | ┢ | H | | | | T+ |
| | | ELECTRIC TRANSMISSION FLUID PUMP CONTROL CIRCUIT | H | H | G | | \dashv | |
| | | TRANSMISSION RANGE SENSOR "B" CIRCUIT (PRNDL INPUT) | G | G | G | | \dashv | |
| М | | TRANSMISSION RANGE SENSOR "B" CIRCUIT RANGE / PERFORMANCE | _ | G | G | Т | Т | T * |
| М | | TRANSMISSION RANGE SENSOR "B" CIRCUIT LOW | _ | G | G | T | | T * |
| М | | TRANSMISSION RANGE SENSOR "B" CIRCUIT HIGH | _ | G | G | Ť | _ | T * |
| w | | TRANSMISSION RANGE SENSOR "B" CIRCUIT INTERMITTENT | Ť | Ħ | | - | T | T + |
| М | | TRANSMISSION RANGE SENSOR "A" / "B" CORRELATION | G | G | G | _ | Т | T * |
| | | TRANSMISSION RANGE SENSOR ALIGNMENT | Ť | | G | H | | <u>.</u> Т |
| М | | SHIFT FORK "A" POSITION CIRCUIT | H | H | | Т | _ | T * |
| М | | SHIFT FORK "A" POSITION CIRCUIT RANGE / PERFORMANCE | | | | | | T * |
| | | | 1 | | | Н | | T * |
| | P2833 | SHIFT FORK "A" POSITION CIRCUIT LOW | | | | | | |
| М | | SHIFT FORK "A" POSITION CIRCUIT LOW SHIFT FORK "A" POSITION CIRCUIT HIGH | H | | | | | - |
| | P2834 | SHIFT FORK "A" POSITION CIRCUIT LOW SHIFT FORK "A" POSITION CIRCUIT HIGH SHIFT FORK "A" POSITION CIRCUIT INTERMITTENT | | | | Т | | T* |

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| M | | SHIFT FORK "B" POSITION CIRCUIT RANGE / PERFORMANCE | | | | | T * |
| М | | SHIFT FORK "B" POSITION CIRCUIT LOW | | | | | T * |
| М | P2839 | SHIFT FORK "B" POSITION CIRCUIT HIGH | | | | | T * |
| M | P283A | SHIFT FORK "B" POSITION CIRCUIT INTERMITTENT | | | | Τ | T * |
| М | P283B | SHIFT FORK "C" POSITION CIRCUIT | | | | Т | T * |
| M W | P283C | SHIFT FORK "C" POSITION CIRCUIT RANGE / PERFORMANCE | | | | Т | T * + |
| M | P283D | SHIFT FORK "C" POSITION CIRCUIT LOW | | | | | T * |
| M | P283E | SHIFT FORK "C" POSITION CIRCUIT HIGH | | | | | T * |
| М | P283F | SHIFT FORK "C" POSITION CIRCUIT INTERMITTENT | | | | | T * |
| M | P2840 | SHIFT FORK "D" POSITION CIRCUIT | | | | | T * |
| M | P2841 | SHIFT FORK "D" POSITION CIRCUIT RANGE / PERFORMANCE | | | | | T * |
| M | P2842 | SHIFT FORK "D" POSITION CIRCUIT LOW | | | | | T * |
| M | P2843 | SHIFT FORK "D" POSITION CIRCUIT HIGH | | | | | T * |
| M | P2844 | SHIFT FORK "D" POSITION CIRCUIT INTERMITTENT | | | | | T * |
| M | P2845 | SHIFT FORK "A" POSITION SENSOR INCORRECT NEUTRAL POSITION INDICATED | | | | | T * |
| M | P2846 | SHIFT FORK "B" POSITION SENSOR INCORRECT NEUTRAL POSITION INDICATED | | | | | T * |
| М | P2847 | SHIFT FORK "C" POSITION SENSOR INCORRECT NEUTRAL POSITION INDICATED | Ĺ | | | | T * |
| М | P2848 | SHIFT FORK "D" POSITION SENSOR INCORRECT NEUTRAL POSITION INDICATED | | | | | T * |
| М | P2849 | SHIFT FORK "A" STUCK | | | | | T * |
| М | P284A | SHIFT FORK "B" STUCK | | | | | T * |
| М | P284B | SHIFT FORK "C" STUCK | | | | | T * |
| М | P284C | SHIFT FORK "D" STUCK | | | | | T * |
| М | P284D | SHIFT FORK "A" UNREQUESTED MOVEMENT | | | | | T * |
| М | P284E | SHIFT FORK "B" UNREQUESTED MOVEMENT | | | | | T * |
| М | P284F | SHIFT FORK "C" UNREQUESTED MOVEMENT | | | | | T * |
| М | P2850 | SHIFT FORK "D" UNREQUESTED MOVEMENT | | | | | T * |
| М | P2851 | SHIFT FORK POSITION SENSOR "A" / "B" CORRELATION | | | | | T * |
| М | P2852 | SHIFT FORK POSITION SENSOR "C" / "D" CORRELATION | | | | | T * |
| М | P2853 | CLUTCH "A" PRESSURE DISCHARGE PERFORMANCE | | | | | T * |
| М | P2854 | CLUTCH "B" PRESSURE DISCHARGE PERFORMANCE | | | | | T * |
| М | P2855 | CLUTCH "A" PRESSURE CHARGE PERFORMANCE | | | | | T * |
| М | P2856 | CLUTCH "B" PRESSURE CHARGE PERFORMANCE | | | | | T * |
| М | P2857 | CLUTCH "A" PRESSURE ENGAGEMENT PERFORMANCE / TOO LOW | | | | | T * |
| М | P2858 | CLUTCH "B" PRESSURE ENGAGEMENT PERFORMANCE / TOO LOW | | | | | T * |
| М | P2859 | CLUTCH "A" PRESSURE DISENGAGEMENT PERFORMANCE / TOO LOW | | | | | T * |
| М | P285A | CLUTCH "B" PRESSURE DISENGAGEMENT PERFORMANCE / TOO LOW | | | | | T * |
| М | P285B | SHIFT FORK "A" ACTUATOR CIRCUIT / OPEN | | | | Т | T * |
| W | P285C | SHIFT FORK "A" ACTUATOR CIRCUIT PERFORMANCE | | | | Т | T * |
| М | P285D | SHIFT FORK "A" ACTUATOR CIRCUIT LOW | | | | Т | T * |
| М | P285E | SHIFT FORK "A" ACTUATOR CIRCUIT HIGH | | | | Т | T * |
| М | P285F | SHIFT FORK "B" ACTUATOR CIRCUIT / OPEN | L | | | Т | T * |
| W | P2860 | SHIFT FORK "B" ACTUATOR CIRCUIT PERFORMANCE | | | | Т | T * |
| М | P2861 | SHIFT FORK "B" ACTUATOR CIRCUIT LOW | | | | Т | T * |
| М | P2862 | SHIFT FORK "B" ACTUATOR CIRCUIT HIGH | | | | Т | T * |
| M W | P286F | CLUTCH "A" DISENGAGEMENT TIME PERFORMANCE TOO / SLOW | | | | | T * + |
| М | | CLUTCH "A" STUCK ENGAGED | L | | | | T * |
| M W | P2877 | CLUTCH "B" DISENGAGEMENT TIME PERFORMANCE TOO / SLOW | | | | | T * + |
| М | P287A | CLUTCH "B" STUCK ENGAGED | | | | | T * |
| М | P287B | SHIFT FORK CALIBRATION NOT LEARNED | | | | | T * |
| М | P2A00 | O2 SENSOR CIRCUIT RANGE / PERFORMANCE - BANK 1, SENSOR 1 | | | | | |
| М | P2A01 | O2 SENSOR CIRCUIT RANGE / PERFORMANCE - BANK 1, SENSOR 2 | G | G | G* | | |
| М | P2A04 | O2 SENSOR CIRCUIT RANGE / PERFORMANCE - BANK 2, SENSOR 2 | G | G | G * | | |
| | P2BA7 | NOx EXCEEDANCE - EMPTY REAGENT TANK | | | | | |
| М | P3400 | CYLINDER DEACTIVATION SYSTEM (Bank 1) | | | G* | | |
| М | P340A | DEACTIVATION / INTAKE VALVE CONTROL CIRCUIT (Bank 1) | G | G | G * | | |
| М | P340B | DEACTIVATION / INTAKE VALVE CONTROL CIRCUIT (Bank 2) | G | G | G * | | |
| | • | | • | | | | |

| М | P340C | DEACTIVATION / EXHAUST VALVE CONTROL CIRCUIT (Bank 1) | G | G | G * | | \neg | |
|---|-------|---|---|----------|-----|---|--------------|--|
| М | | DEACTIVATION / EXHAUST VALVE CONTROL CIRCUIT (Bank 2) | _ | G | G * | | + | |
| M | | DEACTIVATION / INTAKE VALVE CONTROL CIRCUIT PERFORMANCE (Bank 1) | Ť | | G * | | \dashv | |
| M | | DEACTIVATION / INTAKE VALVE CONTROL CIRCUIT PERFORMANCE (Bank 2) | 1 | | G * | | \dashv | |
| M | | DEACTIVATION / EXHAUST VALVE CONTROL CIRCUIT PERFORMANCE (Bank 1) | t | | G * | | \dashv | |
| М | | DEACTIVATION / EXHAUST VALVE CONTROL CIRCUIT PERFORMANCE (Bank 2) | t | | G * | | \dashv | |
| м | | CYLINDER DEACTIVATION SYSTEM (Bank 1) | t | | G * | | \neg | |
| | | | t | | | | \dashv | |
| | | GEM MODULE DTC's | | | | | \exists | |
| | B1315 | BATTERY SAVER RELAY COIL CIRCUIT SHORT TO BATTERY | | | G | | | |
| | B1342 | ECU IS FAULTED | G | G | G | | \exists | |
| | B1355 | IGNITION RUN CIRCUIT FAILURE | G | _ | | | \exists | |
| | B1359 | IGNITION RUN / ACC CIRCUIT FAILURE | G | G | G | | \exists | |
| | B1365 | IGNITION START CIRCUIT SHORT TO BATTERY | G | G | G | | \exists | |
| | P0500 | VEHICLE SPEED SENSOR "A" | | | G | | \exists | |
| | B1483 | BRAKE PEDAL INPUT CIRCUIT FAILURE | G | G | G | | \exists | |
| | B1485 | BRAKE PEDAL INPUT SHORT TO BATTERY | G | G | G | | | |
| | | PATS SYSTEM DTC's | | | | | | |
| | B1213 | LESS THAN TWO KEYS PROGRAMMED TO THE PATS CONTROL | ĺ | | G | | 寸 | |
| | B1342 | ECU IS FAULTED | ĺ | | G | | 寸 | |
| | B1600 | NO PATS KEY READ BY THE PATS CONTROL | | | G | | T | |
| | B1601 | UNPROGRAMMED PATS KEY | | | G | | T | |
| | B1602 | PARTIAL PATS KEY WAS READ | | | G | | | |
| | B1681 | PATS TRANSCEIVER SIGNAL IS NOT BEING RECEIVED BY THE PATS CONTROL | | | G | | | |
| | B2103 | ANTENNA NOT CONNECTED | | | G | | | |
| | B2431 | KEY PROGRAMMING ERROR | | | G | | | |
| | P1260 | THEFT DETECTED, VEHICLE IMMOBILIZED | | | G | | | |
| | U2511 | CAN - DATA MIS-MATCH (RECEIVED DATA DOES NOT MATCH EXPECTED) | | | G | | | |
| | | ALTERNATIVE FUEL CONTROL MODULE DTC's | | | | | | |
| | B1219 | FUEL TANK PRESSURE SENSOR CIRCUIT | | | G | | | |
| | B1220 | FUEL TANK PRESSURE SENSOR CIRCUIT OPEN | | | G | | | |
| | U1011 | SCP (J1850) INVALID OR MISSING DATA | | | G | | | |
| | | SCP (J1850) SINGLE ENDED (+) CIRCUIT | | | G | | | |
| | U1261 | SCP (J1850) SINGLE ENDED (-) CIRCUIT | | | G | | | |
| | U1262 | SCP (J1850) COMMUNICATION BUS FAULT | | | G | | | |
| | | 4 X 4 CONTROL MODULE DTC's | | | | | | |
| | C1160 | CENTER AXLE DISCONNECT (CAD) SYSTEM GENERAL FAILURE | | G | G | | | |
| | | TRANSFER CASE UNABLE TO TRANSITION BETWEEN 2H AND 4H | | G | G | | | |
| | C1729 | TRANSFER CASE UNABLE TO TRANSITION BETWEEN 4H AND 4L | _ | G | G | | | |
| | C1970 | 4 X 4 LOW MODE SWITCH LED SHORT TO BATTERY | _ | G | G | | \perp | |
| | C1971 | 5 X 4 LOW MODE SWITCH LED CIRCUIT FAILURE | _ | G | G | Ц | \downarrow | |
| | | IWE SOLENIOD CIRCUIT FAILURE | _ | G | G | Ш | \dashv | |
| | C1980 | IWE SOLENIOD SHORT TO BATTERY | G | G | G | Ш | \dashv | |
| | | MISCELLANEOUS DTC's | L | Ш | | Ш | \dashv | |
| | | CRASH INPUT | _ | G | G | Ш | \dashv | |
| | | CRASH INPUT MISMATCH - CAN INACTIVE HARDWIRED ACTIVE | _ | G | G | Ш | \downarrow | |
| | | CRASH INPUT HARDWIRED SIGNAL | _ | G | G | Ш | \downarrow | |
| | | CRASH INPUT MISMATCH - CAN ACTIVE HARDWIRED INACTIVE | | G | G | Ш | \downarrow | |
| | | BATTERY VOLTAGE HIGH | _ | G | G | Ш | \downarrow | |
| | | BATTERY VOLTAGE LOW | G | G | G | Ц | \dashv | |
| | | DRIVER DOOR AJAR CIRCUIT FAILURE | L | \sqcup | G | Ш | \dashv | |
| | | DRIVER DOOR AJAR CIRCUIT SHORT TO GROUND | _ | G | G | Ц | \dashv | |
| | | ECU IS FAULTED | | G | G | Ц | \dashv | |
| | | IGNITION RUN CIRCUIT FAILURE | | G | | Ц | \dashv | |
| | | IGNITION RUN / ACC CIRCUIT FAILURE | | G | | Ш | \downarrow | |
| | B1483 | BRAKE PEDAL INPUT CIRCUIT FAILURE | G | G | G | | \perp | |

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|---|--|--|---|---|---|----------|---------------------------------------|
| | | BRAKE PEDAL INPUT CIRCUIT BATTERY SHORT | | G | | Ш | |
| | | IGNITION RUN / START CIRCUIT FAILURE | | G | | \sqcup | |
| | | THROTTLE POSITION INPUT OUT OF RANGE LOW | | G | G | \sqcup | |
| | | THROTTLE POSITION INPUT OUT OF RANGE HIGH | G | G | G | \sqcup | |
| | | CAN COMMUNICATION BUS FAULT - RECEIVE ERROR | | | G | \sqcup | |
| | | UBP COMMUNICATION BUS FAULT | | <u> </u> | G | \sqcup | |
| | | FAULT RECEIVED FROM EXTERNAL NODE | | | G | Ш | |
| | | UBP INVALID DATA FROM NODE ID \$10 | | ₩' | G | Щ | |
| | U2306 | UBP INVALID DATA FROM NODE ID \$60 | | ₩' | G | Щ | |
| | | STAND ALONE TRANSMISSION CONTROL MODULE DTC's | | \perp | | Ш | |
| | | ABS WARNING LAMP OUT CIRCUIT FAILURE | | | | Ш | Т |
| | | WHEEL SPEED MISMATCH | | ₩' | | Щ | Т |
| | C1296 | WHEEL SPEED LF SIGNAL FAULT | | ₩' | | Щ | Т |
| | C1297 | WHEEL SPEED RF SIGNAL FAULT | | | | Ш | Т |
| | C1298 | WHEEL SPEED RR SIGNAL FAULT | | | | Ш | Т |
| | C1299 | WHEEL SPEED LR SIGNAL FAULT | | | | Ш | Т |
| | | STAND ALONE BATTERY ENERGY CONTROL MODULE DTC's | | | | | |
| | B10A2 | CRASH INPUT | G | G | G | | Т |
| | B11D5 | RESTRAINTS EVENT - VEHICLE DISABLED | | | | Ш | Т |
| | B11D8 | RESTRAINTS EVENT NOTIFICATION | | | | Ц | Т |
| | U1003 | SYSTEM CLOCK | | $oldsymbol{ol}}}}}}}}}}}}}}}$ | | LĨ | Т |
| | U1006 | SUB NETWORK CAN INIALISATION FAILURE | | | | LT | Т |
| | U200D | CONTROL MODULE OUTPUT POWER "A" | | | | | Т |
| | | NETWORK - SOFTWARE INCOMPATIBILITY DTC's | | | | | |
| M W | U0300 | INTERNAL CONTROL MODULE SOFTWARE INCOMPATIBILITY | G | G | G * + | | |
| | U0301 | SOFTWARE INCOMPATIBILITY WITH ENGINE / POWERTRAIN CONTROL MODULE | | | G | | |
| | U0302 | SOFTWARE INCOMPATIBILITY WITH TRANSMISSION CONTROL MODULE | | | G | | |
| | U0306 | SOFTWARE INCOMPATIBILITY WITH FUEL INJECTOR CONTROL MODULE | | | | | |
| М | U0309 | SOFTWARE INCOMPATIBILITY WITH ALTERNATIVE FUEL CONTROL MODULE | | | G * | | |
| | | J1850 / SCP / CAN NETWORK DTC's | | | | | |
| | U0001 | HIGH SPEED CAN COMMUNICATION BUS | G | G | G | | Т |
| М | U0002 | HIGH SPEED CAN COMMUNICATION BUS PERFORMANCE | G | G | G | | T * |
| | U0028 | VEHICLE COMMUNICATION BUS "A" | | | | | |
| | U0029 | VEHICLE COMMUNICATION BUS "A" PERFORMANCE | | | | | |
| | U0037 | VEHICLE COMMUNICATION BUS "B" | | | | | |
| | U0046 | VEHICLE COMMUNICATION BUS "C" | | | G | | |
| M W | U0073 | CONTROL MODULE COMMUNICATION BUS "A" OFF | | \Box | G | | T * + |
| М | | CONTROL MODULE COMMUNICATION BUS "B" OFF | | +- | | \sqcap | Т |
| | | CONTROL MODULE COMMUNICATION BUS B OFF | | | | | _ |
| M W | | LOST COMMUNICATION WITH ECM / PCM "A" | | | G | П | T * + |
| | U0100 | | G | G | G G* | | T*+ |
| M W | U0100 U0101 | LOST COMMUNICATION WITH ECM / PCM "A" | G | G | | | |
| M W | U0100 U0101 U0102 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM | G | G | G * | | Т |
| M W | U0100 U0101 U0102 U0103 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE | G | G | G * | | T |
| M W | U0100 U0101 U0102 U0103 U0105 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" | G | G | G * | | T |
| M W | U0100 U0101 U0102 U0103 U0105 U0106 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 | G | G | G * | | T |
| M W M | U0100 U0101 U0102 U0103 U0105 U0106 U0108 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE | | | G * G G * | | T |
| M W M | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" | | G | G* | | T |
| M W M | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 U0111 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" LOST COMMUNICATION WITH BATTERY ENERGY CONTROL MODULE "A" | | | G* G* G* G* | | T T |
| M W M | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 U0111 U01113 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" LOST COMMUNICATION WITH BATTERY ENERGY CONTROL MODULE "A" LOST COMMUNICATION WITH EMISSIONS CRITICAL CONTROL INFORMATION | | | G* G* G* G* G | | T T T |
| M W M M M M | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 U0111 U0113 U0114 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" LOST COMMUNICATION WITH BATTERY ENERGY CONTROL MODULE "A" LOST COMMUNICATION WITH EMISSIONS CRITICAL CONTROL INFORMATION LOST COMMUNICATION WITH FOUR-WHEEL DRIVE CLUTCH CONTROL MODULE | | | G* G* G* G* | | T T T |
| M W M | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 U0111 U0113 U0114 U0115 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" LOST COMMUNICATION WITH BATTERY ENERGY CONTROL MODULE "A" LOST COMMUNICATION WITH EMISSIONS CRITICAL CONTROL INFORMATION LOST COMMUNICATION WITH FOUR-WHEEL DRIVE CLUTCH CONTROL MODULE LOST COMMUNICATION WITH ECM / PCM "B" | | G | G* G* G* G G | | T T T |
| M W M M M M M M M M M M M M M M M M M M | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 U0111 U0113 U0114 U0115 U0120 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" LOST COMMUNICATION WITH BATTERY ENERGY CONTROL MODULE "A" LOST COMMUNICATION WITH EMISSIONS CRITICAL CONTROL INFORMATION LOST COMMUNICATION WITH FOUR-WHEEL DRIVE CLUTCH CONTROL MODULE LOST COMMUNICATION WITH ECM / PCM "B" LOST COMMUNICATION WITH STARTER / GENERATOR CONTROL MODULE | | | G* G* GG* GG GG | | T T T T T + |
| M W M M M W M W | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 U0111 U0113 U0114 U0115 U0120 U0121 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" LOST COMMUNICATION WITH BATTERY ENERGY CONTROL MODULE "A" LOST COMMUNICATION WITH EMISSIONS CRITICAL CONTROL INFORMATION LOST COMMUNICATION WITH FOUR-WHEEL DRIVE CLUTCH CONTROL MODULE LOST COMMUNICATION WITH ECM / PCM "B" LOST COMMUNICATION WITH STARTER / GENERATOR CONTROL MODULE LOST COMMUNICATION WITH STARTER / GENERATOR CONTROL MODULE | | G | G* G* G G G G G | | T T T |
| M W M M M W M M M M M M M M M M M M M M | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 U0111 U0113 U0114 U0115 U0120 U0121 U0122 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" LOST COMMUNICATION WITH BATTERY ENERGY CONTROL MODULE "A" LOST COMMUNICATION WITH EMISSIONS CRITICAL CONTROL INFORMATION LOST COMMUNICATION WITH FOUR-WHEEL DRIVE CLUTCH CONTROL MODULE LOST COMMUNICATION WITH STARTER / GENERATOR CONTROL MODULE LOST COMMUNICATION WITH STARTER / GENERATOR CONTROL MODULE LOST COMMUNICATION WITH ANTI-LOCK BRAKE SYSTEM (ABS) CONTROL MODULE | | G | G* G* G G G G G G G G G G G G G G G G G | | T T T T T T T T T T T T T T T T T T T |
| M W M M M W M W | U0100 U0101 U0102 U0103 U0105 U0106 U0108 U0109 U0111 U0113 U0114 U0115 U0120 U0121 U0122 U0123 | LOST COMMUNICATION WITH ECM / PCM "A" LOST COMMUNICATION WITH TCM LOST COMMUNICATION WITH TRANSFER CASE CONTROL MODULE LOST COMMUNICATION WITH GEAR SHIFT CONTROL MODULE "A" LOST COMMUNICATION WITH FUEL INJECTOR CONTROL MODULE LOST COMMUNICATION WITH GLOW PLUG CONTROL MODULE 1 LOST COMMUNICATION WITH ALTERNATIVE FUEL CONTROL MODULE LOST COMMUNICATION WITH FUEL PUMP CONTROL MODULE "A" LOST COMMUNICATION WITH BATTERY ENERGY CONTROL MODULE "A" LOST COMMUNICATION WITH EMISSIONS CRITICAL CONTROL INFORMATION LOST COMMUNICATION WITH FOUR-WHEEL DRIVE CLUTCH CONTROL MODULE LOST COMMUNICATION WITH ECM / PCM "B" LOST COMMUNICATION WITH STARTER / GENERATOR CONTROL MODULE LOST COMMUNICATION WITH STARTER / GENERATOR CONTROL MODULE | | G | G* G* G G G G G | | T T T T T T T T T T T T T T T T T T T |

| | 110405 | LOCT COMMUNICATION WITH CENERATOR CONTROL MOST " | _ | | | | 1 |
|-----|----------|---|-----|-----|--------|--|-------|
| | | LOST COMMUNICATION WITH GENERATOR CONTROL MODULE | G | G | G | $\vdash \vdash$ | + |
| | | LOST COMMUNICATION WITH POWER STEERING CONTROL MODULE | | Н | G | \vdash | + |
| | | LOST COMMUNICATION WITH TRAILER BRAKE CONTROL MODULE | | | | $\vdash \vdash$ | |
| | | LOST COMMUNICATION WITH SUSPENSION CONTROL MODULE | _ | | _ | $\vdash \vdash$ | _ |
| | | LOST COMMUNICATION WITH BODY CONTROL MODULE | G | G | G | \vdash | Т |
| | | LOST COMMUNICATION WITH RESTRAINTS CONTROL MODULE | | | G | $\vdash \vdash$ | + |
| M W | l | LOST COMMUNICATION WITH INSTRUMENT PANEL CLUSTER (IPC) CONTROL MODULE | | | G * | \vdash | T + |
| | | LOST COMMUNICATION WITH AUXILIARY HEATER CONTROL MODULE | _ | | _ | $\vdash \vdash$ | |
| | | LOST COMMUNICATION WITH VEHICLE IMMOBILIZER CONTROL MODULE | G | G | G | $\vdash \vdash$ | |
| | | LOST COMMUNICATION WITH STEERING COLUMN CONTROL MODULE | | | _ | $\vdash \vdash$ | |
| | - | LOST COMMUNICATION WITH ACTIVE GRILLE AIR SHUTTER MODULE "A" | _ | | G | $\vdash \vdash$ | |
| M | | LOST COMMUNICATION WITH HYBRID / EV POWERTRAIN CONTROL MODULE | G | G | G * | $\vdash \vdash$ | +- |
| W | | LOST COMMUNICATION WITH POWERTRAIN CONTROL MONITOR MODULE | | | | $\vdash \vdash$ | T + |
| | | LOST COMMUNICATION WITH DC TO DC CONVERTER CONTROL MODULE "A" | | | G | $\vdash \vdash$ | T |
| | | LOST COMMUNICATION WITH HYBRID / EV BATTERY PACK SENSOR MODULE | | | G | \vdash | Т |
| M | | LOST COMMUNICATION WITH EVAP SYSTEM LEAK DETECTION CONTROL MODULE | | G | G * | \vdash | |
| М | | LOST COMMUNICATION WITH PM SENSOR | | | | | |
| M W | - | INTERNAL CONTROL MODULE SOFTWARE INCOMPATIBILITY | G | G | G * + | \vdash | T |
| | | SOFTWARE INCOMPATIBILITY WITH ENGINE / POWERTRAIN CONTROL MODULE | | | | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | Т |
| | | SOFTWARE INCOMPATIBILITY WITH TRANSMISSION CONTROL MODULE | | | G | $\vdash \vdash$ | |
| | | SOFTWARE INCOMPATIBILITY WITH FUEL INJECTOR CONTROL MODULE | | | | ot | |
| М | U0309 | SOFTWARE INCOMPATIBILITY WITH ALTERNATIVE FUEL CONTROL MODULE | | | G* | | |
| M | U030C | SOFTWARE INCOMPATIBILITY WITH REDUCTANT QUALITY MODULE | | | G* | Ш | |
| М | U030D | SOFTWARE INCOMPATIBILITY WITH NOX SENSOR "A" | | | G* | Ш | |
| М | U030E | SOFTWARE INCOMPATIBILITY WITH NOX SENSOR "B" | | | G* | Ш | |
| | U0335 | SOFTWARE INCOMPATIBILITY WITH HYBRID BATTERY PACK SENSOR MODULE | | | | Ш | Т |
| | U0336 | SOFTWARE INCOMPATIBILITY WITH RESTRAINTS CONTROL MODULE | | | | Ш | Т |
| M | U0401 | INVALID DATA RECEIVED FROM ECM / PCM "A" | | | | | T * |
| W | U0402 | INVALID DATA RECEIVED FROM TRANSMISSION CONTROL MODULE (TCM) | | | G+ | | Т |
| | UO404 | INVALID DATA RECEIVED FROM GEAR SHIFT CONTROL MODULE "A" | G | G | G | | |
| | UO405 | INVALID DATA RECEIVED FROM CRUISE CONTROL MODULE (TCM) | G | G | G | | |
| М | U0414 | INVALID DATA RECEIVED FROM FOUR-WHEEL DRIVE CLUTCH CONTROL MODULE | | | | | T * |
| M W | U0415 | INVALID DATA RECEIVED FROM ANTI-LOCK BRAKE SYSTEM CONTROL MODULE | | G | G | | T * + |
| | U0416 | INVALID DATA RECEIVED FROM VEHICLE DYNAMICS CONTROL MODULE | | | G | | |
| | U0418 | INVALID DATA RECEIVED FROM BRAKE SYSTEM CONTROL MODULE | | | G | | |
| | U041E | INVALID DATA RECEIVED FROM ALL WHEEL DRIVE CONTROL MODULE | | | | | |
| М | U0423 | INVALID DATA RECEIVED FROM INSTRUMENT PANEL CLUSTER CONTROL MODULE | G | G | G * | | |
| | U0424 | INVALID DATA RECEIVED FROM HVAC CONTROL MODULE | | | | | Т |
| | U0426 | INVALID DATA RECEIVED FROM VEHICLE IMMOBILIZER CONTROL MODULE | | | G | | |
| | - | INVALID DATA RECEIVED FROM STEERING ANGLE SENSOR MODULE | | | G | | 1 |
| | U042E | INVALID DATA RECEIVED FROM GENERATOR CONTROL MODULE | G | G | G | | |
| М | l | INVALID DATA RECEIVED FROM EMISSIONS CRITICAL CONTROL INFORMATION | | | | \sqcap | T * |
| | | INVALID DATA RECEIVED FROM RESTRAINTS CONTROL MODULE | | П | G | \sqcap | Т |
| | | INVALID DATA RECEIVED FROM STARTER / GENERATOR CONTROL MODULE | | H | G | \sqcap | † |
| М | | INVALID DATA RECEIVED FROM PM SENSOR | | H | | \vdash | |
| | | INVALID DATA RECEIVED FROM ACTIVE GRILLE AIR SHUTTER CONTROL MODULE "A" | | H | | \sqcap | + |
| | - | INVALID DATA RECEIVED FROM TRANSMISSION FLUID PUMP MODULE | | H | | \vdash | |
| М | | INVALID DATA RECEIVED FROM HYBRID / EV POWERTRAIN CONTROL MODULE | G | G | G * | | |
| | - | INVALID DATA RECEIVED FROM DC TO DC CONVERTER CONTROL MODULE "A" | Ĕ | ř | 1 | \vdash | Т |
| М | | INVALID DATA RECEIVED FROM EVAP SYSTEM LEAK DETECTION CONTROL MODULE | | G | G * | \vdash | + ' |
| M | | NOx SENSOR "A" RECEIVED INVALID DATA FROM ECM / PCM | | ū | u | \vdash | +- |
| IVI | | SYSTEM CLOCK | | | | \vdash | _ |
| | | | | | | \vdash | T |
| | | SUB NETWORK CAN INITIALIZATION FAILURE | | H | | \vdash | Т |
| | l | INVALID INTERNAL CONTROL MODULE MONITORING DATA RECEIVED FROM HYBRID/EV PCN SCP (J1850) INVALID OR MISSING DATA FOR A/C CLUTCH SENSE INPUT | _ | G | G G | $\vdash \vdash$ | +- |
| | | SERVICE AND TRAVERS OF THE RESERVE TO A LATE AND A CONTRACT OF THE CENTRE INDICE. | (- | (-) | 1.2 | | i |

| М | U1039 | SCP (J1850) INVALID OR MISSING DATA FOR VEHICLE SPEED | G | G | G * | |
|---|-------|---|---|---|-----|---|
| | | SCP (J1850) INVALID OR MISSING DATA FOR BRAKE INPUT | G | G | G | |
| М | U1055 | LOST COMMUNICATION WITH INSTRUMENT PANEL CLUSTER (IPC) CONTROL MODULE | | | G * | |
| | U1073 | SCP (J1850) INVALID OR MISSING DATA FOR ENGINE COOLANT FAN STATUS | G | G | G | |
| | U1075 | SCP (J1850) INVALID OR MISSING DATA FOR ENGINE OIL TEMPERATURE | G | G | G | |
| | U1131 | SCP (J1850) INVALID OR MISSING DATA FOR FUEL PUMP STATUS | G | G | G | |
| | U1135 | SCP (J1850) INVALID OR MISSING DATA FOR IGNITION SWITCH / STARTER | G | G | G | |
| | U1451 | SCP (J1850) INVALID OR MISSING DATA FROM ANTI - THEFT MODULE, VEHICLE IMMOBILIZED | G | | | |
| | U1900 | CAN COMMUNICATION BUS FAULT - RECEIVE ERROR | | | G | Т |
| | U1950 | UBP COMMUNICATION BUS FAULT | | | G | |
| | U200D | CONTROL MODULE OUTPUT POWER "A" | | | | Т |
| М | U2012 | CAR CONFIGURATION PARAMETER(S) | | | G * | |
| М | U2015 | SCP (J1850) INVALID OR MISSING DATA FROM NGV MODULE | G | G | G * | |
| | U2023 | FAULT RECEIVED FROM EXTERNAL NODE | | | G | Т |
| | U2050 | NO APPLICATION PRESENT | | | G | T |
| | U2051 | ONE OR MORE CALIBRATION FILES MISSING / CORRUPT | | | | 1 |
| | U210B | LOST COMMUNICATION BETWEEN FUEL PUMP CONTROL AND RESTRAINTS CONTROL MODULES | G | G | G | |
| | U2226 | UBP INVALID DATA FROM NODE ID \$10 | | | G | |
| | U2306 | UBP INVALID DATA FROM NODE ID \$60 | | | G | |
| | | CONTROL MODULE / POWER DISTRIBUTION DTC's | | | | |
| | U3000 | CONTROL MODULE | | | | Т |
| | U3001 | CONTROL MODULE IMPROPER SHUTDOWN PERFORMANCE | | | | Т |
| | U3003 | BATTERY VOLTAGE | | | | I |