

VAG Foutcode lijsten P codes

P000100	Fuel Volume Regulator Control Circuit/Open
P000A00	A Camshaft Position Slow Response (Bank 1)
P000B00	B Camshaft Position Slow Response (Bank 1)
P000C00	A Camshaft Position Slow Response (Bank 2)
P000D00	B Camshaft Position Slow Response (Bank 2)
P001000	A Camshaft Position Actuator Circuit/Open (Bank1)
P001100	A Camshaft Position (Bank1) Timing over-advanced or System Performance
P001200	A Camshaft Position (Bank1) Timing over-retarded
P001300	B Camshaft Position Actuator Circuit/Open (Bank1)
P001400	B Camshaft Position (Bank1) Timing over-advanced or System Performance
P001500	B Camshaft Position (Bank1) Timing over-retarded
P001600	Crankshaft Position-Camshaft Position Correlation Bank 1 Sensor A
P001700	Crankshaft Position-Camshaft Position Correlation Bank 1 Sensor B
P001800	Crankshaft Position-Camshaft Position Correlation Bank 2 Sensor A
P001900	Crankshaft Position-Camshaft Position Correlation Bank 2 Sensor B
P002000	A Camshaft Position ActuatorCircuit(Bank2)
P002100	A Camshaft Position (Bank2) Timing over-advanced or System Performance
P002200	A Camshaft Position (Bank2) Timing over-retarded
P002300	B Camshaft Position Actuator Circuit(Bank2)
P002400	B Camshaft Position (Bank2) Timing over-advanced or System Performance
P002500	B Camshaft Position (Bank2) Timing over-retarded
P003000	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 1)
P003100	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 1) Low
P003200	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 1) High
P003300	Turbo Charger Bypass Valve Control Circuit
P003400	Turbo Charger Bypass Valve Control Circuit Low
P003500	Turbo Charger Bypass Valve Control Circuit High
P003600	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 2)
P003700	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 2) Low

P003800	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 2) High
P003900	Turbo/Super Charger Bypass Valve Control Circuit Range/Performance
P004000	O2 Sensor Signals Swapped Bank 1 Sensor 1/ Bank 2 Sensor 1
P004100	O2 Sensor Signals Swapped Bank 1 Sensor 2/ Bank 2 Sensor 2
P004200	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 3)
P004300	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 3) Low
P004400	O2 Sensor Heater Contr. Circ.(Bank1(1)Sensor 3) High
P004500	Turbocharger/Supercharger Boost Control Solenoid "A" Circuit/Open
P004700	Turbocharger/Supercharger Boost Control Solenoid "A" Circuit Low
P004800	Turbocharger/Supercharger Boost Control Solenoid "A" Circuit High
P004900	Turbocharger/Supercharger Turbine Overspeed
P004A00	Turbocharger/Supercharger Boost Control Solenoid "B" Circuit / Open
P004C00	Turbocharger/Supercharger Boost Control Solenoid "B" Circuit Low
P004D00	Turbocharger/Supercharger Boost Control Solenoid "B" Circuit High
P005000	O2 Sensor Heater Contr. Circ.(Bank2 Sensor 1)
P005100	O2 Sensor Heater Contr. Circ.(Bank2 Sensor 1) Low
P005200	O2 Sensor Heater Contr. Circ.(Bank2 Sensor1) High
P005600	O2 Sensor Heater Contr. Circ.(Bank2 Sensor 2)
P005700	O2 Sensor Heater Contr. Circ.(Bank2 Sensor 2) Low
P005800	O2 Sensor Heater Contr. Circ.(Bank2 Sensor2) High
P006200	HO2S Heater Control Circuit
P006300	HO2S Heater Control Circuit Low
P006400	HO2S Heater Control Circuit High Bank2 Sensor3
P006500	Air Assisted Injector Control Range/Performance
P006600	Air Assisted Injector Control Circuit low
P006700	Air Assisted Injector Control Circuit high
P006800	MAP/MAF - Throttle Position Correlation
P006900	Manifold Absolute Pressure - Barometric Pressure Correlation
P007000	Ambient Air Temperature Sensor Circuit
P007100	Ambient Air Temperature Sensor Circuit Range/Performance
P007200	Ambient Air Temperature Sensor Circuit Low

P007300	Ambient Air Temperature Sensor Circuit High
P007400	Ambient Air Temperature Sensor Circuit Intermittent
P007C00	Charge Air Cooler Temperature Sensor Circuit Low Bank 1
P007D00	Charge Air Cooler Temperature Sensor Circuit High Bank 1
P008700	Fuel Rail/System Pressure - Too Low
P008800	Fuel Rail/System Pressure - Too High
P008900	Fuel Pressure Regulator 1 Performance
P008A00	Low Pressure Fuel System Pressure - Too Low
P008B00	Low Pressure Fuel System Pressure - Too High
P009000	Fuel Pressure Regulator 1 Control Circuit
P009100	Fuel Pressure Regulator 1 Control Circuit Low
P009200	Fuel Pressure Regulator 1 Control Circuit High
P009500	Intake Air Temperature Sensor 2 Circuit
P009600	Intake Air Temperature Sensor 2 Circuit Bank 1 Range/Performance
P009700	Intake Air Temperature Sensor 2 Circuit Low
P009800	Intake Air Temperature Sensor 2 Circuit High
P009900	Intake Air Temperature Sensor 2 Circuit Intermittent/Erratic
P009B00	Fuel Pressure Relief Control Circuit/Open
P009C00	Fuel Pressure Relief Control Circuit Low
P009D00	Fuel Pressure Relief Control Circuit High
P009E00	Fuel Pressure Relief Control Performance/Stuck Off
P009F00	Fuel Pressure Relief Control Stuck on
P00A200	Charge Air Cooler Temperature Sensor Circuit Low Bank 2
P00A300	Charge Air Cooler Temperature Sensor Circuit High Bank 2
P00A600	Intake Air Temperature Sensor 2 Circuit Bank 2 Range/Performance
P00AF00	Turbocharger/Supercharger Boost Control "A" Module Performance
P00B000	Turbocharger/Supercharger Boost Control "B" Module Performance
P00C600	Fuel Rail Pressure Too Low - Engine Cranking
P010000	Mass or Volume Air Flow Circuit
P010100	Mass or Volume Air Flow Circ. Range/Performance
P010200	Mass or Volume Air Flow Circ. Low Input

P010300	Mass or Volume Air Flow Circ. High Input
P010400	Mass or Volume Air Flow Circuit Intermittent
P010500	Manifold Absolut Pressure/Barometric Pressure Circuit
P010600	Manifold Abs.Pressure or Bar.Pressure Range/Performance
P010700	Manifold Abs.Pressure or Bar.Pressure Low Input
P010800	Manifold Abs.Pressure or Bar.Pressure High Input
P010A00	Mass or Volume Air Flow "B" Circuit
P010B00	Mass or Volume Air Flow "B" Circuit Range/Performance
P010C00	Mass or Volume Air Flow "B" Circuit Low Input
P010D00	Mass or Volume Air Flow "B" Circuit High Input
P010E00	Mass or Volume Air Flow "B" Circuit Intermittent/Erratic
P010F00	Mass or Volume Air Flow Sensor A/B Correlation
P011000	Intake Air Temperature Sensor 1 Circuit
P011100	Intake Air Temp.Circ. Range/Performance
P011200	Intake Air Temp.Circ. Low Input
P011300	Intake Air Temp.Circ. High Input
P011400	Intake Air Temp.Circ. Intermittend
P011500	Engine Coolant Temperature Sensor 1 Circuit
P011600	Engine Coolant Temperature Sensor 1 Circuit Range/Performance
P011700	Engine Coolant Temperature Sensor 1 Circuit Low
P011800	Engine Coolant Temperature Sensor 1 Circuit High
P011A00	Engine Coolant Temperature Sensor 1/2 Correlation
P012000	Throttle/Pedal Pos.Sensor A Circ. Malfunction
P012100	Throttle/Pedal Pos.Sensor A Circ. Range/Performance
P012200	Throttle/Pedal Pos.Sensor A Circ. Low Input
P012300	Throttle/Pedal Pos.Sensor A Circ. High Input
P012500	Insufficient Coolant Temp.for Closed Loop Fuel Control
P012800	Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)
P012A00	Turbocharger/Supercharger Inlet Pressure Sensor Circuit
P012B00	Turbocharger/Supercharger Inlet Pressure Sensor Circuit Range/Performance

P012C00	Turbocharger/Supercharger Inlet Pressure Sensor Circuit Low
P012D00	Turbocharger/Supercharger Inlet Pressure Sensor Circuit High
P013000	O2 Sensor Circ.,Bank1-Sensor1 Malfunction
P013100	O2 Sensor Circ.,Bank1-Sensor1 Low Voltage
P013200	O2 Sensor Circ.,Bank1-Sensor1 High Voltage
P013300	O2 Sensor Circ.,Bank1-Sensor1 Slow Response
P013400	O2 Sensor Circ.,Bank1-Sensor1 No Activity Detected
P013500	O2 Sensor Heater Circ.,Bank1-Sensor1 Malfunction
P013600	O2 Sensor Circ.,Bank1-Sensor2 Malfunction
P013700	O2 Sensor Circ.,Bank1-Sensor2 Low Voltage
P013800	O2 Sensor Circ.,Bank1-Sensor2 High Voltage
P013900	O2 Sensor Circ.,Bank1-Sensor2 Slow Response
P014000	O2 Sensor Circ.,Bank1-Sensor2 No Activity Detected
P014100	O2 Sensor Heater Circ.,Bank1-Sensor2 Malfunction
P014200	O2 Sensor Circ.,Bank1-Sensor3
P014300	O2 Sensor Circ.,Bank1-Sensor3 Low Voltage
P014400	O2 Sensor Circ.,Bank1-Sensor3 High Voltage
P014500	O2 Sensor Circ.,Bank1-Sensor3 Slow Response
P014600	O2 Sensor Circ.,Bank1-Sensor3 No Activity Detected
P014700	O2 Sensor Heater Circ.,Bank1-Sensor3
P014800	Fuel Delivery Error
P014900	Fuel Timing Error
P015000	O2 Sensor Circ.,Bank2-Sensor1 Malfunction
P015100	O2 Sensor Circ.,Bank2-Sensor1 Low Voltage
P015200	O2 Sensor Circ.,Bank2-Sensor1 High Voltage
P015300	O2 Sensor Circ.,Bank2-Sensor1 Slow Response
P015400	O2 Sensor Circ.,Bank2-Sensor1 No Activity Detected
P015500	O2 Sensor Heater Circ.,Bank2-Sensor1 Malfunction
P015600	O2 Sensor Circ.,Bank2-Sensor2 Malfunction
P015700	O2 Sensor Circ.,Bank2-Sensor2 Low Voltage
P015800	O2 Sensor Circ.,Bank2-Sensor2 High Voltage

P015900	O2 Sensor Circ.,Bank2-Sensor2 Slow Response
P016000	O2 Sensor Circ.,Bank2-Sensor2 No Activity Detected
P016100	O2 Sensor Heater Circ.,Bank2-Sensor2 Malfunction
P016200	O2 Sensor Circ.,Bank2-Sensor3 Malfunction
P016300	O2 Sensor Circ.,Bank2-Sensor3 Low Voltage
P016400	O2 Sensor Circ.,Bank2-Sensor3 High Voltage
P016500	O2 Sensor Circ.,Bank2-Sensor3 Slow Response
P016600	O2 Sensor Circ.,Bank2-Sensor3 No Activity Detected
P016700	O2 Sensor Heater Circ.,Bank2-Sensor3 Malfunction
P016900	Incorrect Fuel Composition
P017000	Fuel Trim,Bank1 Malfunction
P017100	Fuel Trim,Bank1 System too Lean
P017200	Fuel Trim,Bank1 System too Rich
P017300	Fuel Trim,Bank2 Malfunction
P017400	Fuel Trim,Bank2 System too Lean
P017500	Fuel Trim,Bank2 System too Rich
P017700	Fuel Composition Sensor Circuit Range/Performance
P017800	Fuel Composition Sensor Circuit Low
P017900	Fuel Composition Sensor Circuit High
P018100	Fuel Temperature Sensor A Circuit Range/Performance
P018200	Fuel Temperature Sensor A Circuit Low Input
P018300	Fuel Temperature Sensor A Circuit High Input
P018600	Fuel Temperature Sensor B Circuit Range/Performance
P018700	Fuel Temperature Sensor B Circuit Low
P018800	Fuel Temperature Sensor B Circuit High
P018A00	Fuel Pressure Sensor "B" Circuit
P018B00	Fuel Pressure Sensor "B" Circuit Range/Performance
P018C00	Fuel Pressure Sensor "B" Circuit Low
P019000	Fuel Rail Pressure Sensor "A" Circuit
P019100	Fuel Rail Pressure Sensor "A" Circuit Range/Performance
P019200	Fuel Rail Pressure Sensor "A" Circuit Low Input

P019300	Fuel Rail Pressure Sensor "A" Circuit High Input
P019400	Fuel Rail Pressure Sensor "A" Circuit intermittent
P019500	Engine Oil Temperature Sensor Circuit
P019600	Engine Oil Temperature Sensor Circuit range/performance
P019700	Engine Oil Temperature Sensor Circuit low
P019800	Engine Oil Temperature Sensor Circuit high
P019900	Engine Oil Temperature Sensor Circuit Intermittent/Erratic
P020000	Injector Circuit open
P020100	Cylinder 1- Injector Circuit
P020200	Cylinder 2- Injector Circuit
P020300	Cylinder 3- Injector Circuit
P020400	Cylinder 4- Injector Circuit
P020500	Cylinder 5- Injector Circuit
P020600	Cylinder 6- Injector Circuit
P020700	Cylinder 7- Injector Circuit
P020800	Cylinder 8- Injector Circuit
P020900	Cylinder 9- Injector Circuit
P020A00	Cylinder 1 Injection Timing
P020B00	Cylinder 2 Injection Timing
P020C00	Cylinder 3 Injection Timing
P020D00	Cylinder 4 Injection Timing
P020E00	Cylinder 5 Injection Timing
P020F00	Cylinder 6 Injection Timing
P021000	Cylinder 10- Injector Circuit
P021100	Cylinder 11- Injector Circuit
P021200	Cylinder 12- Injector Circuit
P021500	Engine Shutoff Solenoid
P021600	Injection Timing Control Circuit
P021800	Transmission Fluid Over Temperature Condition
P021900	Engine Overspeed Condition
P021A00	Cylinder 7 Injection Timing

P021B00	Cylinder 8 Injection Timing
P021C00	Cylinder 9 Injection Timing
P021D00	Cylinder 10 Injection Timing
P021E00	Cylinder 11 Injection Timing
P021F00	Cylinder 12 Injection Timing
P022100	Throttle/Pedal Position Sensor/Switch B Range/Performance
P022200	Throttle/Pedal Position Sensor/Switch B Low Input
P022300	Throttle/Pedal Position Sensor/Switch B High Input
P022500	Throttle/Pedal Position Sensor/Switch C
P022600	Throttle/Pedal Position Sensor/Switch C Circuit Range/Performance
P022700	Throttle/Pedal Position Sensor/Switch C Circuit Low Input
P022800	Throttle/Pedal Position Sensor/Switch C Circuit High Input
P022A00	Charge Air Cooler Bypass Control "A" Circuit /Open
P022B00	Charge Air Cooler Bypass Control "A" Circuit Low
P022C00	Charge Air Cooler Bypass Control "A" Circuit High
P023000	Fuel Pump Primary Circuit
P023400	Turbo/Super Charger Overboost Condition
P023500	Turbo/Super Charger Boost Sensor A Circ.
P023600	Turbocharger Boost Sensor (A) Circ. Range/Performance
P023700	Turbocharger Boost Sensor (A) Circ. Low Input
P023800	Turbocharger Boost Sensor (A) Circ. High Input
P023F00	Fuel Pump Secondary Circuit/Open
P024000	Turbo/Super Charger Boost Sensor "B" Circuit Range/Performance
P024100	Turbo/Super Charger Boost Sensor "B" Circuit Low
P024200	Turbo/Super Charger Boost Sensor "B" Circuit High
P024300	Turbo/Super Charger Wastegate Solenoid A
P024500	Turbo/Super Charger Wasteg.Solenoid A Low
P024600	Turbo/Sup.Charger Wasteg.Solenoid A High
P024900	Turbo/Super Charger Wastegate Solenoid "B" Low
P024A00	Charge Air Cooler Bypass Control "A" Range/Performance
P024B00	Charge Air Cooler Bypass Control "A" Stuck

P025000	Turbo/Super Charger Wastegate Solenoid "B" High
P025100	Injection Pump Fuel Metering Control "A" (Cam/Rotor/Injector)
P025200	Injection Pump Fuel Metering Control A Range/Performance (Cam/Rotor/Injector)
P025A00	Fuel Pump Module Control Circuit/Open
P025B00	Fuel Pump Module Control Circuit Range/Performance
P025C00	Fuel Pump Module Control Circuit Low
P025D00	Fuel Pump Module Control Circuit High
P026100	Cylinder 1- Injector Circuit Low
P026200	Cylinder 1- Injector Circuit High
P026300	Cylinder 1 Contribution/Balance
P026400	Cylinder 2- Injector Circuit Low
P026500	Cylinder 2- Injector Circuit High
P026600	Cylinder 2 Contribution/Balance
P026700	Cylinder 3- Injector Circuit Low
P026800	Cylinder 3- Injector Circuit High
P026900	Cylinder 3 Contribution/Balance
P027000	Cylinder 4- Injector Circuit Low
P027100	Cylinder 4- Injector Circuit High
P027200	Cylinder 4 Contribution/Balance
P027300	Cylinder 5- Injector Circuit Low
P027400	Cylinder 5- Injector Circuit High
P027500	Cylinder 5 Contribution/Balance
P027600	Cylinder 6- Injector Circuit Low
P027700	Cylinder 6- Injector Circuit High
P027800	Cylinder 6 Contribution/Balance
P027900	Cylinder 7- Injector Circuit Low
P028000	Cylinder 7- Injector Circuit High
P028100	Cylinder 7 Contribution/Balance
P028200	Cylinder 8- Injector Circuit Low
P028300	Cylinder 8- Injector Circuit High
P028400	Cylinder 8 Contribution/Balance

P028500	Cylinder 9- Injector Circuit Low
P028600	Cylinder 9- Injector Circuit High
P028700	Cylinder 9 Contribution/Balance
P028800	Cylinder 10- Injector Circuit Low
P028900	Cylinder 10- Injector Circuit High
P029000	Cylinder 10 Contribution/Balance
P029100	Cylinder 11- Injector Circuit Low
P029200	Cylinder 11- Injector Circuit High
P029300	Cylinder 11 Contribution/Balance
P029400	Cylinder 12- Injector Circuit Low
P029500	Cylinder 12- Injector Circuit High
P029600	Cylinder 12 Contribution/Balance
P029900	Turbo/Super Charger Underboost
P02CA00	Turbocharger/Supercharger "B" Overboost Condition
P02CB00	Turbocharger/Supercharger "B" Underboost Condition
P02CD00	Cylinder 1 Fuel Injector Offset Learning At Max Limit
P02CF00	Cylinder 2 Fuel Injector Offset Learning At Max Limit
P02D100	Cylinder 3 Fuel Injector Offset Learning At Max Limit
P02D300	Cylinder 4 Fuel Injector Offset Learning At Max Limit
P030000	Random/Multiple Cylinder Misfire Detected
P030100	Cyl.1 Misfire Detected
P030200	Cyl.2 Misfire Detected
P030300	Cyl.3 Misfire Detected
P030400	Cyl.4 Misfire Detected
P030500	Cyl.5 Misfire Detected
P030600	Cyl.6 Misfire Detected
P030700	Cyl.7 Misfire Detected
P030800	Cyl.8 Misfire Detected
P030900	Cyl.9 Misfire Detected
P031000	Cyl.10 Misfire Detected
P031100	Cyl.11 Misfire Detected

P031200	Cyl.12 Misfire Detected
P031300	Misfire Detected with Low Fuel
P031400	Single Cylinder Misfire
P031800	Rough Road Sensor "A" Signal Circuit
P032100	Ign./Distributor Eng.Speed Inp.Circ. Range/Performance
P032200	Ign./Distributor Eng.Speed Inp.Circ. No Signal
P032400	Knock Control System Error
P032500	Knock Sensor 1 Circuit Malfunktion
P032600	Knock Sensor 1 Circuit Range/Performance
P032700	Knock Sensor 1 Circ. Low Input
P032800	Knock Sensor 1 Circ. High Input
P033000	Knock Sensor 2 Circuit
P033100	Knock Sensor 2 Circuit Range/Performance
P033200	Knock Sensor 2 Circ. Low Input
P033300	Knock Sensor 2 Circ. High Input
P033500	Crankshaft Position Sensor A Circuit
P033600	Crankshaft Position Sensor A Circuit Range/Performance
P033700	Crankshaft Pos.Sensor (A) Circ. Low Input
P033900	Crankshaft Position Sensor "A" Circuit Intermittent
P034000	Camshaft Position Sensor Circuit
P034100	Camshaft Pos.Sensor Circ. Range/Performance
P034200	Camshaft Pos.Sensor Circ. Low Input
P034300	Camshaft Pos.Sensor Circ. High Input
P034500	Camshaft Position Sensor Circuit Bank2
P034600	Camshaft Pos.Sensor Circ. (Bank2) Range/Performance
P034700	Camshaft Pos.Sensor "A" Circ. (Bank2) Low
P034800	Camshaft Pos.Sensor "A" Circ. (Bank2) High
P035100	Ignition Coil A Primary/secondary Circuit
P035200	Ignition Coil B Primary/secondary Circuit
P035300	Ignition Coil C Primary/secondary Circuit
P035400	Ignition Coil D Primary/secondary Circuit

P035500	Ignition Coil E Primary/secondary Circuit
P035600	Ignition Coil F Primary/secondary Circuit
P035700	Ignition Coil G Primary/secondary Circuit
P035800	Ignition Coil H Primary/secondary Circuit
P035900	Ignition Coil I Primary/secondary Circuit
P036000	Ignition Coil J Primary/secondary Circuit
P036100	Ignition Coil K Primary/secondary Circuit
P036200	Ignition Coil L Primary/secondary Circuit
P036300	Misfire Detected - Fueling Disabled
P036500	Camshaft Position Sensor "B" Circuit (Bank 1)
P036600	Camshaft Pos.Sensor "B" Circ. (Bank 1) Range/Performance
P036700	Camshaft Pos.Sensor "B" Circ. (Bank 1) Low Input
P036800	Camshaft Pos.Sensor "B" Circ. (Bank 1) High Input
P038000	Glow Plug/Heater Circuit "A"
P038100	Glow Plug/Heater Indicator Circuit
P038300	Glow Plug Control Module Control Circuit Low
P038400	Glow Plug Control Module Control Circuit High
P039000	Camshaft Position Sensor "B" Circuit (Bank 2)
P039100	Camshaft Pos.Sensor "B" Circ. (Bank 2) Range/Performance
P039200	Camshaft Pos.Sensor "B" Circ. (Bank 2) Low Input
P039300	Camshaft Pos.Sensor "B" Circ. (Bank 2) High Input
P039B00	Cylinder 1 Pressure Too High
P03A500	Cylinder 2 Pressure Too High
P03AF00	Cylinder 3 Pressure Too High
P03B900	Cylinder 4 Pressure Too High
P03C300	Cylinder 5 Pressure Too High
P03CD00	Cylinder 6 Pressure Too High
P040000	Exhaust Gas Recirc."A" Flow
P040100	Exhaust Gas Recirc.Flow Insufficient Detected
P040200	Exhaust Gas Recirc.Flow Excessive Detected
P040300	Exhaust Gas Recirculation Circuit

P040400	Exhaust Gas Recirculation Circuit Range/Performance
P040500	Exhaust Gas Recirculat.Sensor A Circuit Low
P040600	Exhaust Gas Recirculat.Sensor A Circuit High
P040700	Exhaust Gas Recirculat.Sensor B Circuit Low
P040800	Exhaust Gas Recirculat.Sensor B Circuit High
P040B00	Exhaust Gas Recirculation Temperature Sensor "A" Circuit Range/Performance
P040C00	Exhaust Gas Recirculation Temperature Sensor "A" Circuit Low
P040D00	Exhaust Gas Recirculation Temperature Sensor "A" Circuit High
P041000	Sec.Air Inj.Sys. Malfunction
P041100	Sec.Air Inj.Sys. Incorrect Flow Detected
P041200	Sec.Air Inj.Sys.Switching Valve A Circ. Malfunction
P041300	Sec.Air Inj.Sys.Switching Valve A Circ. Open
P041400	Sec.Air Inj.Sys.Switching Valve A Circ. Shorted
P041500	Sec.Air Inj.Sys.Switching Valve B Circ. Malfunction
P041600	Sec.Air Inj.Sys.Switching Valve B Circ. Open
P041700	Sec.Air Inj.Sys.Switching Valve B Circ. Shorted
P041800	Sec. Air Injection System Relay A Circuit
P041900	Sec. Air Injection System Relay B Circuit
P042000	Catalyst System,Bank1 Efficiency Below Threshold
P042100	Warm Up Catalyst, Bank1 Efficiency Below Threshold
P042200	Main Catalyst,Bank1 Efficiency Below Threshold
P042500	Catalyst Temperature Sensor Circuit
P042600	Catalyst Temperature Sensor Circuit Range/Performance
P042700	Catalyst Temperature Sensor Bank1 Low Input
P042800	Catalyst Temperature Sensor Bank1 High Input
P043000	Catalyst System, Bank2 Efficiency Below Threshold
P043100	Warm Up Catalyst, Bank2 Efficiency Below Threshold
P043200	Main Catalyst,Bank2 Efficiency Below Threshold
P043600	Catalyst Temperature Sensor Bank2 Range/performance
P043700	Catalyst Temperature Sensor Bank2 Low Input
P043800	Catalyst Temperature Sensor Bank2 High Input

P044000	EVAP Emission Contr.Sys. Malfunction
P044100	EVAP Emission Contr.Sys.Incorrect Purge Flow
P044200	EVAP Emission Contr.Sys.(Small Leak) Leak Detected
P044300	Evaporativ Emiss.System Purge Control Valve Circ.
P044400	Evaporativ Emiss.System Purge Control Valve Circ. Open
P044500	Evaporativ Emiss.System Purge Control Valve Circ. Shorted
P044900	Evaporativ Emiss.System Vent Valve/Solenoid Circ.
P045000	Evaporative Emission System Pressure Sensor/Switch
P045100	Evaporative Emission System Pressure Sensor/Switch Range/Performance
P045200	EVAP Emission Contr.Sys.Press.Sensor Low Input
P045300	EVAP Emission Contr.Sys.Press.Sensor High Input
P045500	EVAP Emission Contr.Sys.(Gross Leak) Leak Detected
P045600	EVAP Emission Contr. Sys. (very small Leak) Leak Detected
P045800	Evaporative Emission System Purge Control Valve Circuit Low
P045900	Evaporative Emission System Purge Control Valve Circuit High
P045A00	Exhaust Gas Recirculation "B" Control Circuit
P045B00	Exhaust Gas Recirculation "B" Control Circuit Range/Performance
P045C00	Exhaust Gas Recirculation "B" Control Circuit Low
P045D00	Exhaust Gas Recirculation "B" Control Circuit High
P045E00	Exhaust Gas Recirculation "B" Control Stuck Open
P045F00	Exhaust Gas Recirculation "B" Control Stuck Closed
P046100	Fuel Level Sensor Circ. Range/Performance
P046200	Fuel Lever Sensor Circuit Low Input
P046300	Fuel Lever Sensor Circuit High Input
P046C00	Exhaust Gas Recirculation Sensor "A" Circuit Range/Performance
P046E00	Exhaust Gas Recirculation Sensor "B" Circuit Range/Performance
P047000	Exhaust Pressure Sensor "A"
P047100	Exhaust Pressure Sensor "A" Range/Performance
P047200	Exhaust Pressure Sensor "A"Low
P047300	Exhaust Pressure Sensor "A" High
P047500	Exhaust Pressure Control Valve "A"

P047600	Exhaust Pressure Control Valve "A" Range/Performance
P047700	Exhaust Pressure Control Valve "A" Low
P047800	Exhaust Pressure Control Valve "A" High
P047A00	Exhaust Pressure Sensor "B"
P047B00	Exhaust Pressure Sensor "B" Range/Performance
P047C00	Exhaust Pressure Sensor "B" Low
P047D00	Exhaust Pressure Sensor "B" High
P047F00	Exhaust Pressure Control Valve "A" Stuck Open
P048000	Cooling Fan 1 Control Circuit
P048100	Cooling Fan 2 Control Circuit
P048600	Exhaust Gas Recirculation Sensor "B" Circuit
P048900	Exhaust Gas Recirculation Control Circuit Low
P048A00	Exhaust Pressure Control Valve "A" Stuck Closed
P048B00	Exhaust Pressure Control Valve Position Sensor/Switch Circuit
P048C00	Exhaust Pressure Control Valve Pos. Sensor/Switch Circuit Range/Performance
P048E00	Exhaust Pressure Control Valve Pos. Sensor/Switch Circuit High
P049000	Exhaust Gas Recirculation Control Circuit High
P049100	Secondary Air Injection System (Bank 1) insufficient flow
P049200	Secondary Air Injection System (Bank 2)
P049800	Evaporative Emission System Vent Valve Control Circuit Low
P049900	Evaporative Emission System Vent Valve Control Circuit High
P049A00	Exhaust Gas Recirc."B" Flow
P049D00	Exhaust Gas Recirculation "A" Control Position Exceeded Learning Limit
P049E00	Exhaust Gas Recirculation "B" Control Position Exceeded Learning Limit
P050100	Vehicle Speed Sensor "A" Range/Performance
P050200	Vehicle Speed Sensor "A" Circuit Low Input
P050300	Vehicle Speed Sensor "A" Intermittend/Erratic/High
P050500	Idle Control System
P050600	Idle Control System RPM Lower than Expected
P050700	Idle Control System RPM Higher than Expected
P050A00	Cold Start Idle Air Control System Performance

P050B00	Cold Start Ignition Timing Performance
P051000	Closed Throttle Pos.Switch Malfunction
P051300	Incorrect Immobilizer Key
P053100	A/C Refrigerant Pressure Sensor Circuit Range/Performance
P053200	A/C Refrigerant Pressure Sensor Circuit low Input
P053300	A/C Refrigerant Pressure Sensor Circuit high Input
P053700	A/C Evaporator Temperature Sensor Circuit Low
P053800	A/C Evaporator Temperature Sensor Circuit High
P053A00	Positive Crankcase Ventilation Heater Control Circuit /Open
P053B00	Positive Crankcase Ventilation Heater Control Circuit Low
P053C00	Positive Crankcase Ventilation Heater Control Circuit High
P054400	Exhaust Gas Temperatur Sensor Circuit - Bank 1
P054500	Exhaust Gas Temperatur Sensor Circuit - Bank 1 Low
P054600	Exhaust Gas Temperatur Sensor Circuit - Bank 1 High
P054700	Exhaust Gas Temperatur Sensor Circuit - Bank 2
P054800	Exhaust Gas Temperatur Sensor Circuit - Bank 2 Low
P054900	Exhaust Gas Temperatur Sensor Circuit - Bank 2 High
P055000	Power Steering Pressure Circuit
P055100	Power Steering Pressure Sensor Circuit Range/Performance
P056000	System Voltage Malfunction
P056100	System Voltage Unstable
P056200	System Voltage Low Voltage
P056300	System Voltage High Voltage
P056800	Cruise Control Set Signal
P057100	Cruise/Brake Switch (A) Circ. Malfunction
P059700	Thermostat Heater Control Circuit Open
P059800	Thermostat Heater Control Circuit Low
P059900	Thermostat Heater Control Circuit High
P060000	Serial Link Communication
P060100	Internal Contr.Module Memory Check Sum Error
P060200	Control Modul Programming Error

P060300	Internal Contr.Module (KAM) Error
P060400	Internal Contr.Module Random Access Memory (RAM) Error
P060500	Internal Contr.Module ROM Test Error
P060600	ECM/PCM Processor
P060700	Control Module Performance
P060800	Control Module VSS Output "A"
P060900	Control Module VSS Output "B"
P060A00	Internal Control Module Monitoring Processor Performance
P061000	Control Module Vehicle Options Error
P061300	TCM Processor
P061400	ECM/TCM Incompatible
P061500	Starter Relay Circuit
P061600	Starter Relay Circuit Low
P061700	Starter Relay Circuit High
P062700	Fuel Pump "A" Control Circuit/Open
P062800	Fuel Pump "A" Control Circuit Low
P062900	Fuel Pump "A" Control Circuit High
P062B00	Internal Control Module Fuel Injector Control Performance
P062F00	Internal Control Module EEPROM Error
P063400	PCM/ECM/TCM Internal Temperature Too High
P063800	Throttle Actuator Control (Bank1) Range/Performance
P063900	Throttle Actuator Control (Bank2) Range/Performance
P064100	Sensor Reference Voltage "A" Circuit Open
P064200	Sensor Reference Voltage "A" Circuit Low
P064300	Sensor Reference Voltage "A" Circuit High
P064500	AC clutch relais circuit
P064C00	Glow Plug Control Module
P065000	Malfunction Indicator Lamp Control Circ.
P065100	Sensor Reference Voltage "B" Circuit Open
P065200	Sensor Reference Voltage "B" Circuit Low
P065300	Sensor Reference Voltage "B" Circuit High

P065400	Engine RPM Output Circuit
P065600	Fuel Level Output Circuit
P065700	Actuator Supply Voltage "A" Circuit/Open
P065800	Actuator Supply Voltage "A" Circuit Low
P065900	Actuator Supply Voltage "A" Circuit High
P066000	Intake Manifold Tuning Control Circuit - Bank1
P066100	Intake Manifold Tuning Control Circuit - Bank1 Low
P066200	Intake Manifold Tuning Control Circuit - Bank1 High
P066600	PCM/ECM/TCM Internal Temperature Sensor "A" Circuit
P066700	PCM/ECM/TCM Internal Temperature Sensor "A" Range/Performance
P066800	PCM/ECM/TCM Internal Temperature Sensor "A" Circuit Low
P066900	PCM/ECM/TCM Internal Temperature Sensor "A" Circuit High
P066A00	Cylinder 1 Glow Plug Control Circuit Low
P066C00	Cylinder 2 Glow Plug Control Circuit Low
P066E00	Cylinder 3 Glow Plug Control Circuit Low
P067000	Glow Plug Module Control Circuit
P067100	Cylinder 1 Glow Plug Circuit
P067200	Cylinder 2 Glow Plug Circuit
P067300	Cylinder 3 Glow Plug Circuit
P067400	Cylinder 4 Glow Plug Circuit
P067500	Cylinder 5 Glow Plug Circuit
P067600	Cylinder 6 Glow Plug Circuit
P067700	Cylinder 7 Glow Plug Circuit
P067800	Cylinder 8 Glow Plug Circuit
P067900	Cylinder 9 Glow Plug Circuit
P067A00	Cylinder 4 Glow Plug Control Circuit Low
P067C00	Cylinder 5 Glow Plug Control Circuit Low
P067E00	Cylinder 6 Glow Plug Control Circuit Low
P068000	Cylinder 10 Glow Plug Circuit
P068100	Cylinder 11 Glow Plug Circuit
P068200	Cylinder 12 Glow Plug Circuit

P068400	Glow Plug Control Module to PCM Comm.Circuit Range/Performance
P068500	EMC/PCM Power Relay Control Circuit Open
P068600	EMC/PCM Power Relay Control Circuit Low
P068700	EMC/PCM Power Relay Control Circuit High
P068800	EMC/PCM Power Relay Sense Circuit Open
P068A00	ECM/PCM Power Relay De-Energized Performance - Too Early
P068B00	ECM/PCM Power Relay De-Energized Performance - Too Late
P068C00	Cylinder 7 Glow Plug Control Circuit Low
P068E00	Cylinder 8 Glow Plug Control Circuit Low
P069100	Cooling Fan 1 Control Circuit Low
P069200	Cooling Fan 1 Control Circuit High
P069300	Cooling Fan 2 Control Circuit Low
P069400	Cooling Fan 2 Control Circuit High
P069700	Sensor Reference Voltage "C" Circuit Open
P069800	Sensor Reference Voltage "C" Circuit Low
P069900	Sensor Reference Voltage "C" Circuit High
P069A00	Cylinder 9 Glow Plug Control Circuit Low
P069C00	Cylinder 10 Glow Plug Control Circuit Low
P06A300	Sensor Reference Voltage "D" Circuit/Open
P06B900	Cylinder 1 Glow Plug Circuit Range/Performance
P06BA00	Cylinder 2 Glow Plug Circuit Range/Performance
P06BB00	Cylinder 3 Glow Plug Circuit Range/Performance
P06BC00	Cylinder 4 Glow Plug Circuit Range/Performance
P06BD00	Cylinder 5 Glow Plug Circuit Range/Performance
P06BE00	Cylinder 6 Glow Plug Circuit Range/Performance
P06BF00	Cylinder 7 Glow Plug Circuit Range/Performance
P06C000	Cylinder 8 Glow Plug Circuit Range/Performance
P06C100	Cylinder 9 Glow Plug Circuit Range/Performance
P06C200	Cylinder 10 Glow Plug Circuit Range/Performance
P06C300	Cylinder 11 Glow Plug Circuit Range/Performance
P06C400	Cylinder 12 Glow Plug Circuit Range/Performance

P06C500	Cylinder 1 Glow Plug Incorrect
P06C600	Cylinder 2 Glow Plug Incorrect
P06C700	Cylinder 3 Glow Plug Incorrect
P06C800	Cylinder 4 Glow Plug Incorrect
P06C900	Cylinder 5 Glow Plug Incorrect
P06CA00	Cylinder 6 Glow Plug Incorrect
P06CB00	Cylinder 7 Glow Plug Incorrect
P06CC00	Cylinder 8 Glow Plug Incorrect
P06CD00	Cylinder 9 Glow Plug Incorrect
P06CE00	Cylinder 10 Glow Plug Incorrect
P06CF00	Cylinder 11 Glow Plug Incorrect
P06D000	Cylinder 12 Glow Plug Incorrect
P06D200	Sensor Reference Voltage "E" Circuit/Open
P06E000	Cylinder 11 Glow Plug Control Circuit Low
P06E200	Cylinder 12 Glow Plug Control Circuit Low
P070000	Transm.Contr.System Malfunction
P070100	Transm.Contr.System Range/Performance
P070200	Transm.Contr.System Electrical
P070300	Torque Converter/Brake Switch B Circ. Malfunction
P070400	Clutch Switch Input Circuit
P070500	Transm.Range Sensor "A" Circ.(PRNDL Inp.) Malfunction
P070600	Transm.Range Sensor "A" Circ. Range/Performance
P070700	Transm.Range Sensor "A" Circ. Low Input
P070800	Transm.Range Sensor "A" Circ. High Input
P071000	Transm.Fluid Temp.Sensor Circ. Malfunction
P071100	Transm.Fluid Temp.Sensor Circ. Range/Performance
P071200	Transm.Fluid Temp.Sensor Circ. Low Input
P071300	Transm.Fluid Temp.Sensor Circ. High Input
P071400	Transm.Fluid Temp.Sensor Circ. Intermittent
P071500	Input Turbine/Speed Sensor "A" Circ.
P071600	Input Turbine/Speed Sensor "A" Circ. Range/Performance

P071700	Input Turbine/Speed Sensor "A" Circ. No Signal
P072000	Output Speed Sensor Circ. Malfunction
P072100	Output Speed Sensor Circ. Range/Performance
P072200	Output Speed Sensor Circ. No Signal
P072500	Engine Speed Input Circuit
P072600	Engine Speed Inp.Circ. Range/Performance
P072700	Engine Speed Inp.Circ. No Signal
P072900	Gear 6 Incorrect Ratio
P072B00	Stuck in Reverse
P072C00	Stuck in Gear 1
P072D00	Stuck in Gear 2
P072E00	Stuck in Gear 3
P072F00	Stuck in Gear 4
P073000	Gear Incorrect Ratio
P073100	Gear 1 Incorrect Ratio
P073200	Gear 2 Incorrect Ratio
P073300	Gear 3 Incorrect Ratio
P073400	Gear 4 Incorrect Ratio
P073500	Gear 5 Incorrect Ratio
P073600	Reverse Incorrect Ratio
P073A00	Stuck in Gear 5
P073B00	Stuck in Gear 6
P073C00	Stuck in Gear 7
P073E00	Unable to Engage Reverse
P073F00	Unable to Engage Gear 1
P074000	Torque Converter Clutch Circ. Malfunction
P074100	Torque Converter Clutch Circ. Performance or Stuck Off
P074300	Torque Converter Clutch Circ. Electrical
P074600	Pressure Contr.Solenoid A Performance or Stuck Off
P074700	Pressure Contr.Solenoid A Stuck On
P074800	Pressure Contr.Solenoid A Electrical

P074900	Pressure Contr.Solenoid A Intermittent
P074A00	Unable to Engage Gear 2
P074B00	Unable to Engage Gear 3
P074C00	Unable to Engage Gear 4
P074D00	Unable to Engage Gear 5
P074E00	Unable to Engage Gear 6
P074F00	Unable to Engage Gear 7
P075000	Shift Solenoid A Malfunction
P075100	Shift Solenoid A Performance or Stuck Off
P075200	Shift Solenoid A Stuck On
P075300	Shift Solenoid A Electrical
P075400	Shift Solenoid "A" Intermittent
P075600	Shift Solenoid B Performance or Stuck Off
P075700	Shift Solenoid B Stuck On
P075800	Shift Solenoid B Electrical
P076100	Shift Solenoid C Performance or Stuck Off
P076200	Shift Solenoid C Stuck On
P076300	Shift Solenoid C Electrical
P076400	Shift Solenoid "C" Intermittent
P076600	Shift Solenoid D Performance or Stuck Off
P076800	Shift Solenoid D Electrical
P077100	Shift Solenoid E Performance or Stuck Off
P077300	Shift Solenoid E Electrical
P077600	Pressure Contr.Solenoid B Performance or Stuck Off
P077700	Pressure Contr.Solenoid B Stuck On
P077800	Pressure Contr.Solenoid B Electrical
P077900	Pressure Contr.Solenoid B Intermittent
P078000	Shift
P078100	1-2 Shift
P078200	2-3 Shift
P078300	3-4 Shift

P078400	4-5 Shift
P078500	Shift/Timing Solenoid
P079000	Normal/Performance Switch Circ. Malfunction
P079100	Intermediate Shaft Speed Sensor "A" Circuit
P079600	Pressure Contr.Solenoid C Performance or Stuck Off
P079700	Pressure Contr.Solenoid C Stuck On
P079800	Pressure Contr.Solenoid C Electrical
P079900	Pressure Contr.Solenoid C Intermittent
P080500	Clutch Position Sensor Circuit
P080700	Clutch Position Sensor Circuit Low
P080800	Clutch Position Sensor Circuit High
P081000	Clutch Position Control Error
P081100	Excessive Clutch Slippage
P081500	Upshift Switch Circuit
P081600	Downshift Switch Circuit
P081700	Starter Disable Circuit
P082000	Gear Lever X-Y Position Sensor Circuit
P082600	Up and Down Shift Switch Circuit
P082900	5-6 Shift
P084000	Transmission Fluid Pressure Sensor/Switch A
P084100	Transmission Fluid Pressure Sensor/Switch A Range/Performance
P084200	Transmission Fluid Pressure Sensor/Switch "A" Circuit Low
P084300	Transmission Fluid Pressure Sensor/Switch "A" Circuit High
P084400	Transmission Fluid Pressure Sensor/Switch "A" Intermittend
P084500	Transmission Fluid Pressure Sensor/Switch B
P084600	Transmission Fluid Pressure Sensor/Switch B Range/Performance
P084700	Transmission Fluid Pressure Sensor/Switch "B" Circuit Low
P084800	Transmission Fluid Pressure Sensor/Switch "B" Circuit High
P084900	Transmission Fluid Pressure Sensor/Switch "B" Intermittend
P085000	Park/Neutral Switch Input Circuit
P085100	Park/Neutral Switch Input Circuit Low

P085200	Park/Neutral Switch Input Circuit High
P086300	TCM Communication Circuit
P086400	TCM Communication Circuit Range/Performance
P086500	TCM Communication Circuit Low
P086800	Transmission Fluid Pressure Low
P088400	TCM Power Input Signal Intermittent
P088600	TCM Power Relay Control Circuit Low
P088700	TCM Power Relay Control Circuit High
P088900	TCM Power Relay Sense Circuit Range/Performance
P089000	TCM Power Relay Sense Circuit Low
P089100	TCM Power Relay Sense Circuit High
P089200	TCM Power Relay Sense Circuit Intermittent
P089700	Transmission Fluid Deteriorated
P090400	Gate Select Position Circuit
P090500	Gate Select Position Circuit Range/Performance
P090600	Gate Select Position Low
P090700	Gate Select Position Circuit High
P091400	Gear Shift Position Circuit
P091600	Gear Shift Position Circuit Low
P091700	Gear Shift Position Circuit High
P091900	Gear Shift Position Control Error
P092800	Gear Shift Lock Solenoid Control Circuit/Open
P092900	Gear Shift Lock Solenoid Control Circuit Range/Performance
P093000	Gear Shift Lock Solenoid Control Circuit Low
P093100	Gear Shift Lock Solenoid Control Circuit High
P094400	Hydraulic Pressure Unit Loss of Pressure
P094500	Hydraulic Pump Relay Circuit/Open
P094700	Hydraulic Pump Relay Circuit Low
P094800	Hydraulic Pump Relay Circuit High
P0A0900	DC/DC Converter Status Circuit Low
P0A0A00	High Voltage System Inter-Lock Circuit

P0A1F00	Battery Energy Control Module
P0A2A00	Drive Motor "A" Temperature Sensor Circuit
P0A2B00	Drive Motor "A" Temperature Sensor Circuit Range/Performance
P0A2C00	Drive Motor "A" Temperature Sensor Circuit Low
P0A2D00	Drive Motor "A" Temperature Sensor Circuit High
P0A4000	Drive Motor "A" Position Sensor Circuit Range/Performance
P0A4100	Drive Motor "A" Position Sensor Circuit Low
P0A4200	Drive Motor "A" Position Sensor Circuit High
P0A4400	Drive Motor "A" Position Sensor Circuit Overspeed
P0A5200	Drive Motor "A" Current Sensor Circuit Range/Performance
P0A5300	Drive Motor "A" Current Sensor Circuit Low
P0A5400	Drive Motor "A" Current Sensor Circuit High
P0A5D00	Drive Motor "A" Phase U Current
P0A5E00	Drive Motor "A" Phase U Current Low
P0A5F00	Drive Motor "A" Phase U Current High
P0A6000	Drive Motor "A" Phase V Current
P0A6100	Drive Motor "A" Phase V Current Low
P0A6200	Drive Motor "A" Phase V Current High
P0A7E00	Hybrid Battery Pack Over Temperature
P0A7F00	Hybrid Battery Pack Deterioration
P0A8000	Replace Hybrid Battery Pack
P0A8B00	14 Volt Power Module System Voltage
P0A8D00	14 Volt Power Module System Voltage Low
P0A8E00	14 Volt Power Module System Voltage High
P0A9000	Drive Motor "A" Performance
P0A9500	High Voltage Fuse
P0A9D00	Hybrid Battery Temperature Sensor "A" Circuit Low
P0A9E00	Hybrid Battery Temperature Sensor "A" Circuit High
P0AA600	Hybrid Battery Voltage System Isolation Fault
P0AAE00	Hybrid Battery Pack Air Temperature Sensor "A" Circuit Low
P0AAF00	Hybrid Battery Pack Air Temperature Sensor "A" Circuit High

P0AB300	Hybrid Battery Pack Air Temperature Sensor "B" Circuit Low
P0AB400	Hybrid Battery Pack Air Temperature Sensor "B" Circuit High
P0ABB00	Hybrid Battery Pack Voltage Sense "A" Circuit Range/Performance
P0ABC00	Hybrid Battery Pack Voltage Sense "A" Circuit Low
P0ABD00	Hybrid Battery Pack Voltage Sense "A" Circuit High
P0ABF00	Hybrid Battery Pack Current Sensor "A" Circuit
P0AC000	Hybrid Battery Pack Current Sensor "A" Circuit Range/Performance
P0AC100	Hybrid Battery Pack Current Sensor "A" Circuit Low
P0AC200	Hybrid Battery Pack Current Sensor "A" Circuit High
P0AC700	Hybrid Battery Temperature Sensor "B" Circuit Low
P0AC800	Hybrid Battery Temperature Sensor "B" Circuit High
P0AED00	Drive Motor Inverter Temperature Sensor "A" Circuit
P0AEE00	Drive Motor Inverter Temperature Sensor "A" Circuit Range/Performance
P0AEF00	Drive Motor Inverter Temperature Sensor "A" Circuit Low
P0AF000	Drive Motor Inverter Temperature Sensor "A" Circuit High
P0AF800	Hybrid Battery System Voltage
P0AFA00	Hybrid Battery System Voltage Low
P0AFB00	Hybrid Battery System Voltage High
P0AFC00	Hybrid Battery Pack Sensor Module
P0AFD00	Hybrid Battery Pack Temperature Too Low
P0B1500	Hybrid Battery Pack Voltage Sense "B" Circuit Range/Performance
P0B1600	Hybrid Battery Pack Voltage Sense "B" Circuit Low
P0B1700	Hybrid Battery Pack Voltage Sense "B" Circuit High
P0B2400	Hybrid Battery "A" Voltage Unstable
P0B2500	Hybrid Battery "A" Voltage Low
P0B2600	Hybrid Battery "A" Voltage High
P0B2900	Hybrid Battery "B" Voltage Low
P0B2A00	Hybrid Battery "B" Voltage High
P100000	Cyl.9-Fuel Inj.Circ. -N299 Malfunction
P100100	Cyl.10-Fuel Inj.Circ. -N300 Malfunction
P100200	Cyl.11-Fuel Inj.Circ. -N301 Malfunction

P100300	Cyl.12-Fuel Inj.Circ. -N302 Malfunction
P100400	Torque difference cylinder 1 Limiting value exceeded
P100500	Torque difference cylinder 2 Limiting value exceeded
P100600	Torque difference cylinder 3 Limiting value exceeded
P100700	Torque difference cylinder 4 Limiting value exceeded
P100800	Air mass meter 1/2 Implausible signal
P100900	Air mass meter 1/2 implausible signal from load detection
P100A00	Recirculating valve for turbocharger bank 2 Electrical malfunction
P100B00	Recirculating valve for turbocharger bank 2 Short-circuit to ground
P100C00	Recirculating valve for turbocharger bank 2 Short circuit to B+
P100D00	Turbocharger Adjustment difficulty of movement or blocked
P100E00	Torque intervention due to turbocharger protection
P100F00	Fuel injector Mechanical malfunction
P101000	Cyl.9-Fuel Inj.Circ. -N299 Open circuit
P101100	Cyl.10-Fuel Inj.Circ. -N300 Open circuit
P101200	Cyl.11-Fuel Inj.Circ. -N301 Open circuit
P101300	Cyl.12-Fuel Inj.Circ. -N302 Open circuit
P101400	Bypass Flap Filter Valve -N275- Short circuit to B+
P101500	Bypass Flap Filter Valve -N275- Short-circuit to ground
P101600	Bypass Flap Filter Valve -N275- Open circuit
P101700	Intake Manifold Runner Bank 2 Upper stop not reached
P101800	Intake Manifold Runner Bank 2 lower limit not reached
P101900	NOX Sensor -G295 Slow Response
P101A00	Activation of turbocharger adjustment Short circuit to ground/open circuit
P101B00	Activation of turbocharger adjustment Short circuit to B+
P101C00	Activation of turbocharger adjustment bank 2 Short circuit to ground/open circuit
P101D00	Activation of turbocharger adjustment bank 2 Short circuit to B+
P101E00	Rpm limit due to excess temperature
P101F00	Fuel high pressure Maximum exceeded
P102000	Fuel Pressure Regulation Value above upper control limit
P102100	'A' Camshaft Position (Bank 1) Timing Over-Advanced or System Performance

P102200	'A' Camshaft Position (Bank 1) Timing Over-Advanced or System Performance
P102300	Fuel Pressure Regulator Valve Short-circuit to ground
P102400	Fuel Pressure Regulator Valve Open circuit
P102500	Fuel Pressure Regulator Valve Mechanical malfunction
P102600	Intake manifold Runner Control (IMRC) Short circuit to B+
P102700	Intake manifold Runner Control (IMRC) Short-circuit to ground
P102800	Intake manifold Runner Control (IMRC) Open circuit
P102900	Intake Manifold Runner Control (IMRC) Valve -N316- Upper stop not reached
P102A00	Torque limitation due to coolant temperature
P102B00	Torque limitation due to engine oil temperature
P102C00	Torque limitation due to fuel temperature
P102D00	Torque limitation due to intake air temperature
P102E00	Torque limitation due to exhaust temperature
P103000	Intake Manifold Runner Control (IMRC) Valve -N316- lower limit not reached
P103100	Intake Manifold Runner Control (IMRC) Valve -N316- Target value not reached
P103200	NOX Sensor Signal too high
P103300	NOX Sensor Signal too low
P103400	NOX Sensor Signal outside tolerance
P103500	NOX Sensor Implausible signal
P103600	Heater activation sensor for NOX Short circuit to B+
P103700	Heater activation sensor for NOX Short-circuit to ground
P103800	Heater activation sensor for NOX Open circuit
P103900	Fuel Injector Group "A" Supply Voltage Circuit Short circuit
P104000	Fuel Injector Group "A" Supply Voltage Circuit Malfunction
P104100	Fuel Injector Group "B" Supply Voltage Circuit Short circuit
P104200	Fuel Injector Group "B" Supply Voltage Circuit Malfunction
P104300	Fuel Injector Group -C- Supply Voltage Circuit Short circuit
P104400	Fuel Injector Group C - Supply voltage circuit Malfunction
P104500	Fuel Injector Group -D- Supply Voltage Circuit Short circuit
P104600	Fuel Injector Group -D- Supply Voltage Circuit Malfunction
P104700	Bank1, Camshaft Adjustment Valve 1 (exhaust) -N318- Malfunction

P104800	Bank1, Camshaft Adjustment Valve 1 (exhaust) -N318- Short circuit to B+
P104900	Bank1, Camshaft Adjustment Valve 1 (exhaust) -N318- Short-circuit to ground
P105000	Bank1, Camshaft Adjustment Valve 1 (exhaust) -N318- Open circuit
P105100	Bank2, Camshaft Adjustment Valve2 (exhaust) -N319- Malfunction
P105200	Bank2, Camshaft Adjustment Valve2 (exhaust) -N319- Short circuit to B+
P105300	Bank2, Camshaft Adjustment Valve2 (exhaust) -N319- Short-circuit to ground
P105400	Bank2, Camshaft Adjustment Valve2 (exhaust) -N319- Open circuit
P105500	Bank 1, camshaft adjustment, exhaust Short circuit to B+
P105600	Bank 1, camshaft adjustment, exhaust Short-circuit to ground
P105700	Bank 1, camshaft adjustment, exhaust Open circuit
P105800	Bank2, camshaft adjustment, exhaust Short circuit to B+
P105900	Bank2, camshaft adjustment, exhaust Short-circuit to ground
P106000	Bank2, camshaft adjustment, exhaust Open circuit
P106100	'A' Camshaft Position (Bank 2) Timing Over-Advanced or System Performance
P106200	'A' Camshaft Position (Bank 2) Timing Over-Advanced or System Performance
P106300	Fuel Pressure Regulation Value below lower control limit
P106400	Fuel pressure system Mechanical malfunction
P106500	Fuel Pressure Regulation Control difference
P106600	Intake Air Switch-over valve -N335- Short circuit to B+
P106700	Intake Air Switch-over valve -N335- Short-circuit to ground
P106800	Intake Air Switch-over valve -N335- Open circuit
P106900	NOX Sensor -G295- heating control signal Short-circuit to ground
P106A00	Bank 2 Intake manifold press/air mass <-> throttle valve angle deviation
P106B00	Throttle valve difficulty of movement or blocked
P106C00	Throttle valve 2 difficulty of movement or blocked
P107000	NOX Sensor -G295- heating control signal Short circuit to B+
P107100	NOX Sensor -G295- heating control signal Implausible signal
P107200	NOX Sensor -G295- heating control signal Electrical malfunction in circuit
P107300	Mass Air Flow (MAF) Sensor 2 -G246 Signal too low
P107400	Mass Air Flow (MAF) Sensor 2 -G246 Signal too high
P107500	Oxygen sensor control, emissions bank 3 System too lean

P107600	Oxygen sensor control, emissions bank 3 System too rich
P107700	Oxygen sensor control, emissions bank 4 System too lean
P107800	Oxygen sensor control, emissions bank 4 System too rich
P107900	Oxygen sensor control, emissions bank 3 Implausible control value
P108000	Oxygen sensor control, emissions bank 4 Implausible control value
P108100	Exhaust bank3, mixture adaptation range 1 System too lean
P108200	Exhaust bank3, mixture adaptation range 2 System too lean
P108300	Exhaust bank3, mixture adaptation range 1 System too rich
P108400	Exhaust bank3, mixture adaptation range 2 System too rich
P108500	Exhaust bank4, mixture adaptation range 1 System too lean
P108600	Exhaust bank4, mixture adaptation range 2 System too lean
P108700	Exhaust bank4, mixture adaptation range 1 System too rich
P108800	Exhaust bank4, mixture adaptation range 2 System too rich
P108900	Bank2, mixture adaptation range 1 System too lean
P109000	Bank2, mixture adaptation range 2 System too lean
P109100	Bank2, mixture adaptation range 1 System too rich
P109200	Bank2, mixture adaptation range 2 System too rich
P109300	Bank1, fuel measuring system 2 Malfunction
P109400	Bank2, fuel measuring system 2 Malfunction
P109500	Intake Manifold Runner Position Sensor -G336 Short circuit to B+
P109600	Intake Manifold Runner Position Sensor -G336 Short-circuit to ground
P109700	Intake Manifold Runner Position Sensor -G336 Open circuit
P109800	Intake Manifold Runner Position Sensor -G336 Open circuit/short circuit to B+
P109900	Intake manifold Runner Control (IMRC) Electrical malfunction
P10A000	Actuation regulating flap for intake air Electrical malfunction
P10A100	Actuation regulating flap for intake air Short circuit to B+
P10A200	Actuation regulating flap for intake air Short-circuit to ground
P10A300	Actuation regulating flap for intake air Open circuit
P10A400	Regulating flap for intake air Mechanical malfunction
P10A500	Potentiometer regulating flap for intake air Signal too high
P10A600	Potentiometer regulating flap for intake air Signal too low

P10A700	Adaptation regulating flap for intake air soiled
P10A800	Adaptation regulating flap for intake air lower limit not reached
P10A900	Magnetic clutch for mechanical charger does not open
P10AA00	Magnetic clutch for mechanical charger does not close
P10AB00	Magnetic clutch for mechanical charger excessive wear
P10AC00	Magnetic clutch for mechanical charger Short-circuit to ground
P10AD00	Magnetic clutch for mechanical charger Open circuit
P10AE00	Current sensor for magnetic clutch for mechanical charger Electrical malfunction
P10AF00	Magnetic clutch for mechanical charger Malfunction
P10B000	Magnetic clutch for mechanical charger Short circuit to B+
P10B100	Monitoring of fuel injector for cylinder 1 failure detected
P10B200	Monitoring of fuel injector for cylinder 2 failure detected
P10B300	Monitoring of fuel injector for cylinder 3 failure detected
P10B400	Monitoring of fuel injector for cylinder 4 failure detected
P110000	O2 Sensor Heater Circ.,Bank1-Sensor2 Performance too low
P110100	O2 Sensor Circuit,Bank1-Sensor1 Voltage too low/air leak
P110200	O2 Sensor Heater Circ.,Bank1-Sensor1 Short circuit to B+
P110300	O2 Sensor Heater Circ.,Bank1-Sensor1 Performance too low
P110400	O2 Sensor Circuit,Bank1-Sensor2 Voltage too low/air leak
P110500	O2 Sensor Heater Circ.,Bank1-Sensor2 Short circuit to B+
P110600	O2 Sensor Circuit,Bank2-Sensor1 Voltage too low/air leak
P110700	O2 Sensor Heater Circ.,Bank2-Sensor1 Short circuit to B+
P110800	O2 Sensor Heater Circ.,Bank2-Sensor1 Performance too low
P110900	O2 Sensor Circuit,Bank2-Sensor2 Voltage too low/air leak
P110A00	Fuel Pressure Regulator Valve Short-circuit to ground
P110B00	Fuel Pressure Regulator Valve Open circuit
P110C00	Fuel Pressure Regulator Valve Mechanical malfunction
P110D00	Intake manifold Runner Control (IMRC) Short circuit to B+
P110E00	Intake manifold Runner Control (IMRC) Short-circuit to ground
P110F00	Intake manifold Runner Control (IMRC) Open circuit
P111000	O2 Sensor Heater Circ.,Bank2-Sensor2 Short circuit to B+

P111100	Oxygen sensor control (Bank 1) System too lean
P111200	Oxygen sensor control (Bank 1) System too rich
P111300	Bank 1, sensor 1 Internal resistance too Large
P111400	Bank 1, sensor 2 Internal resistance too Large
P111500	O2 Sensor Heater Circ.,Bank1-Sensor1 Short-circuit to ground
P111600	O2 Sensor Heater Circ.,Bank1-Sensor1 Open circuit
P111700	O2 Sensor Heater Circ.,Bank1-Sensor2 Short-circuit to ground
P111800	O2 Sensor Heater Circ.,Bank1-Sensor2 Open circuit
P111900	O2 Sensor Heater Circ.,Bank2-Sensor1 Short-circuit to ground
P111A00	NOX Sensor -G295 Signal too low
P111B00	NOX Sensor -G295 Signal outside tolerance
P111C00	NOX Sensor -G295 Implausible signal
P111D00	Heater activation sensor for NOX Short circuit to B+
P111E00	Heater activation sensor for NOX Short-circuit to ground
P111F00	Heater activation sensor for NOX Open circuit
P112000	O2 Sensor Heater Circ.,Bank2-Sensor1 Open circuit
P112100	O2 Sensor Heater Circ.,Bank2-Sensor2 Short-circuit to ground
P112200	O2 Sensor Heater Circ.,Bank2-Sensor2 Open circuit
P112300	Long Term Fuel Trim Add.Air.,Bank1 System too rich
P112400	Long Term Fuel Trim Add.Air.,Bank1 System too lean
P112500	Long Term Fuel Trim Add.Air.,Bank2 System too rich
P112600	Long Term Fuel Trim Add.Air.,Bank2 System too lean
P112700	Long Term Fuel Trim mult.,Bank1 System too rich
P112800	Long Term Fuel Trim mult.,Bank1 System too lean
P112900	Long Term Fuel Trim mult.,Bank2 System too rich
P113000	Long Term Fuel Trim mult.,Bank2 System too lean
P113100	Bank 2, sensor 1 Internal resistance too Large
P113200	O2 Sensor Heating Circ.,Bank1+2-Sensor1 Short circuit to B+
P113300	O2 Sensor Heating Circ.,Bank1+2-Sensor1 Malfunction
P113400	O2 Sensor Heating Circ.,Bank1+2-Sensor2 Short circuit to B+
P113500	O2 Sensor Heating Circ.,Bank1+2-Sensor2 Malfunction

P113600	Long Term Fuel Trim Add.Fuel,Bank1 System too lean
P113700	Long Term Fuel Trim Add.Fuel,Bank1 System too rich
P113800	Long Term Fuel Trim Add.Fuel,Bank2 System too lean
P113900	Long Term Fuel Trim Add.Fuel,Bank2 System too rich
P114000	Bank 2, sensor 2 Internal resistance too Large
P114100	Load detection implausible value
P114200	Load detection value below lower limit
P114300	Load detection value above upper limit
P114400	Mass Air Flow (MAF) Sensor -G70- Open circuit/short circuit to ground
P114500	Mass Air Flow (MAF) Sensor -G70- Short circuit to B+
P114600	Mass Air Flow (MAF) Sensor -G70- Supply voltage
P114700	Oxygen sensor control, Bank 2 System too lean
P114800	Oxygen sensor control, Bank 2 System too rich
P114900	Oxygen sensor control, Bank 1 Implausible control value
P115000	Oxygen sensor control, Bank 2 Implausible control value
P115100	Bank1, mixture adaptation, range 1 System too lean
P115200	Bank1, mixture adaptation, range 2 System too lean
P115300	Oxygen sensors behind catalytic converter Swapped
P115400	Two-path intake manifold Malfunction
P115500	Manifold Absolute Pressure (MAP) Sensor -G71 Short circuit to B+
P115600	Manifold Absolute Pressure (MAP) Sensor -G71 Open circuit/short circuit to ground
P115700	Manifold Absolute Pressure (MAP) Sensor -G71 Supply voltage
P115800	Manifold Absolute Pressure (MAP) Sensor -G71 Implausible signal
P115900	Signal of Mass Air Flow (MAF) sensor 1/2 Implausible relation
P115A00	Manifold Absolute Pressure (MAP) Sensor 2 Implausible signal
P115B00	Manifold Absolute Pressure (MAP) Sensor 2 Signal too low
P115C00	Manifold Absolute Pressure (MAP) Sensor 2 Signal too high
P115D00	Sensor 2 for air pressure Implausible signal
P115E00	Sensor 2 for air pressure Signal too low
P115F00	Sensor 2 for air pressure Signal too high
P116000	Manifold Temp.Sensor Circ. -G72 Short-circuit to ground

P116100	Manifold Temp.Sensor Circ. -G72 Open circuit/short circuit to B+
P116200	Fuel Temperature Sensor A Circuit Low Input -G81 Short-circuit to ground
P116300	Fuel Temperature Sensor A Circuit Low Input -G81 Open circuit/short circuit to B+
P116400	Fuel Temperature Sensor A Circuit Low Input -G81 Implausible signal
P116500	Bank1, mixture adaptation, range 1 System too rich
P116600	Bank1, mixture adaptation, range 2 System too rich
P116700	Mass Air Flow (MAF) Sensor 2 -G246 Implausible signal
P116800	Mass Air Flow (MAF) Sensor 2 -G246 Open circuit/short circuit to ground
P116900	Mass Air Flow (MAF) Sensor 2 -G246 Short circuit to B+
P116A00	Intake manifold press./air press. - Throttle valve pos. bank 2 Correlation at idle
P116B00	Intake manifold press./air press. - Throttle valve pos. bank 2 Correlation in partial throttle
P116C00	Leaking air in intake system, bank 2
P116F00	Mass air flow sensor interrupted signal
P117000	Mass Air Flow (MAF) Sensor 2 -G246 Supply voltage
P117100	Throttle/Pedal Position Sensor/Switch -B- Circuit -G188 Implausible signal
P117200	Throttle/Pedal Position Sensor/Switch -B- Circuit -G188 Signal too low
P117300	Throttle/Pedal Position Sensor/Switch -B- Circuit -G188 Signal too high
P117400	Bank 1, fuel calculation system Injection Timing Deviation
P117500	Pre-injection switched off
P117600	O2 Correction Behind Catalyst,B1 Control limit reached
P117700	O2 Correction Behind Catalyst,B2 Control limit reached
P117800	Linear oxygen sensor/pump current Open circuit
P117900	Linear oxygen sensor/pump current Short-circuit to ground
P117A00	Bank1, Lambda correction center sensor Control limit reached
P117B00	Bank2, Lambda correction center sensor Control limit reached
P117C00	Bank3,oxygen sensor correction behind cat Lean control limit exceeded
P117D00	Bank3,oxygen sensor correction behind cat Rich control limit exceeded
P117E00	Bank4,oxygen sensor correction behind cat Lean control limit exceeded
P117F00	Bank4,oxygen sensor correction behind cat Rich control limit exceeded
P118000	Linear oxygen sensor/pump current Short circuit to B+

P118100	Linear oxygen sensor/reference voltage Open circuit
P118200	Linear oxygen sensor/reference voltage Short-circuit to ground
P118300	Linear oxygen sensor/reference voltage Short circuit to B+
P118400	linear Lambda probe / common ground wire Open circuit
P118500	linear Lambda probe / common ground wire Short-circuit to ground
P118600	linear Lambda probe / common ground wire Short circuit to B+
P118700	linear Lambda probe/compensat. resistor Open circuit
P118800	linear Lambda probe/compensat. resistor Short-circuit to ground
P118900	linear Lambda probe/compensat. resistor Short circuit to B+
P118A00	Bank3-sensor1 Voltage too low/air leak
P118B00	Bank4-sensor1 Voltage too low/air leak
P119000	Linear oxygen sensor/reference voltage Implausible
P119100	linear Lambda probe before catalyst swapped
P119200	Fuel Pressure Sensor -G247- Supply voltage
P119300	Fuel Pressure Sensor -G247- Open circuit/short circuit to B+
P119400	Fuel Pressure Regulator Valve Short circuit to B+
P119500	Fuel Pressure Regulator Valve Open circuit/short circuit to ground
P119600	O2 Sensor Heater Circ.,Bank1-Sensor1 Malfunction
P119700	O2 Sensor Heater Circ.,Bank2-Sensor1 Malfunction
P119800	O2 Sensor Heater Circ.,Bank1-Sensor2 Malfunction
P119900	O2 Sensor Heater Circ.,Bank2-Sensor2 Malfunction
P119A00	Fuel Pressure Sensor -G247- Malfunction
P119B00	Fuel pressure sensor 2 Malfunction
P119C00	Fuel Volume Regulator Control Exceeded Learning lower Limit
P119D00	Fuel Volume Regulator Control Exceeded Learning upper Limit
P11A100	Cam Shift Actuator "A" Cylinder 1 Circuit/Open
P11A200	Cam Shift Actuator "A" Cylinder 1 Range/Performance
P11A300	Cam Shift Actuator "B" Cylinder 1 Circuit/Open
P11A400	Cam Shift Actuator "B" Cylinder 1 Range/Performance
P11A500	Cam Shift Actuator "A" Cylinder 2 Circuit/Open
P11A600	Cam Shift Actuator "A" Cylinder 2 Range/Performance

P11A700	Cam Shift Actuator "B" Cylinder 2 Circuit/Open
P11A800	Cam Shift Actuator "B" Cylinder 2 Range/Performance
P11A900	Cam Shift Actuator "A" Cylinder 3 Circuit/Open
P11AA00	Cam Shift Actuator "A" Cylinder 3 Range/Performance
P11AB00	Cam Shift Actuator "B" Cylinder 3 Circuit/Open
P11AC00	Cam Shift Actuator "B" Cylinder 3 Range/Performance
P11AD00	Cam Shift Actuator "A" Cylinder 4 Circuit/Open
P11AE00	Cam Shift Actuator "A" Cylinder 4 Range/Performance
P11AF00	Cam Shift Actuator "B" Cylinder 4 Circuit/Open
P11B000	Cam Shift Actuator "B" Cylinder 4 Range/Performance
P11B100	Cam Shift Actuator "A" Cylinder 5 Circuit/Open
P11B200	Cam Shift Actuator "A" Cylinder 5 Range/Performance
P11B300	Cam Shift Actuator "B" Cylinder 5 Circuit/Open
P11B400	Cam Shift Actuator "B" Cylinder 5 Range/Performance
P11B500	Cam Shift Actuator "A" Cylinder 6 Circuit/Open
P11B600	Cam Shift Actuator "A" Cylinder 6 Range/Performance
P11B700	Cam Shift Actuator "B" Cylinder 6 Circuit/Open
P11B800	Cam Shift Actuator "B" Cylinder 6 Range/Performance
P11B900	Camshaft adjustment bank 1 Supply voltage
P11BA00	Camshaft adjustment bank 2 Supply voltage
P120000	Recirculating valve for turbocharger -N249, Mechanical malfunction
P120100	Cylinder 1 Fuel Injector -N30- electrical malfunction in circuit
P120200	Cylinder 2 Fuel Injector -N31- electrical malfunction in circuit
P120300	Cylinder 3 Fuel Injector -N32- electrical malfunction in circuit
P120400	Cylinder 4 Fuel Injector -N33- electrical malfunction in circuit
P120500	Cylinder 5 Fuel Injector -N83- electrical malfunction in circuit
P120600	Cylinder 6 Fuel Injector -N84- electrical malfunction in circuit
P120700	Cylinder 7 Fuel Injector -N85- electrical malfunction in circuit
P120800	Cylinder 8 Fuel Injector -N86- electrical malfunction in circuit
P120900	Cylinder Shut-off, Intake Deactivation Valves Short-circuit to ground
P120A00	Injectors control module 1 Electrical malfunction in circuit

P120B00	Injectors control module 2 Electrical malfunction in circuit
P120C00	Injectors control module 1 Short circuit between activation wires, Low-Side
P120D00	Injectors control module 2 Short circuit between activation wires, Low-Side
P121000	Cylinder Shut-off, Intake Deactivation Valves Short circuit to B+
P121100	Cylinder Shut-off, Intake Deactivation Valves Open circuit
P121200	Cylinder shut-off, bank 1
P121300	Cylinder 1 Fuel Injector -N30- Short circuit to B+
P121400	Cylinder 2 Fuel Injector -N31- Short circuit to B+
P121500	Cylinder 3 Fuel Injector -N32- Short circuit to B+
P121600	Cylinder 4 Fuel Injector -N33- Short circuit to B+
P121700	Cylinder 5 Fuel Injector -N83- Short circuit to B+
P121800	Cylinder 6 Fuel Injector -N84- Short circuit to B+
P121900	Cylinder 7 Fuel Injector -N85- Short circuit to B+
P122000	Cylinder 8 Fuel Injector -N86- Short circuit to B+
P122100	Cylinder Shut-off, Exhaust Deactivation Valves Short-circuit to ground
P122200	Cylinder Shut-off, Exhaust Deactivation Valves Short circuit to B+
P122300	Cylinder Shut-off, Exhaust Deactivation Valves Open circuit
P122400	Cylinder shut-off, bank 2
P122500	Cylinder 1 Fuel Injector -N30- Short-circuit to ground
P122600	Cylinder 2 Fuel Injector -N31- Short-circuit to ground
P122700	Cylinder 3 Fuel Injector -N32- Short-circuit to ground
P122800	Cylinder 4 Fuel Injector -N33- Short-circuit to ground
P122900	Cylinder 5 Fuel Injector -N83- Short-circuit to ground
P123000	Cylinder 6 Fuel Injector -N84- Short-circuit to ground
P123100	Cylinder 7 Fuel Injector -N85- Short-circuit to ground
P123200	Cylinder 8 Fuel Injector -N86- Short-circuit to ground
P123300	Load detection Malfunction
P123400	fuel lead missing
P123500	O2 Correction Behind Catalyst, exhaust gas bank 3 Control limit reached
P123600	O2 Correction Behind Catalyst, exhaust gas bank 4 Control limit reached
P123700	Cylinder 1 Fuel Injector -N30- Open circuit

P123800	Cylinder 2 Fuel Injector -N31- Open circuit
P123900	Cylinder 3 Fuel Injector -N32- Open circuit
P124000	Cylinder 4 Fuel Injector -N33- Open circuit
P124100	Cylinder 5 Fuel Injector -N83- Open circuit
P124200	Cylinder 6 Fuel Injector -N84- Open circuit
P124300	Cylinder 7 Fuel Injector -N85- Open circuit
P124400	Cylinder 8 Fuel Injector -N86- Open circuit
P124500	Needle Lift Sensor -G80 Short-circuit to ground
P124600	Needle Lift Sensor -G80 Implausible signal
P124700	Needle Lift Sensor -G80 Open circuit/short circuit to B+
P124800	Commencement of injection regulation Control difference
P124900	Fuel consumption signal Electrical malfunction in circuit
P125000	Fuel level too low
P125100	Commencement of injection valve -N108 Short circuit to B+
P125200	Commencement of injection valve -N108 Open circuit/short circuit to ground
P125300	Fuel consumption signal Short-circuit to ground
P125400	Fuel consumption signal Short circuit to B+
P125500	Engine Coolant Temperature (ECT) Sensor -G62 Short-circuit to ground
P125600	Engine Coolant Temperature (ECT) Sensor -G62 Open circuit/short circuit to B+
P125700	Coolant Thermostat/Valve. Open circuit
P125800	Coolant Thermostat/Valve. Short circuit to B+
P125900	Coolant Thermostat/Valve. Short-circuit to ground
P125E00	Valve for pump/injector Short circuit control wire
P125F00	Valve for pump/injector not completely discharged
P126000	Unit injector solenoid valve - cylinder 1-N240 Implausible signal
P126100	Unit injector solenoid valve - cylinder 1-N240 Value above upper control limit
P126200	Unit injector solenoid valve - cylinder 1-N240 Value below lower control limit
P126300	Unit injector solenoid valve - cylinder 2-N241 Implausible signal
P126400	Unit injector solenoid valve - cylinder 2-N241 Value above upper control limit
P126500	Unit injector solenoid valve - cylinder 2-N241 Value below lower control limit
P126600	Unit injector solenoid valve - cylinder 3-N242 Implausible signal

P126700	Unit injector solenoid valve - cylinder 3-N242 Value above upper control limit
P126800	Unit injector solenoid valve - cylinder 3-N242 Value below lower control limit
P126900	Unit injector solenoid valve - cylinder 4-N243 Implausible signal
P127000	Unit injector solenoid valve - cylinder 4-N243 Value above upper control limit
P127100	Unit injector solenoid valve - cylinder 4-N243 Value below lower control limit
P127200	Unit injector solenoid valve - cylinder 5-N244 Implausible signal
P127300	Unit injector solenoid valve - cylinder 5-N244 Value above upper control limit
P127400	Unit injector solenoid valve - cylinder 5-N244 Value below lower control limit
P127500	Unit injector solenoid valve - cylinder 6-N245 Implausible signal
P127600	Unit injector solenoid valve - cylinder 6-N245 Value above upper control limit
P127700	Unit injector solenoid valve - cylinder 6-N245 Value below lower control limit
P127800	Fuel Metering Valve Short circuit to B+
P127900	Fuel Metering Valve Open circuit/short circuit to ground
P128000	Fuel Inj.Air Contr.Valve Circ. -N212 Flow too Low
P128100	Fuel Metering Valve Short-circuit to ground
P128200	Fuel Metering Valve Open circuit
P128300	Fuel Inj.Air Contr.Valve Circ. -N212 electrical malfunction in circuit
P128400	Fuel Inj.Air Contr.Valve Circ. -N212 Open circuit
P128500	Fuel Inj.Air Contr.Valve Circ. -N212 Short-circuit to ground
P128600	Fuel Inj.Air Contr.Valve Circ. -N212 Short circuit to B+
P128700	Recirculating valve for turbocharger -N249, Open circuit
P128800	Recirculating valve for turbocharger -N249, Short circuit to B+
P128900	Recirculating valve for turbocharger -N249, Short-circuit to ground
P128F00	A/C Engine Coolant Temperature (ECT) Sensor -Radiator Outlet Electrical malfunction
P129000	Engine Coolant Temperature (ECT) Sensor (on Radiator) -G83- Signal too high
P129100	Engine Coolant Temperature (ECT) Sensor (on Radiator) -G83- Signal too low
P129200	Map Controlled Engine Cooling Thermostat -F265- Open circuit
P129300	Map Controlled Engine Cooling Thermostat -F265- Short circuit to B+
P129400	Map Controlled Engine Cooling Thermostat -F265- Short-circuit to ground
P129500	Bypass turbocharger Throughput faulty
P129600	Malfunction in cooling system

P129700	Connection charger-throttle valve Pressure drop
P129800	Engine Coolant Temperature (ECT) Sensor (on Radiator) -G83- Implausible signal
P129900	Fuel Metering Valve Malfunction
P129A00	Fuel Pressure Regulator Valve -N276, Bank 2 Mechanical malfunction
P129B00	Fuel Pressure Regulator Valve -N276, Bank 2 Open circuit
P129C00	Fuel Pressure Regulator Valve -N276, Bank 2 Short-circuit to ground
P129D00	Fuel Pressure Regulator Valve -N276, Bank 2 Short circuit to B+
P129E00	Low Pressure Fuel System Pressure Too Low
P129F00	Low Pressure Fuel System Pressure Too High
P12A000	Low Pressure Fuel System Performance
P130000	Random/Multiple Cylinder. Misfire Detected Reason: Low fuel
P130100	Cyl.9-Knock Contr Control limit reached
P130200	Cyl.10-Knock Contr Control limit reached
P130300	Cyl.11-Knock Contr Control limit reached
P130400	Cyl.12-Knock Contr Control limit reached
P130500	Ignition control cylinder 9 Open circuit
P130600	Ignition control cylinder 9 Short circuit to B+
P130700	Ignition control cylinder 9 Short-circuit to ground
P130800	Ignition control cylinder 10 Open circuit
P130900	Ignition control cylinder 10 Short circuit to B+
P130A00	Hide cylinder
P131000	Ignition control cylinder 10 Short-circuit to ground
P131100	Ignition control cylinder 11 Open circuit
P131200	Ignition control cylinder 11 Short circuit to B+
P131300	Ignition control cylinder 11 Short-circuit to ground
P131400	Ignition control cylinder 12 Open circuit
P131500	Ignition control cylinder 12 Short circuit to B+
P131600	Ignition control cylinder 12 Short-circuit to ground
P131700	Cyl.13-Knock Contr Control limit reached
P131800	Cyl.14-Knock Contr Control limit reached
P131900	Knock Sensor (KS) 1 -G61 Short-circuit to ground

P132000	Knock Sensor (KS) 2 -G66 Short-circuit to ground
P132100	Knock Sensor (KS) 3 -G198 Signal too low
P132200	Knock Sensor (KS) 3 -G198 Signal too high
P132300	Knock Sensor (KS) 4 -G199 Signal too low
P132400	Knock Sensor (KS) 4 -G199 Signal too high
P132500	Cyl.1-Knock Contr Control limit reached
P132600	Cyl.2-Knock Contr Control limit reached
P132700	Cyl.3-Knock Contr Control limit reached
P132800	Cyl.4-Knock Contr Control limit reached
P132900	Cyl.5-Knock Contr Control limit reached
P132A00	Knock Sensor (KS) 3 Electrical malfunction in circuit
P132B00	Knock Sensor (KS) 4 Electrical malfunction in circuit
P133000	Cyl.6-Knock Contr Control limit reached
P133100	Cyl.7-Knock Contr Control limit reached
P133200	Cyl.8-Knock Contr Control limit reached
P133300	Cyl.15-Knock Contr Control limit reached
P133400	Cyl.16-Knock Contr Control limit reached
P133500	Engine torque monitoring 2 Value above upper control limit
P133600	Engine torque monitoring Value above upper control limit
P133700	Camshaft Pos. (CMP) Sensor, Bank1=>-G40 Short-circuit to ground
P133800	Camshaft Pos. (CMP) Sensor, Bank1=>-G40 Open circuit/short circuit to B+
P133900	Crankshaft Pos./Engine Speed Sensor swapped
P134000	Camshaft Position Sensor-G40,Engine Speed Sensor-G28 Incorrect allocation
P134100	Ignition output 1 Short-circuit to ground
P134200	Ignition output 1 Short circuit to B+
P134300	Ignition output 2 Short-circuit to ground
P134400	Ignition output 2 Short circuit to B+
P134500	Ignition output 3 Short-circuit to ground
P134600	Ignition output 3 Short circuit to B+
P134700	Camshaft Position Sensor 2-G163/Engine Speed (RPM) Sensor -G28 Incorrect allocation

P134800	Ignition output 1 Open circuit
P134900	Ignition output 2 Open circuit
P135000	Ignition output 3 Open circuit
P135100	Camshaft Pos. (CMP) Sensor, Bank1=>-G40 Implausible signal during start
P135200	Bank1, camshaft adjustment Specification not reached
P135300	Engine Coolant Temperature/Intake Air Temperature Correlation
P135400	Modulating piston movement sender -G149 electrical malfunction in circuit
P135500	Ignition control cylinder 1 Open circuit
P135600	Ignition control cylinder 1 Short circuit to B+
P135700	Ignition control cylinder 1 Short-circuit to ground
P135800	Ignition control cylinder 2 Open circuit
P135900	Ignition control cylinder 2 Short circuit to B+
P136000	Ignition control cylinder 2 Short-circuit to ground
P136100	Ignition control cylinder 3 Open circuit
P136200	Ignition control cylinder 3 Short circuit to B+
P136300	Ignition control cylinder 3 Short-circuit to ground
P136400	Ignition control cylinder 4 Open circuit
P136500	Ignition control cylinder 4 Short circuit to B+
P136600	Ignition control cylinder 4 Short-circuit to ground
P136700	Ignition control cylinder 5 Open circuit
P136800	Ignition control cylinder 5 Short circuit to B+
P136900	Ignition control cylinder 5 Short-circuit to ground
P137000	Ignition control cylinder 6 Open circuit
P137100	Ignition control cylinder 6 Short circuit to B+
P137200	Ignition control cylinder 6 Short-circuit to ground
P137300	Ignition control cylinder 7 Open circuit
P137400	Ignition control cylinder 7 Short circuit to B+
P137500	Ignition control cylinder 7 Short-circuit to ground
P137600	Ignition control cylinder 8 Open circuit
P137700	Ignition control cylinder 8 Short circuit to B+
P137800	Ignition control cylinder 8 Short-circuit to ground

P137900	Cylinder 13 Random/Multiple Cylinder. Misfire Detected
P138000	Cylinder 14 Random/Multiple Cylinder. Misfire Detected
P138100	Cylinder 15 Random/Multiple Cylinder. Misfire Detected
P138200	Cylinder 16 Random/Multiple Cylinder. Misfire Detected
P138300	Portion of alternative fuels not adapted
P138400	Engine control module 2 faulty
P138500	Control module defective
P138600	Control module defective
P138700	Control module defective
P138800	Control module defective
P138900	Diesel Direct Fuel Injection (DFI) Engine ECM 2 -J494- Defective
P139100	Camshaft Pos. (CMP) Sensor, Bank2=>-G163 Short-circuit to ground
P139200	Camshaft Pos. (CMP) Sensor, Bank2=>-G163 Open circuit/short circuit to B+
P139300	Ignition output 1 electrical malfunction in circuit
P139400	Ignition output 2 electrical malfunction in circuit
P139500	Ignition output 3 electrical malfunction in circuit
P139600	Engine speed sender -G28 Range/Performance
P139700	Sensor Wheel for Engine Speed adaptation limit reached
P139800	Engine speed signal, TD Short-circuit to ground
P139900	Engine speed signal, TD Short circuit to B+
P139A00	Engine speed (RPM) validation
P13A000	Signal wire 1 ion current system bank 1 Short circuit to B+
P13A100	Signal wire 2 ion current system bank 1 Short circuit to B+
P13A200	Signal wire 1 ion current system bank 1 Short-circuit to ground
P13A300	Signal wire 2 ion current system bank 1 Short-circuit to ground
P13A400	Signal wire 1 ion current system bank 2 Short circuit to B+
P13A500	Signal wire 2 ion current system bank 2 Short circuit to B+
P13A600	Signal wire 1 ion current system bank 2 Short-circuit to ground
P13A700	Signal wire 2 ion current system bank 2 Short-circuit to ground
P13A800	Ion current system cylinder 1 Trouble code detected?
P13A900	Ion current system cylinder 1 Implausible signal

P13AA00	Ion current system cylinder 2 Trouble code detected?
P13AB00	Ion current system cylinder 2 Implausible signal
P13AC00	Ion current system cylinder 3 Trouble code detected?
P13AD00	Ion current system cylinder 3 Implausible signal
P13AE00	Ion current system cylinder 4 Trouble code detected?
P13AF00	Ion current system cylinder 4 Implausible signal
P13B000	Ion current system cylinder 5 Trouble code detected?
P13B100	Ion current system cylinder 5 Implausible signal
P13B200	Ion current system cylinder 6 Trouble code detected?
P13B300	Ion current system cylinder 6 Implausible signal
P13B400	Ion current system cylinder 7 Trouble code detected?
P13B500	Ion current system cylinder 7 Implausible signal
P13B600	Ion current system cylinder 8 Trouble code detected?
P13B700	Ion current system cylinder 8 Implausible signal
P13B800	Ion current system cylinder 9 Trouble code detected?
P13B900	Ion current system cylinder 9 Implausible signal
P13BA00	Ion current system cylinder 10 Trouble code detected?
P13BB00	Ion current system cylinder 10 Implausible signal
P13BC00	Ion current system cylinder 11 Trouble code detected?
P13BD00	Ion current system cylinder 11 Implausible signal
P13BE00	Ion current system cylinder 12 Trouble code detected?
P13BF00	Ion current system cylinder 12 Implausible signal
P13C000	Ion current system cylinder 13 Trouble code detected?
P13C100	Ion current system cylinder 13 Implausible signal
P13C200	Ion current system cylinder 14 Trouble code detected?
P13C300	Ion current system cylinder 14 Implausible signal
P13C400	Ion current system cylinder 15 Trouble code detected?
P13C500	Ion current system cylinder 15 Implausible signal
P13C600	Ion current system cylinder 16 Trouble code detected?
P13C700	Ion current system cylinder 16 Implausible signal
P13C800	Ion current system bank 1, Initialization error channel 1

P13C900	Ion current system bank 1, Initialization error channel 2
P13CA00	Ion current system bank 1, Initialization error channel 1/2
P13CB00	Ion current system bank 2, Initialization error channel 1
P13CC00	Ion current system bank 2, Initialization error channel 2
P13CD00	Ion current system bank 2, Initialization error channel 1/2
P13CE00	Sensor for internal pressure of cylinder 1 Electrical malfunction
P13CF00	Sensor for internal pressure of cylinder 1 Short circuit to ground
P13D000	Sensor for internal pressure of cylinder 1 Implausible signal
P13D100	Sensor for internal pressure of cylinder 2 Electrical malfunction
P13D200	Sensor for internal pressure of cylinder 2 Short circuit to ground
P13D300	Sensor for internal pressure of cylinder 2 Implausible signal
P13D400	Sensor for internal pressure of cylinder 3 Electrical malfunction
P13D500	Sensor for internal pressure of cylinder 3 Short circuit to ground
P13D600	Sensor for internal pressure of cylinder 3 Implausible signal
P13D700	Sensor for internal pressure of cylinder 4 Electrical malfunction
P13D800	Sensor for internal pressure of cylinder 4 Short circuit to ground
P13D900	Sensor for internal pressure of cylinder 4 Implausible signal
P13DA00	Sensor for internal pressure of cylinder 5 Electrical malfunction
P13DB00	Sensor for internal pressure of cylinder 5 Short circuit to ground
P13DC00	Sensor for internal pressure of cylinder 5 Implausible signal
P13DD00	Sensor for internal pressure of cylinder 6 Electrical malfunction
P13DE00	Sensor for internal pressure of cylinder 6 Short circuit to ground
P13DF00	Sensor for internal pressure of cylinder 6 Implausible signal
P13E000	Sensor for internal pressure of cylinder 1 Malfunction
P13E100	Sensor for internal pressure of cylinder 2 Malfunction
P13E200	Sensor for internal pressure of cylinder 3 Malfunction
P13E300	Sensor for internal pressure of cylinder 4 Malfunction
P13E400	Sensor for internal pressure of cylinder 5 Malfunction
P13E500	Sensor for internal pressure of cylinder 6 Malfunction
P13EA00	Cold Start Ignition Timing Performance Off Idle
P140000	EGR Vacuum Regulator Solenoid Valve electrical malfunction in circuit

P140100	EGR Vacuum Regulator Solenoid Valve Short-circuit to ground
P140200	EGR Vacuum Regulator Solenoid Valve Short circuit to B+
P140300	Exhaust gas recirculation system Control difference
P140400	Exhaust gas recirculation system Basic settings not carried out
P140500	Exhaust gas recirculation valve 2 -N213 Malfunction
P140600	EGR Temp.Sensor -G98 Implausible signal
P140700	EGR Temp.Sensor -G98 Signal too low
P140800	EGR Temp.Sensor -G98 Signal too high
P140900	Evaporative Emission (EVAP) Canister Purge Regulator Valve -N80 electrical malfunction in circuit
P140A00	EGR system 2 bank 1 Control difference
P140B00	EGR system 2 bank 2 Control difference
P140C00	EGR sensor 2 bank 1 Signal too low
P140D00	EGR sensor 2 bank 2 Signal too low
P140E00	EGR sensor 2 bank 1 Signal too high
P140F00	EGR sensor 2 bank 2 Signal too high
P141000	Evaporative Emission (EVAP) Canister Purge Regulator Valve -N80 Short circuit to B+
P141100	Bank2, secondary air system Flow too Low
P141200	Pressure sensor for exhaust gas recirculation Signal too low
P141300	Pressure sensor for exhaust gas recirculation Signal too high
P141400	Bank2, secondary air system leak detected
P141500	EGR valve, curve adaptation characteristic curve adaptation Lower limit exceeded
P141600	EGR valve, curve adaptation Upper limit exceeded
P141700	Fuel Level Sensor (A) Circuit Signal too low
P141800	Fuel Level Sensor (A) Circuit Signal too high
P141900	Exhaust Gas Recirculation (EGR) Cool Switch-over Valve 2 -N381 Short circuit to B+
P141A00	Exhaust temperature sensor 3 bank 2 Electrical malfunction
P141B00	Exhaust temperature sensor 3 bank 2 Implausible signal
P141C00	Exhaust temperature sensor 3 bank 2 Short-circuit to ground
P141D00	Exhaust temperature sensor 3 bank 2 Short circuit to B+
P141E00	Exhaust Gas Recirculation Contr. Circuit Bank 2 Control difference

P141F00	Exhaust gas temperature sensors Implausible
P142000	Secondary air inlet valve-N112 electrical malfunction in circuit
P142100	Secondary air inlet valve-N112 Short-circuit to ground
P142200	Secondary air inlet valve-N112 Short circuit to B+
P142300	Bank1, secondary air system Flow too Low
P142400	Bank1, secondary air system leak detected
P142500	Evaporative Emission (EVAP) Canister Purge Regulator Valve -N80 Short-circuit to ground
P142600	Evaporative Emission (EVAP) Canister Purge Regulator Valve -N80 Open circuit
P142700	Brake vacuum pump activation Short circuit to B+
P142800	Brake vacuum pump activation Short-circuit to ground
P142900	Brake vacuum pump activation Open circuit
P142A00	Exhaust Gas Temperature Sensor 2 and 3 Circuit - Bank 1 deviation
P142B00	Exhaust Gas Temperature Sensor 2 and 3 Circuit - Bank 2 deviation
P142C00	Exhaust Gas Temperature Sensor 2 Circuit - Bank 1 and 2 deviation
P142D00	Exhaust Gas Temperature Sensor 3 Circuit - Bank 1 and 2 deviation
P142E00	EGR valve 2 bank 1 electrical malfunction in circuit
P142F00	EGR valve 2 bank 2 electrical malfunction in circuit
P143000	Brake vacuum pump activation Open circuit/short circuit to B+
P143100	Brake vacuum pump activation Open circuit/short circuit to ground
P143200	Secondary air inlet valve-N112 Open circuit
P143300	Secondary Air Injection (AIR) Pump Relay -J299 Open circuit
P143400	Secondary Air Injection (AIR) Pump Relay -J299 Short circuit to B+
P143500	Secondary Air Injection (AIR) Pump Relay -J299 Short-circuit to ground
P143600	Secondary Air Injection (AIR) Pump Relay -J299 electrical malfunction in circuit
P143700	EGR Vacuum Regulator Solenoid Valve 2 Short circuit to B+
P143800	EGR Vacuum Regulator Solenoid Valve 2 Open circuit/short circuit to ground
P143900	Exhaust gas recirculation potentiometer -G212 Malfunction in basic settings
P143A00	Bank 2 Particle Filter Post-Injection Metering Pump -V337- Short circuit to B+
P143B00	Bank 2 Particle Filter Post-Injection Metering Pump -V337- Short circuit to ground/open circuit
P143C00	Bank 1 Particle Filter Post-Injection Metering Pump -V336- Short circuit to B+

P143D00	Bank 1 Particle Filter Post-Injection Metering Pump -V336- Short circuit to ground/open circuit
P143E00	Particle Filter Post-Injection Metering Pump -V335- Short circuit to B+
P143F00	Particle Filter Post-Injection Metering Pump -V335- Short circuit to ground/open circuit
P144000	EGR Vacuum Regulator Solenoid Valve Open circuit
P144100	EGR Vacuum Regulator Solenoid Valve Open circuit/short circuit to ground
P144200	Exhaust gas recirculation potentiometer -G212 Signal too high
P144300	Exhaust gas recirculation potentiometer -G212 Signal too low
P144400	Exhaust gas recirculation potentiometer -G212 Implausible signal
P144500	Catalyst Temp.Sensor 2 Circ. -G132 Implausible signal
P144600	Catalyst Temp.Sensor 1 Circ. -G20 Short-circuit to ground
P144700	Catalyst Temp.Sensor 1 Circ. -G20 Open circuit/short circuit to B+
P144800	Catalyst Temp.Sensor 2 Circ. -G132 Short-circuit to ground
P144900	Catalyst Temp.Sensor 2 Circ. -G132 Open circuit/short circuit to B+
P144A00	EGR system 2 bank 1 Malfunction
P144B00	EGR system 2 bank 2 Malfunction
P144C00	EGR sensor 2 bank 1 Malfunction in basic settings
P144D00	EGR sensor 2 bank 2 Malfunction in basic settings
P144E00	EGR Vacuum Regulator Solenoid Valve 2 Electrical malfunction
P144F00	EGR Vacuum Regulator Solenoid Valve 2 Open circuit
P145000	Secondary air system Short circuit to B+
P145100	Secondary air system Short-circuit to ground
P145200	Secondary air system Open circuit
P145300	Exhaust Gas Temperature Sensor 1 Circuit, Bank 1 -G235- Open circuit/short circuit to B+
P145400	Exhaust Gas Temperature Sensor 1 Circuit, Bank 1 -G235- Short-circuit to ground
P145500	Exhaust Gas Temperature Sensor 1 Circuit, Bank 1 -G235- Implausible signal
P145600	Exhaust Gas Temperature Control Bank 1 Control limit reached
P145700	Exhaust temperature sensor 1 bank 2 - G236 Open circuit/short circuit to B+
P145800	Exhaust temperature sensor 1 bank 2 - G236 Short-circuit to ground
P145900	Exhaust temperature sensor 1 bank 2 - G236 Implausible signal

P145A00	Exhaust Gas Temperature Sensor 3 Circuit Electrical malfunction
P145B00	Exhaust Gas Temperature Sensor 3 Circuit Implausible signal
P145C00	Exhaust Gas Temperature Sensor 3 Circuit Short-circuit to ground
P145D00	Exhaust Gas Temperature Sensor 3 Circuit Short circuit to B+
P145E00	Air mass throughput in regeneration operation is too low
P145F00	Mass air flow in regeneration operation too high
P146000	Exhaust Gas Temperature Control Bank 2 Control limit reached
P146100	Exhaust Gas Temperature Control Bank 1 Implausible signal
P146200	Exhaust Gas Temperature Control Bank 2 Implausible signal
P146300	Sec.Air Inj.Sys., Bank 3 Malfunction
P146400	Sec.Air Inj.Sys., Bank 4 Malfunction
P146500	Metering pump for cleaning solution Short circuit to B+
P146600	Metering pump for cleaning solution Open circuit/short circuit to ground
P146700	Evaporative Emission (EVAP) Canister Purge Solenoid -N115 Short circuit to B+
P146800	Evaporative Emission (EVAP) Canister Purge Solenoid -N115 Short-circuit to ground
P146900	Evaporative Emission (EVAP) Canister Purge Solenoid -N115 Open circuit
P146A00	Malfunction Diesel particle filter bank 1 Temperature increase too low
P146B00	Malfunction Diesel particle filter bank 2 Temperature increase too low
P146C00	Acknowledgement of heating 1 for reducing agent Electrical malfunction
P146D00	Acknowledgement of heating 1 for reducing agent Short circuit to B+
P146E00	Acknowledgement of heating 2 for reducing agent Electrical malfunction
P146F00	Acknowledgement of heating 2 for reducing agent Short circuit to B+
P147000	Leak diagnosis pump - tank breather system electrical malfunction in circuit
P147100	Leak diagnosis pump - tank breather system Short circuit to B+
P147200	Leak diagnosis pump - tank breather system Short-circuit to ground
P147300	Leak diagnosis pump - tank breather system Open circuit
P147400	Evaporative Emission (EVAP) Canister Purge Solenoid -N115 Electrical malfunction in
P147500	Leak diagnosis pump - tank breather system malfunction/no signal
P147600	Leak diagnosis pump - tank breather system malfunction/vacuum to low
P147700	Leak diagnosis pump - tank breather system Malfunction
P147800	Leak diagnosis pump - tank breather system blocked pipe detected

P147900	Brake vacuum system Mechanical malfunction
P147A00	Brake vacuum pump activation Electrical malfunction
P148000	Brake vacuum pump
P148100	Secondary Air Injection (AIR) Pump Relay 2 -J545- Open circuit
P148200	Secondary Air Injection (AIR) Pump Relay 2 -J545- Short circuit to B+
P148300	Secondary Air Injection (AIR) Pump Relay 2 -J545- Short-circuit to ground
P148400	Secondary Air Injection (AIR) Pump Relay 2 -J545- electrical malfunction in circuit
P148500	Secondary Air Injection (AIR) Solenoid Valve 2 -N320- Open circuit
P148600	Secondary Air Injection (AIR) Solenoid Valve 2 -N320- electrical malfunction in circuit
P148700	Secondary Air Injection (AIR) Solenoid Valve 2 -N320- Short-circuit to ground
P148800	Secondary Air Injection (AIR) Solenoid Valve 2 -N320- Short circuit to B+
P148900	Evaporative Emission (EVAP) Canister Purge Regulator -N333 Short circuit to B+
P148A00	Sensor for reducing agent fill level Implausible fill level
P148B00	End stage for reducing agent heating Defective
P148C00	End stage 2 for reducing agent heating Defective
P148F00	Exhaust Gas Recirculation (EGR) Cool Switch-Over Valve 2 Electrical malfunction
P149000	Evaporative Emission (EVAP) Canister Purge Regulator -N333 Short-circuit to ground
P149100	Evaporative Emission (EVAP) Canister Purge Regulator -N333 Open circuit
P149200	Evaporative Emission (EVAP) Canister Purge Regulator -N333 electrical malfunction in
P149300	Brake vacuum pump Performance too low
P149400	EVAP Emission Control System 2 Throughput faulty
P149500	Radiator Exhaust Gas Recirculation Switch-over Valve -N345 Open circuit/short circuit to ground
P149600	Radiator Exhaust Gas Recirculation Switch-over Valve -N345 Short circuit to B+
P149700	Sec.Air Inj.Sys., Bank 3 Incorrect Flow Detected
P149800	Sec.Air Inj.Sys., Bank 4 Incorrect Flow Detected
P149900	Exhaust Gas Recirculation (EGR) Cool Switch-over Valve 2 -N381 Open circuit/short
P149A00	EGR Coolant pump Short-circuit to ground
P149B00	EGR Coolant pump Short circuit to B+
P149C00	EGR Coolant pump Open circuit
P149D00	Transfer pump for reducing agent Open circuit

P149E00	Transfer pump for reducing agent Short-circuit to ground
P149F00	Transfer pump for reducing agent Short circuit to B+
P14A000	Exhaust temperature sensor 1 bank 3 Implausible signal
P14A100	Exhaust temperature sensor 1 bank 3 Short-circuit to ground
P14A200	Exhaust temperature sensor 1 bank 3 Short circuit to B+
P14A300	Exhaust temperature sensor 1 bank 4 Implausible signal
P14A400	Exhaust temperature sensor 1 bank 4 Short-circuit to ground
P14A500	Exhaust temperature sensor 1 bank 4 Short circuit to B+
P14A600	Sensor 3a for exhaust temperature bank 1 Electrical malfunction
P14A700	Sensor 3a for exhaust temperature bank 1 Implausible signal
P14A800	Sensor 3a for exhaust temperature bank 1 Short-circuit to ground
P14A900	Sensor 3a for exhaust temperature bank 1 Short circuit to B+
P150000	Fuel pump relay -J17 electrical malfunction in circuit
P150100	Fuel pump relay -J17 Short-circuit to ground
P150200	Fuel pump relay -J17 Short circuit to B+
P150300	Load signal from generator DF Implausible signal
P150400	Air intake system leak detected
P150500	Closed Throttle Position (CTP) Switch -F60 does not close/open circuit
P150600	Closed Throttle Position (CTP) Switch -F60 does not open/short circuit to Ground (GND)
P150700	Idling system learnt value - lower limit reached
P150800	Idling system learnt value - upper limit reached
P150900	Idling speed stabilization valve -N71 electrical malfunction in circuit
P150A00	Engine Off Timer Performance
P150B00	Acceleration monitoring Value above upper control limit
P150C00	RPM request from transmission cannot be performed
P150D00	Chain elongation
P150E00	Vehicle Speed Sensor (A) Implausible to ABS Control Module
P150F00	External control module incorrect code
P151000	Idling speed stabilization valve -N71 Short circuit to B+
P151100	Intake manifold change-over valve -N156 electrical malfunction in circuit

P151200	Intake manifold change-over valve -N156 Short circuit to B+
P151300	Intake Manifold Changover Valve 2 circuit -N261 Short circuit to B+
P151400	Intake Manifold Changover Valve 2 circuit -N261 Short-circuit to ground
P151500	Intake Manifold Changover Valve circuit -N156 Short-circuit to ground
P151600	Intake Manifold Changover Valve circuit -N156 Open circuit
P151700	Main relay electrical malfunction in circuit
P151800	Main relay Short circuit to B+
P151900	Bank1, camshaft adjustment Malfunction
P152000	Intake Manifold Changover Valve 2 circuit -N261 Open circuit
P152100	Intake Manifold Changover Valve 2 circuit -N261 Electrical malfunction in circuit
P152200	A Camshaft Position Actuator Control Circuit(Bank2) Malfunction
P152300	Crash Signal from Airbag Control Unit Implausible signal
P152400	Fuel pump relay -J17 Open circuit/short circuit to ground
P152500	Bank1, camshaft adjustment=>-N205 electrical malfunction in circuit
P152600	Bank1, camshaft adjustment=>-N205 Short circuit to B+
P152700	Bank1, camshaft adjustment=>-N205 Short-circuit to ground
P152800	Bank1, camshaft adjustment=>-N205 Open circuit
P152900	Intake camshaft control circuit Short circuit to B+
P153000	Intake camshaft control circuit Short-circuit to ground
P153100	Intake camshaft control circuit Open circuit
P153200	Idle regulation lean operation RPM below specified value
P153300	Bank2, camshaft adjustment=>-N208 electrical malfunction in circuit
P153400	Bank2, camshaft adjustment=>-N208 Short circuit to B+
P153500	Bank2, camshaft adjustment=>-N208 Short-circuit to ground
P153600	Bank2, camshaft adjustment=>-N208 Open circuit
P153700	Fuel Cut-Off Valve -N109- Malfunction
P153800	Fuel Cut-Off Valve -N109- Open circuit/short circuit to ground
P153900	Clutch pedal switch -F36 Implausible signal
P154000	Vehicle Speed Sensor (A) Signal too high
P154100	Fuel pump relay -J17 Open circuit
P154200	Angle sender 1 for throttle valve drive -G187 Implausible signal

P154300	Angle sender 1 for throttle valve drive -G187 Signal too low
P154400	Angle sender 1 for throttle valve drive -G187 Signal too high
P154500	Throttle valve control system Malfunction
P154600	Wastegate Bypass Regulator Valve -N75 Short circuit to B+
P154700	Wastegate Bypass Regulator Valve -N75 Short-circuit to ground
P154800	Wastegate Bypass Regulator Valve -N75 Open circuit
P154900	Wastegate Bypass Regulator Valve -N75 Open circuit/short circuit to ground
P154E00	Charge pressure regulation bank 2 Malfunction
P154F00	Turbo/Super Charger Boost Sensor (A) Circuit Malfunction
P155000	Charging pressure Control difference
P155100	Altitude sender-F96 Short circuit to B+
P155200	Altitude sender-F96 Open circuit/short circuit to ground
P155300	Barometric pressure sensor/manifold absolute pressure Implausible relation
P155400	Throttle valve control part-J338- Conditions f. basic setting not met
P155500	value above maximum charge pressure
P155600	Turbo/Super Charger Boost Sensor (A) Circuit Value below lower control limit
P155700	Turbo/Super Charger Boost Sensor (A) Circuit Value above upper control limit
P155800	Throttle Drive (for Electronic Power Control (EPC)) -G186 electrical malfunction in circuit
P155900	Throttle valve control part-J338- Malfunction in basic settings
P155A00	Turbo/Super Charger Boost Sensor (A) Circuit Charge air pressure not reached
P156000	Engine Overspeed Condition
P156100	Quantity adjuster-N146 Control difference
P156200	Quantity adjuster-N146 upper limit stop value
P156300	Quantity adjuster-N146 lower limit stop value
P156400	Throttle valve control part-J338- insufficient voltage during basic settings
P156500	Throttle valve control part-J338- lower stop not reached
P156600	A/C Refrigerant Pressure Sensor (A) Circuit Implausible signal
P156700	A/C Refrigerant Pressure Sensor (A) Circuit No signal
P156800	Throttle valve control part-J338- Mechanical malfunction
P156900	Cruise control system switch -E45 Implausible signal

P156A00	Filling/throttle valve position Validation
P156B00	Lower mechanical stop of throttle valve Implausible signal
P157000	Engine Control Module (ECM) disabled
P157100	Left Electro-Hydraulic Engine Mount Solenoid Valve -N144- Short circuit to B+
P157200	Left Electro-Hydraulic Engine Mount Solenoid Valve -N144- Short-circuit to ground
P157300	Left Electro-Hydraulic Engine Mount Solenoid Valve -N144- Open circuit
P157400	Left Electro-Hydraulic Engine Mount Solenoid Valve -N144- Electrical malfunction in circuit
P157500	Right Electro-Hydraulic Engine Mount Solenoid Valve -N145- Short circuit to B+
P157600	Right Electro-Hydraulic Engine Mount Solenoid Valve -N145- Short-circuit to ground
P157700	Right Electro-Hydraulic Engine Mount Solenoid Valve -N145- Open circuit
P157800	Right Electro-Hydraulic Engine Mount Solenoid Valve -N145- Electrical malfunction in circuit
P157900	Throttle valve control part-J338- Adaptation not initiated
P158000	Throttle valve drive - bank 1 Malfunction
P158100	Throttle valve control part-J338- Basic settings not carried out
P158200	Idle speed control adaptation limit reached
P158300	Transmission Mount Valve -1-/-2- -N262-/-N263- Short circuit to B+
P158400	Transmission Mount Valve -1-/-2- -N262-/-N263- Short-circuit to ground
P158500	Transmission Mount Valve -1-/-2- -N262-/-N263- Open circuit
P158600	L/R Electr-Hydr Eng. Mount Sol Valve -N144/N145 Short circuit to B+
P158700	L/R Electr-Hydr Eng. Mount Sol Valve -N144/N145 Short-circuit to ground
P158800	L/R Electr-Hydr Eng. Mount Sol Valve -N144/N145 Open circuit
P158900	Temperature Selector Knob Potentiometer -G267- Short circuit to Ground (GND)
P159000	Temperature Selector Knob Potentiometer -G267- Open circuit
P159100	Wastegate Bypass Regulator Valve -N75 No function
P159200	Height sensor/charge pressure sensor Implausible relation
P159300	Altitude adaptation Signal outside tolerance
P159400	Engine Oil Temperature Sensor Circuit,Camshaft Control -G277 Short circuit to B+
P159500	Engine Oil Temperature Sensor Circuit,Camshaft Control -G277 Open circuit/short circuit to ground
P159600	Databus drivetrain Implausible message from level control system control module

P159700	Databus drivetrain missing message from level controls system control module
P159800	Engine Oil Temperature Sensor Circuit,Camshaft Control -G277 Implausible signal
P159900	Idle regulation lean operation RPM above specified value
P159B00	Oil Level Thermal Sensor Short circuit to B+
P159C00	Oil Level Thermal Sensor Short-circuit to ground
P159D00	Oil Level Thermal Sensor Implausible signal
P159E00	Oil Level Thermal Sensor No signal
P159F00	Function restriction by Transmission Control Module
P15A000	Neutral gear sensor Electrical malfunction
P15A100	Neutral gear sensor Implausible signal
P15A200	Neutral gear sensor Short-circuit to ground
P15A300	Neutral gear sensor Short circuit to B+
P15A400	vehicle shutdown activated
P160000	Voltage supply terminal 15 Low Voltage
P160100	Relay for Power Supply (B+) Terminal 30 -J317 Implausible signal
P160200	Power Supply (B+) Terminal 30 Low Voltage
P160300	Control module defective
P160400	Control module defective
P160500	Uneven road surface /acceleration sensor electrical malfunction in circuit
P160600	Rough Road Spec Engine Torque ABS-ECU electrical malfunction in circuit
P160700	Speed signal Malfunction message from instrument cluster
P160800	Steering angle signal Malfunction indication from steering angle sensor
P160900	Crash shut-off was triggered
P160A00	Control module defective
P160B00	See literature
P160C00	Coolant pump 2 Open circuit
P160D00	Coolant pump 2 Implausible signal
P160E00	Coolant pump 2 Short-circuit to ground
P160F00	Coolant pump 2 Short circuit to B+
P161000	Control module defective
P161100	Requirement - malfunction lamp on Short-circuit to ground

P161200	Engine Control Module (ECM) incorrect coding
P161300	Requirement - malfunction lamp on Open circuit/short circuit to B+
P161400	Requirement - malfunction lamp on Implausible signal
P161500	Engine Oil Temperature Sensor Circuit Implausible signal
P161600	Glow Plug Indicator Light -K29- Short circuit to B+
P161700	Glow Plug Indicator Light -K29- Open circuit/short circuit to ground
P161800	Glow plug relay -J52 Short circuit to B+
P161900	Glow plug relay -J52 Open circuit/short circuit to ground
P161A00	Glow plug cylinder 1 -Q10 Open circuit
P161B00	Glow plug cylinder 2 -Q11 Open circuit
P161C00	Glow plug cylinder 3 -Q12 Open circuit
P161D00	Glow plug cylinder 4 -Q13 Open circuit
P161E00	Glow plug cylinder 5 -Q14 Open circuit
P161F00	Glow plug cylinder 6 -Q15 Open circuit
P162000	Signal for coolant temperature Open/Short to B+
P162100	Signal for coolant temperature Short-circuit to ground
P162200	Signal for coolant temperature Implausible signal
P162300	Databus drivetrain No communication
P162400	Requirement - malfunction lamp on active
P162500	Databus drivetrain Implausible Message from Transm.Contr.
P162600	Databus drivetrain Missing Message from Transm.Contr.
P162700	Databus drivetrain missing message from fuel injection pump
P162800	Databus drivetrain missing message from steering sensor
P162900	Databus drivetrain Missing message from ADR control module
P162A00	Glow plug cylinder 7 -Q16 Open circuit
P162B00	Glow plug cylinder 8 -Q17 Open circuit
P162C00	Glow/Time Control Module - voltage supply Load circuit open circuit
P162D00	Diesel Particle Filter Indicator Lamp -K231 Malfunction
P162E00	Glow plug cylinder 9 -Q18 Open circuit
P162F00	Glow plug cylinder 10 -Q19 Open circuit
P163000	Accelerator position sender-G79 Signal too low

P163100	Accelerator position sender-G79 Signal too high
P163200	Accelerator position sender-G79 Supply voltage
P163300	Accelerator pedal position sender 2 -G185 Signal too low
P163400	Accelerator pedal position sender 2 -G185 Signal too high
P163500	Databus drivetrain missing message f.air condition control
P163600	Databus drivetrain missing message from Airbag control
P163700	Databus drivetrain Missing message f.central electr. control
P163800	Databus drivetrain missing message from clutch control module
P163900	Throttle/Pedal Position Sensor/Switch -C- Circuit Implausible signal
P163A00	Glow/Time Control Module 2 - voltage supply Load circuit open circuit
P163B00	Wakeup request constantly detected
P163C00	Wakeup request not detected
P163D00	Indicator lamp for driving program Electrical malfunction in circuit
P163E00	Control module defective
P163F00	Glow timing control module 2
P164000	Control module defective
P164100	Read DTC memory of Air Condition ECU
P164200	Read DTC memory of Airbag ECU
P164300	Read DTC memory of read out select central control
P164400	Read DTC memory of clutch ECU
P164500	Databus drivetrain missing message f.all wheel drive contr
P164600	Read DTC memory of four wheel drive electronics
P164700	Checking coding/versions of control modules in CAN-bus
P164800	Databus drivetrain Defective
P164900	Databus drivetrain missing message from break ECU
P164A00	Oil pressure switch Implausible signal
P164B00	Oil pressure switch Malfunction
P164C00	Oil pressure switch for reduced oil pressure Implausible signal
P164D00	Oil pressure switch for reduced oil pressure Malfunction
P164E00	Oil pressure regulation valve Electrical malfunction
P164F00	Torque withdrawal

P165000	Databus drivetrain missing message from instrument panel ECU
P165100	Databus drivetrain missing messages
P165200	Read DTC memory of transmission ECU
P165300	Read DTC memory of break ECU
P165400	Read DTC memory of instrument cluster
P165500	Read DTC memory of distance control ECU
P165600	AC Clutch Relay Control Circuit Short-circuit to ground
P165700	AC Clutch Relay Control Circuit Short circuit to B+
P165800	Databus drivetrain range/performance from distance control
P165900	Fan 1 control circuit Short circuit to B+
P165A00	Temperature sensor - fresh air intake duct Short circuit to B+
P165B00	Temperature sensor - fresh air intake duct Short-circuit to ground
P165C00	Temperature sensor - fresh air intake duct Electrical malfunction
P165D00	Refrigerant pressure too high
P165E00	Refrigerant pressure too low
P165F00	Oil pressure regulation valve Short-circuit to ground
P166000	Fan 1 control circuit Short-circuit to ground
P166100	Fan 2 control circuit Short circuit to B+
P166200	Fan 2 control circuit Short-circuit to ground
P166300	Activation of unit injectors Short circuit to B+
P166400	Activation of unit injectors Electrical malfunction in circuit
P166500	Activation of unit injectors Mechanical malfunction
P166600	Unit injector solenoid valve - cylinder 1-N240 Electrical malfunction in circuit
P166700	Unit injector solenoid valve - cylinder 2-N241 Electrical malfunction in circuit
P166800	Unit injector solenoid valve - cylinder 3-N242 Electrical malfunction in circuit
P166900	Unit injector solenoid valve - cylinder 4-N243 Electrical malfunction in circuit
P166A00	Oil temperature sensor 2 Electrical malfunction
P166B00	Oil temperature sensor 2 Short-circuit to ground
P166C00	Oil temperature sensor 2 Implausible signal
P166D00	Engine control module incorrect installation
P167000	Unit injector solenoid valve - cylinder 5-N244 Electrical malfunction in circuit

P167100	Unit injector solenoid valve - cylinder 6-N245 Electrical malfunction in circuit
P167200	Fan 1 control circuit Open circuit/short circuit to ground
P167300	Speed signal Malfunction message from ABS control module
P167400	Databus drivetrain implausible message from instrument panel ECU
P167500	Databus drivetrain fuel pump control module
P167600	Drive by Wire-MIL Circ. -K132 electrical malfunction in circuit
P167700	Drive by Wire-MIL Circ. -K132 Short circuit to B+
P167800	Drive by Wire-MIL Circ. -K132 Short-circuit to ground
P167900	Drive by Wire-MIL Circ. -K132 Open circuit
P167A00	Indicator light start/stop Electrical malfunction
P167B00	Driver's belt buckle Malfunction
P167C00	Driving program switch Electrical malfunction
P167D00	Switch for start/stop Electrical malfunction
P167F00	Injection system initialization error or impermissible operating condition
P168000	Reset-resistant emergency running
P168100	Control unit programming programming not finished
P168200	Databus drivetrain Implausible message from ABS control module
P168300	Databus drivetrain Implausible message from airbag control module
P168400	Control unit programming Malfunction in data transfer
P168500	Databus drivetrain implausible message from steering angle sensor
P168600	Control module defective Programming error
P168700	Databus drivetrain Implausible message from climate control module
P168800	Databus drivetrain implausible message from all wheel drive electronic
P168900	Databus drivetrain implausible message f.central electr. control
P169000	Malfunction Indicator Lamp (MIL) -K83- electrical malfunction in circuit
P169100	Malfunction Indicator Lamp (MIL) -K83- Open circuit
P169200	Malfunction Indicator Lamp (MIL) -K83- Short-circuit to ground
P169300	Malfunction Indicator Lamp (MIL) -K83- Short circuit to B+
P169400	Malfunction Indicator Lamp (MIL) -K83- Open circuit/short circuit to ground
P169500	Databus drivetrain implausible message from clutch control ECU
P169600	Databus drivetrain implausible signal from Steering Column Electronic

P169700	Steering angle sensors please read DTC
P169800	Steering Column Electronic Systems please read DTC
P169900	Databus drivetrain missing message from Steering Column Electronic
P169A00	Loading mode active
P169B00	Glow plug cylinder 1 Implausible signal
P169C00	Glow plug cylinder 2 Implausible signal
P169D00	Glow plug cylinder 3 Implausible signal
P169E00	Glow plug cylinder 4 Implausible signal
P169F00	Glow plug cylinder 5 Implausible signal
P16A000	Glow plug cylinder 6 Implausible signal
P16A100	Glow plug cylinder 7 Implausible signal
P16A200	Glow plug cylinder 8 Implausible signal
P16A300	Glow plug cylinder 9 Implausible signal
P16A400	Glow plug cylinder 10 Implausible signal
P16A500	Glow plug cylinder 11 Implausible signal
P16A600	Glow plug cylinder 12 Implausible signal
P16A700	Glow plug cylinder 1 Incorrect installation
P16A800	Glow plug cylinder 2 Incorrect installation
P16A900	Glow plug cylinder 3 Incorrect installation
P16AA00	Glow plug cylinder 4 Incorrect installation
P16AB00	Glow plug cylinder 5 Incorrect installation
P16AC00	Glow plug cylinder 6 Incorrect installation
P16AD00	Glow plug cylinder 7 Incorrect installation
P16AE00	Glow plug cylinder 8 Incorrect installation
P16AF00	Glow plug cylinder 9 Incorrect installation
P16B000	Glow plug cylinder 10 Incorrect installation
P16B100	Glow plug cylinder 11 Incorrect installation
P16B200	Glow plug cylinder 12 Incorrect installation
P170000	Brake Pressure Switch -F270- Implausible signal
P170100	Transmission control unit locked

P170200	Malfunction cannot activate contr. mod. replacem. func., since another malfunction with equal priority is present
P170300	Emergency running, control unit reset
P170400	Kick Down Switch -F8- electrical malfunction in circuit
P170500	Gear Ratio adaptation limit reached
P170600	Gearbox faulty
P170700	Interference in Mechatronic unit
P170800	Engine Control Modules (ECM) exchanged
P170900	Gear position switch 1-3 High Voltage
P170A00	Hill holder Incline limit exceeded
P170B00	Hill holder Malfunction
P170C00	Gear position switch 5-7 High Voltage
P170D00	Gear position switch 5-7 Low Voltage
P170E00	Gear position switch 5-7 Signal error
P170F00	Gear position switch 6-4 High Voltage
P171000	Gear position switch 6-4 Low Voltage
P171100	Wheel speed signal 1=>Left Front ABS Wheel Speed Sensor -G47 Implausible signal
P171200	Gear position switch R-2 High Voltage
P171300	Gear position switch R-2 Low Voltage
P171400	Gear position switch R-2 Signal error
P171500	Gear position switch 6-4 Signal error
P171600	Wheel speed signal 2=>Right Front ABS Wheel Speed Sensor -G45 Implausible signal
P171700	Gear position switch 1-3 Low Voltage
P171800	Gear position switch 1-3 Signal error
P171900	Function restriction by Engine Control Module
P171A00	Ignition key removal lock Open circuit
P171B00	Ignition key removal lock Short circuit to B+
P171C00	Ignition key removal lock Short-circuit to ground
P171D00	Ignition key removal lock Electrical malfunction
P171E00	Transmission Input Speed (RPM) Sensor 2 No signal
P171F00	Transmission Input Speed (RPM) Sensor 2 Implausible signal

P172000	Transmission output speed 1 Implausible signal
P172100	Wheel speed signal 3=>Left Rear ABS Wheel Speed Sensor -G46 Implausible signal
P172200	Transmission output speed 2 Implausible signal
P172300	Signal for starter lock Open circuit
P172400	Signal for starter lock Short-circuit to ground
P172500	Compare transmission output speeds 1 + 2 Implausible signal
P172600	Wheel speed signal 4=>Right Rear ABS Wheel Speed Sensor -G44 Implausible signal
P172700	Transmission Driving direction implausible
P172800	Differing wheel speeds Implausible signal
P172900	Signal for starter lock Short circuit to B+
P172A00	Clutch adjuster valve Open circuit
P172B00	Clutch adjuster valve Short-circuit to ground
P172C00	Clutch adjuster valve Short circuit to B+
P172D00	Clutch adjuster valve Electrical malfunction
P172E00	Switch actuator Mechanical malfunction
P172F00	Gear Position Distance Sensor 1 for gear selector Electrical malfunction
P173000	Gear Position Distance Sensor 2 for gear selector Electrical malfunction
P173100	Gear Position Distance Sensor 3 for gear selector Electrical malfunction
P173200	Gear Position Distance Sensor 4 for gear selector Electrical malfunction
P173300	Tiptronic Switch -F189-, down Short-circuit to ground
P173400	Starter release from the selector lever sensor system
P173500	Position sensor for clutch 1 Electrical malfunction
P173600	Position sensor for clutch 2 Electrical malfunction
P173700	Transmission hydraulic pressure sensor 1 Open circuit/short circuit to B+
P173800	Transmission hydraulic pressure sensor 2 Open circuit/short circuit to B+
P173900	Tiptronic Switch -F189-, up Short-circuit to ground
P173A00	Gear Position Distance Sensor 1 for gear selector Implausible signal
P173B00	Gear Position Distance Sensor 2 for gear selector Implausible signal
P173C00	Gear Position Distance Sensor 3 for gear selector Implausible signal
P173D00	Gear Position Distance Sensor 4 for gear selector Implausible signal
P173E00	Valve 1 in partial transmission 1 Electrical malfunction

P173F00	Valve 2 in partial transmission 1 Electrical malfunction
P174000	Clutch temperature monitoring
P174100	Clutch pressure adaptation at limit
P174200	Clutch torque adaptation, adaptation limit reached
P174300	Clutch slip monitoring Signal too high
P174400	Tiptronic Switch -F189-, recognition Short-circuit to ground
P174500	Transm.Contr.Unit Relay Short circuit to B+
P174600	Transm.Contr.Unit Relay electrical malfunction in circuit
P174700	Transm.Contr.Unit Relay Open circuit/short circuit to ground
P174800	Control module defective
P174900	Automatic gearbox control unit incorrect code
P174A00	Valve 3 in separate transmission 1 Electrical malfunction
P174B00	Valve 4 in partial transmission 1 Electrical malfunction
P174C00	Valve 1 in partial transmission 2 Electrical malfunction
P174D00	Valve 2 in partial transmission 2 Electrical malfunction
P174E00	Valve 3 in separate transmission 2 Electrical malfunction
P174F00	Valve 4 in partial transmission 2 Electrical malfunction
P175000	Voltage supply Low Voltage
P175100	Voltage supply High Voltage
P175200	Voltage supply Implausible signal
P175300	Tiptronic Switch -F189- Implausible signal
P175400	Tiptronic Switch, up F189 Open circuit/short circuit to B+
P175500	Tiptronic Switch, return F189 Open circuit/short circuit to B+
P175600	Tiptronic Switch -F189-, recognition Open circuit/short circuit to B+
P175700	Voltage supply Open circuit
P175800	Voltage supply terminal 15 Open circuit
P175900	Transmission fluid temperature Exceeded multiple times
P175A00	Actuator gear control unit separate transmission 1 Tolerance limit reached
P175B00	Actuator gear control unit separate transmission 2 Tolerance limit reached
P175C00	Actuator double clutch Tolerance limits reached
P175D00	Clutch 1 opens unintentionally

P175E00	Clutch 1 closes unintentionally
P175F00	Transmission system Basic settings not carried out
P176000	Shift lock solenoid =>solenoid -N110 electrical malfunction in circuit
P176100	Shift lock solenoid =>solenoid -N110 Short-circuit to ground
P176200	Shift lock solenoid =>solenoid -N110 Short circuit to B+
P176300	Shift lock solenoid =>solenoid -N110 Open circuit
P176400	Transmission temperature monitoring
P176500	Hydraulic pressure sender 2 -G194 adaptation limit reached
P176600	Throttle Angel Signal Open circuit/short circuit to B+
P176700	Throttle Angel Signal Short-circuit to ground
P176800	Hydraulic pressure sender 2 -G194 Signal too high
P176900	Hydraulic pressure sender 2 -G194 Signal too low
P176A00	Gear selector 1 cannot be regulated
P176B00	Gear selector 2 cannot be regulated
P176C00	Gear selector 3 cannot be regulated
P176D00	Gear selector 4 cannot be regulated
P176E00	Clutch 2 opens unintentionally
P176F00	Clutch 2 closes unintentionally
P177000	Load Signal Implausible signal
P177100	Load Signal Open circuit/short circuit to B+
P177200	Load Signal Short-circuit to ground
P177300	Hydraulic pressure sender 1 -G193 Signal too high
P177400	Hydraulic pressure sender 1 -G193 Signal too low
P177500	Hydraulic pressure sender 1 -G193 adaptation limit reached
P177600	Hydraulic pressure sender 1 -G193 Implausible signal
P177700	Hydraulic pressure sender 2 -G194 Implausible signal
P177800	Valve 7 electrical malfunction in circuit
P177900	Transmission input shaft 1 Overspeed
P177A00	Transmission input shaft 2 Overspeed
P177B00	Coupling 1 Tolerance limit reached
P177C00	Coupling 2 Tolerance limit reached

P177D00	Double clutch Torque too high
P177E00	Function restriction due to pressure drop
P177F00	Hydraulic pump motor Insuff. voltage
P178000	Torque withdrawal faulty
P178100	Torque reduction signal Open circuit/short circuit to ground
P178200	Torque reduction signal Short circuit to B+
P178300	Clutch torque adaptation 2 adaptation limit reached
P178400	Up/down shift wire Open circuit/short circuit to ground
P178500	Up/down shift wire Short circuit to B+
P178600	Reversing light signal Open circuit
P178700	Reversing light signal Short-circuit to ground
P178800	Reversing light signal Short circuit to B+
P178900	Idling speed adjustment Error Message from Engine Contr.
P178A00	Hydraulic pump Electrical malfunction
P178B00	Hydraulic pump Implausible behavior
P178C00	Clutch 1 to clutch 2 Implausible
P178D00	Synchronizer ring Wear
P178E00	Function limitation due to excessive temperature
P178F00	Pressure control valve soiled
P179000	Signal for selector range display Open circuit
P179100	Signal for selector range display Short-circuit to ground
P179200	Signal for selector range display Short circuit to B+
P179300	Output Speed Sensor 2 Circ. No signal
P179500	Signal for driving speed Open circuit
P179600	Signal for driving speed Short-circuit to ground
P179700	Signal for driving speed Short circuit to B+
P179800	Output Speed Sensor 2 Circ. Implausible signal
P179900	Output Speed Sensor 2 Circ. Rpm too High
P179A00	Solenoid valve Electrical malfunction
P179B00	Separate transmission valve Electrical malfunction
P179C00	Main pressure valve Electrical malfunction

P179D00	Cooling oil valve Electrical malfunction
P179E00	Sensor for transmission range Electrical malfunction
P179F00	Sensor for transmission range Malfunction
P17A000	Accumulator 1 temperature monitoring
P17A100	Accumulator 2 temperature monitoring
P17A200	Differential fluid pressure monitoring
P17A300	Differential fluid temperature monitoring
P17A400	Transverse acceleration monitoring
P17A500	Longitudinal acceleration monitoring
P17A600	Selector lever position P position1
P17A700	Selector lever position P position2
P17A800	Shift Lever Forward Valve 1 Open circuit
P17A900	Shift Lever Forward Valve 1 Short-circuit to ground
P17AA00	Shift Lever Forward Valve 1 Short circuit to B+
P17AB00	Shift Lever Forward Valve 1 Electrical malfunction
P17AC00	Shift Lever Forward Valve 2 Open circuit
P17AD00	Shift Lever Forward Valve 2 Short-circuit to ground
P17AE00	Shift Lever Forward Valve 2 Short circuit to B+
P17AF00	Shift Lever Forward Valve 2 Electrical malfunction
P17B000	Shift Lever Forward Valve 3 Open circuit
P17B100	Shift Lever Forward Valve 3 Short-circuit to ground
P17B200	Shift Lever Forward Valve 3 Short circuit to B+
P17B300	Shift Lever Forward Valve 3 Electrical malfunction
P17B400	Shift Lever Forward Valve 4 Open circuit
P17B500	Shift Lever Forward Valve 4 Short-circuit to ground
P17B600	Shift Lever Forward Valve 4 Short circuit to B+
P17B700	Shift Lever Forward Valve 4 Electrical malfunction
P17B800	Gear Recognition Potentiometer 1 Implausible signal
P17B900	Gear Recognition Potentiometer 1 Signal too low
P17BA00	Gear Recognition Potentiometer 1 Signal too high
P17BB00	Gear Recognition Potentiometer 2 Implausible signal

P17BC00	Gear Recognition Potentiometer 2 Signal too low
P17BD00	Gear Recognition Potentiometer 2 Signal too high
P17BE00	Hydraulic pump Excess temperature
P17BF00	Hydraulic pump Play protection
P17C000	Sport program button Open circuit
P17C100	Selector lever position display unit Electrical malfunction
P17C200	Selector lever position display unit Supply voltage
P17C300	Selector lever Defective
P17C400	Selector lever position display unit Defective
P17C500	Selector lever Implausible signal
P17C600	Clutch valve Electrical malfunction
P17C700	Transmission Input Speed (RPM) Sensor 3 electrical malfunction in circuit
P17C800	Transmission Input Speed (RPM) Sensor 3 Implausible signal
P17C900	Transmission Input Speed (RPM) Sensor 3 No signal
P17CA00	Basic calibration Data implausible
P17CB00	Clutch valve Defective
P17CC00	Clutch valve 2 Defective
P17CD00	Coupling 1 Drag torque too high
P17CE00	Coupling 2 Drag torque too high
P17CF00	Coupling 1 Slip too great
P17D000	Coupling 2 Slip too great
P17D100	Coupling 1 Pressure upper limit exceeded
P17D200	Coupling 2 Pressure upper limit exceeded
P17D300	Electrohydraulic control unit Characteristic curve deviation
P17D400	Valve 3 in separate transmission 1 Mechanical malfunction
P17D500	Valve 3 in separate transmission 2 Mechanical malfunction
P17D600	Coupling 1 Pressure too high
P17D700	Coupling 2 Pressure too high
P17D800	Torque limitation due to clutch temperature
P17D900	Gear selector sensor Characteristic curve deviation
P17DA00	Gear position sensor 1 Implausible

P17DB00	Gear position sensor 2 Implausible
P17DC00	Gear position sensor 3 Implausible
P17DD00	Gear position sensor 4 Implausible
P17DE00	Gear Position Distance Sensors 1 and 3 Electrical malfunction
P17DF00	Gear Position Distance Sensors 2 and 4 Electrical malfunction
P17E000	Gear selector 1 Mechanical malfunction
P17E100	Gear selector 2 Mechanical malfunction
P17E200	Gear selector 3 Mechanical malfunction
P17E300	Gear selector 4 Mechanical malfunction
P17E400	Selector lever position display unit Short circuit to B+
P17E500	Selector lever position sensor Mechanical malfunction
P17E600	Selector lever position sensor Implausible signal
P17E700	Selector lever position sensor Defective
P17E800	Locking solenoid Electrical malfunction
P17E900	Locking solenoid Short circuit to B+
P17EA00	Locking solenoid Defective
P17EB00	Unlock button Short-circuit to ground
P17EC00	Unlock button Electrical malfunction
P17ED00	Unlock button sticks
P17EE00	Unlock button Implausible signal
P17EF00	Solenoid for pressure accumulator Short circuit to B+
P17F000	Solenoid for pressure accumulator Short-circuit to ground
P17F100	Solenoid for pressure accumulator Open circuit
P17F200	Solenoid for pressure accumulator Electrical malfunction
P17F300	Solenoid for parking lock Short circuit to B+
P17F400	Solenoid for parking lock Short-circuit to ground
P17F500	Solenoid for parking lock Open circuit
P17F600	Solenoid for parking lock Electrical malfunction
P17F700	Sensor for parking lock Implausible signal
P17F800	Sensor for parking lock Electrical malfunction
P17F900	Parking lock Mechanical malfunction

P17FA00	Pressure control valve 8 electrical malfunction in circuit
P17FB00	Pressure control valve 8 Open circuit
P17FC00	Pressure control valve 8 Open circuit/short circuit to ground
P17FD00	Pressure control valve 8 Short circuit to B+
P180000	Hydraulic Actuator Valve -N331- Electrical malfunction in circuit
P180100	Signal buzzer activation Short circuit to B+
P180200	Clutch pedal switch -F194 Implausible signal
P180300	Planetary post-switch stage Mechanical malfunction
P180400	Hydraulic Actuator Range Sender -G302- Electrical malfunction in circuit
P180500	Hydraulic Actuator Range Sender -G302- Upper limit exceeded
P180600	Hydraulic Actuator Range Sender -G302- Lower limit not reached
P180700	Hydraulic Actuator Range Sender -G302- no or incorrect basic setting/adaptation
P180800	Hydraulic Actuator Range Sender -G302- Implausible signal
P180900	4-Low Range Hydraulic Pump -V190- Electrical malfunction in circuit
P180A00	Gear selector 1 Leaving Neutral not allowed
P180B00	Gear selector 2 Leaving Neutral not allowed
P180C00	Gear selector 3 Leaving Neutral not allowed
P180D00	Gear selector 4 Leaving Neutral not allowed
P180E00	Position sensor for clutch 1 Implausible signal
P180F00	Position sensor for clutch 2 Implausible signal
P181300	Pressure control valve 1 -N215 electrical malfunction in circuit
P181400	Pressure control valve 1 -N215 Open circuit/short circuit to ground
P181500	Pressure control valve 1 -N215 Short circuit to B+
P181800	Pressure control valve 2 -N216 electrical malfunction in circuit
P181900	Pressure control valve 2 -N216 Open circuit/short circuit to ground
P182000	Pressure control valve 2 -N216 Short circuit to B+
P182300	Pressure control valve 3 -N217 electrical malfunction in circuit
P182400	Pressure control valve 3 -N217 Open circuit/short circuit to ground
P182500	Pressure control valve 3 -N217 Short circuit to B+
P182800	Pressure control valve 4 -N218 electrical malfunction in circuit
P182900	Pressure control valve 4 -N218 Open circuit/short circuit to ground

P183000	Pressure control valve 4 -N218 Short circuit to B+
P183300	Pressure regulating valve -5- for automatic transmission electrical malfunction in circuit
P183400	Pressure regulating valve -5- for automatic transmission Open circuit/short circuit to ground
P183500	Pressure regulating valve -5- for automatic transmission Short circuit to B+
P183800	Pressure Regulating Valve 6-N371 Electrical malfunction in circuit
P183900	Pressure Regulating Valve 6-N371 Open circuit/short circuit to ground
P184000	Pressure Regulating Valve 6-N371 Short circuit to B+
P184100	Engine control module/Transmission Control Module (TCM) Versions not compatible
P184200	Read DTC memory of instrument cluster
P184300	Read DTC memory of distance control ECU
P184400	Read DTC memory of read out select central control
P184500	Read DTC memory of Steering Column Electronic Systems Control Module -J527-
P184700	Read DTC memory of break ECU
P184800	Read DTC memory of engine ECU
P184900	Read DTC memory of transmission ECU
P184A00	Main pressure adaptation Offset upper limit exceeded
P184B00	Main pressure adaptation Malfunction
P185000	Databus drivetrain Missing Message from Engine Contr
P185100	Databus drivetrain missing message from break ECU
P185200	Databus drivetrain Implausible Message from Engine Contr.
P185300	Databus drivetrain Implausible message from ABS control module
P185400	Databus drivetrain Defective
P185500	Databus drivetrain Software version monitoring
P185600	Throttle valve potentiometer -G69- Error Message from Engine Contr.
P185700	Load Signal Error Message from Engine Contr.
P185800	Engine Speed Input Circ. Error Message from Engine Contr.
P185900	Brake Light Switch -F Error Message from Engine Contr.
P186000	Kick Down Switch -F8- Error Message from Engine Contr.
P186100	Accelerator position sender-G79 Malfunction indication from Engine Control Module (ECM)

P186200	Databus drivetrain missing message from instrument panel ECU
P186300	Databus drivetrain missing message from steering angle sensor
P186400	Databus drivetrain Missing message from ADR control module
P186500	Databus drivetrain missing message f.central electr. control
P186600	Databus drivetrain missing messages
P186700	Databus drivetrain missing message from -J527-
P186800	Transmission Mount Valve -1- -N262- Short circuit to B+
P186900	Transmission Mount Valve -1- -N262- Short-circuit to ground
P187000	Transmission Mount Valve -1- -N262- Open circuit
P187100	Transmission Mount Valve -2- -N263- Short circuit to B+
P187200	Transmission Mount Valve -2- -N263- Short-circuit to ground
P187300	Transmission Mount Valve -2- -N263- Open circuit
P187400	Valve for torque support mount Short circuit to B+
P187500	Valve for torque support mount Short-circuit to ground
P187600	Valve for torque support mount Open circuit
P187700	Control Coolant System Gearbox intermittent Open circuit
P187800	Control Coolant System Gearbox intermittent Short circuit to B+
P187900	Control Coolant System Gearbox intermittent Short-circuit to ground
P188000	Databus missing message from Diagnostic Interface ECU
P188100	Data Bus missing message
P188200	Databus drivetrain missing message from electrical brake system ECU
P188300	Park/Neutral Switch Input Circuit Implausible signal
P188400	Reversing light signal Short-circuit to ground
P188500	Reversing light signal Short circuit to B+
P188600	Reversing light signal Open circuit
P188700	Vehicle Speed Signal wheel speed from brake control module Implausible signal
P188800	valve for coolant system circuit Short circuit to B+
P188900	valve for coolant system circuit Short circuit to ground/open circuit
P188A00	Coolant shut-off valve Electrical malfunction
P189000	Signal wire for Tiptronic Electrical malfunction
P189100	Signal wire for Tiptronic Implausible signal

P189200	Selector lever position detection Defective
P189300	Signal wire for gear display in selector lever Electrical malfunction
P189400	Signal wire for gear display in selector lever Implausible signal
P189500	Function restriction due to pressure drop
P189600	Coupling 1 Temperature shock
P189700	Coupling 2 Temperature shock
P189800	Coupling 1 Function restriction
P189900	Coupling 2 Function restriction
P189A00	Coupling 1 Clearance too small
P189B00	Coupling 2 Clearance too small
P189C00	Function restriction due to insufficient pressure build-up
P190000	Fan 2 control circuit Open circuit/short circuit to ground
P190100	After-Run Coolant Fan Control (FC) Control Module -J138- Short circuit to B+
P190200	After-Run Coolant Fan Control (FC) Control Module -J138- Open circuit/short circuit to ground
P190300	Coolant Fan Valve -N313- Short circuit to B+
P190400	Coolant Fan Valve -N313- Open circuit/short circuit to ground
P190500	Charge Air Cooling Pump Relay -J536- Short circuit to B+
P190600	Charge Air Cooling Pump Relay -J536- Open circuit/short circuit to ground
P190700	Engine databus/engine Defective
P190800	Engine databus/engine Software version monitoring
P190900	Engine databus/engine Missing message from Engine Control Module (ECM) 1
P190A00	Coolant pump for charge pressure cooler Electrical malfunction
P190B00	Coolant pump for charge pressure cooler Temperature shut-off
P190C00	Coolant pump for charge pressure cooler No signal
P190D00	Coolant pump for charge pressure cooler Mechanical malfunction
P190E00	Coolant pump for charge pressure cooler Supply voltage
P190F00	Coolant pump for charge pressure cooler Electrical malfunction in load circuit
P191000	Engine databus/engine Missing message from Engine Control Module (ECM) 2
P191100	Synchronization wire engine/engine Electrical malfunction in circuit
P191200	Pressure sensor for brake booster Open circuit/short circuit to B+

P191300	Pressure sensor for brake booster Short-circuit to ground
P191400	Pressure sensor for brake booster Implausible signal
P191500	Coolant Circulation Pump Relay -J151 Short circuit to B+
P191600	Coolant Circulation Pump Relay -J151 Short-circuit to ground
P191700	Coolant Circulation Pump Relay -J151 Open circuit
P191800	Load signal from generator DF Open circuit/short circuit to B+
P191900	Load signal from generator DF Short-circuit to ground
P191A00	Loss of crankshaft synchronization
P191B00	Coolant Fan Control (FC) Control Module Implausible signal
P191C00	Control module 2 for cooling fan Implausible signal
P191D00	Coolant pump for charge pressure cooler Implausible signal
P191E00	Actuator for structure-borne noise
P191F00	Pressure sensor for brake booster Electrical malfunction
P192000	L/R Electr-Hydr Eng. Mount Sol Valve -N144/N145 Open circuit/short circuit to ground
P192100	Outside Air Temperature Sensor 2 -G249- Short-circuit to ground
P192200	Outside Air Temperature Sensor 2 -G249- Open circuit/short circuit to B+
P192300	Check DTC memory of Engine Control Module (ECM) 2
P192400	Control module pin coding Implausible signal
P192500	Auxiliary Engine Coolant (EC) Pump Relay Short circuit to B+
P192600	Auxiliary Engine Coolant (EC) Pump Relay Short-circuit to ground
P192700	Auxiliary Engine Coolant (EC) Pump Relay Open circuit
P192800	Immobilizer inquiry not yet performed
P192900	Radiator fan -V7 Open circuit
P193000	Coolant Fan -2- Open circuit
P193100	Coolant Fan Control (FC) Control Module -J293 Malfunction
P193200	Databus drivetrain implausible message from ctrl. for access start authorization
P193300	Throttle plate control 2 Malfunction
P193400	Drive Circuit Cooling Fan Temperature Sensor -G382- Signal too low
P193500	Drive Circuit Cooling Fan Temperature Sensor -G382- Signal too high
P193600	Generator switch off Open circuit/short circuit to ground

P193700	Generator switch off Short circuit to B+
P193800	Auxiliary Engine Coolant (EC) Pump Relay -J496 Open circuit/short circuit to ground
P193900	Databus drivetrain missing message from ctrl. for access start authorization
P194000	Databus drivetrain missing message f. battery monitoring control module
P194100	Databus drivetrain implausible message f. battery monitoring control module
P194200	Databus drivetrain missing message from level control system control module
P194300	Databus drivetrain implausible message from level control system control module
P194400	Control module 1 for cooling fan Excess temperature
P194500	Coolant Fan Control (FC) Control Module 1, fan activation Short circuit
P194600	Control module 1 for cooling fan Faulty/open circuit in voltage supply
P194700	Control module 2 for cooling fan Excess temperature
P194800	Coolant Fan Control (FC) Control Module 2, fan activation Short circuit
P194900	Control module 2 for cooling fan Faulty/open circuit in voltage supply
P195000	Radiator fan -V7 difficulty of movement/blocked
P195100	Coolant Fan -2- difficulty of movement/blocked
P195200	Turbocharger (TC) control module 1 Defective
P195300	Turbocharger (TC) control module 2 Defective
P195400	Glow Plug Module 2, Control Circuit Electrical malfunction in circuit
P195500	Glow Plug Control Module 2 to PCM Comm.Circuit Implausible signal
P195600	Exhaust temperature sensor 2 bank 1 Electrical malfunction
P195700	Exhaust temperature sensor 2 bank 1 Short-circuit to ground
P195800	Exhaust temperature sensor 2 bank 1 Short circuit to B+
P195900	Exhaust temperature sensor 2 bank 1 Implausible signal
P196000	Exhaust temperature control circuit exhaust bank 3 Value above upper control limit
P196100	Exhaust temperature sensor 2 bank 2 - G449 Electrical malfunction
P196200	Exhaust temperature sensor 2 bank 2 - G449 Short-circuit to ground
P196300	Exhaust temperature sensor 2 bank 2 - G449 Short circuit to B+
P196400	Exhaust temperature sensor 2 bank 2 - G449 Implausible signal
P196500	Exhaust temperature control circuit exhaust bank 4 Value above upper control limit
P196600	Sec.Air Inj.Sys.Pump C Relay Circ Open circuit
P196700	Sec.Air Inj.Sys.Pump C Relay Circ Short circuit to B+

P196800	Sec.Air Inj.Sys.Pump C Relay Circ Short-circuit to ground
P196900	Sec.Air Inj.Sys.Pump C Relay Circ electrical malfunction in circuit
P197000	Sec.Air Inj.Sys.Pump D Relay Circ Open circuit
P197100	Sec.Air Inj.Sys.Pump D Relay Circ Short circuit to B+
P197200	Sec.Air Inj.Sys.Pump D Relay Circ Short-circuit to ground
P197300	Sec.Air Inj.Sys.Pump D Relay Circ electrical malfunction in circuit
P197400	Sec.Air Inj.Valve 3 Circ electrical malfunction in circuit
P197500	Sec.Air Inj.Valve 3 Circ Short-circuit to ground
P197600	Sec.Air Inj.Valve 3 Circ Short circuit to B+
P197700	Sec.Air Inj.Valve 3 Circ Open circuit
P197800	Sec.Air Inj.Valve 4 Circ electrical malfunction in circuit
P197900	Sec.Air Inj.Valve 4 Circ Short-circuit to ground
P197A00	Sec.Air Inj.Valve 3 Circ Mechanical malfunction
P197B00	Sec.Air Inj.Valve 4 Circ Mechanical malfunction
P197C00	Secondary air injection bank 1 and bank 2 swapped
P198000	Sec.Air Inj.Valve 4 Circ Short circuit to B+
P198100	Sec.Air Inj.Valve 4 Circ Open circuit
P198200	Exhaust temperature control circuit exhaust bank 3 Implausible
P198300	Exhaust temperature control circuit exhaust bank 4 Implausible
P198400	Coolant fan 3 difficulty of movement/blocked
P198500	Coolant FC (Fan Control) Control Module 2 Malfunction
P198600	Coolant Fan Control (FC) Control Module 3, fan activation Short circuit
P198700	Function restriction due to brake temperature
P198800	Coolant Fan 3 Relay -J752- Open circuit
P198900	Coolant Fan 3 Relay -J752- Short circuit to B+
P199000	Coolant Fan 3 Relay -J752- Short-circuit to ground
P199100	Control module defective
P199200	Potentiometer 2 for EGR -G466- Malfunction in basic settings
P199300	Potentiometer 2 for EGR -G466- Signal too high
P199400	Potentiometer 2 for EGR -G466- Signal too low
P199500	Door open signal not recognized

P199600	Friction too high Code E1
P199700	Friction too high Code A1
P199800	Friction too high Code E2
P199900	Friction too high Code E2
P199A00	Temperature sensor for engine temperature management Signal too high
P199B00	Temperature sensor for engine temperature management Signal too low
P199C00	Thermostat for cylinder head Short-circuit to B+
P199D00	Thermostat for cylinder head Short circuit to ground
P199E00	Thermostat for cylinder head Open circuit
P199F00	Thermostat control for cylinder head Excess temperature
P19A000	Thermostat for transmission Short-circuit to B+
P19A100	Thermostat for transmission Short circuit to ground
P19A200	Thermostat for transmission Open circuit
P19A300	Thermostat control for transmission Excess temperature
P19A400	Actuator for engine temperature regulation Short-circuit to B+
P19A500	Actuator for engine temperature regulation Short circuit to ground
P19A600	Actuator for engine temperature regulation Open circuit
P1A0100	Crash signal monitoring failed
P1A0200	Hybrid battery system Insulation malfunction warning 1
P1A0300	Hybrid battery system Insulation malfunction warning 2
P1AFE00	Next output Diagnostic Test Mode (DTM) --> confirmation
P1AFF00	Actuator test end
P1B0000	Generator Mechanical malfunction
P1B0100	Generator Electrical malfunction
P1B0200	Control unit for battery monitoring Defective
P1B0300	Locking electronics solenoid Short-circuit to ground
P1B0400	Locking electronics solenoid Short circuit to B+
P1B0500	Locking electronics solenoid Open circuit
P1B0600	Locking electronics solenoid Resistance too small
P1B0700	Locking electronics solenoid Short circuit between coil A and B
P1B0800	Locking electronics switch Short-circuit to ground

P1B0900	Locking electronics sensor Short circuit to ground
P1B0A00	Locking electronics sensor Defective
P1B0B00	Locking electronics sensor Open circuit/short circuit to B+
P1B0C00	Lock hardware Mechanical malfunction
P200000	NOx Adsorber Efficiency Bank 1 Below Threshold
P200200	Particulate Trap Bank 1 Efficiency Below Threshold
P200300	Particulate Trap Bank 2 Efficiency Below Threshold
P200400	Intake Manifold Runner Control Bank 1 Stuck Open
P200500	Intake Manifold Runner Control Bank 2 Stuck Open
P200600	Intake Manifold Runner Control Bank 1 Stuck Closed
P200700	Intake Manifold Runner Control Bank 2 Stuck Closed
P200800	Intake Manifold Runner Bank 1 Control Circuit/Open
P200900	Intake Manifold Runner Bank 1 Control Circuit Low
P200A00	Intake Manifold Runner Bank 1 Performance
P200B00	Intake Manifold Runner Bank 2 Performance
P201000	Intake Manifold Runner Bank 1 Control Circuit High
P201100	Intake Manifold Runner Bank 2 Control Circuit/Open
P201200	Intake Manifold Runner Bank 2 Control Circuit Low
P201300	Intake Manifold Runner Bank 2 Control Circuit High
P201400	Intake Manifold Runner Position Sensor/Switch Circuit
P201500	Intake Manifold Runner Position Sensor/Switch Circuit Range/Performance
P201600	Intake Manifold Runner Position Sensor/Switch Circuit Low
P201700	Intake Manifold Runner Position Sensor/Switch Circuit High
P201900	Intake Manifold Runner Position Sensor/Switch Circuit Bank 2
P202000	Intake Manifold Runner Pos. Sen./Switch Circuit Bank 2 Range/Performance
P202100	Intake Manifold Runner Pos. Sen./Switch Circuit Bank 2 Low
P202200	Intake Manifold Runner Pos. Sen./Switch Circuit Bank 2 High
P202400	Evaporative Emissions (EVAP) Fuel Vapor Temperature Sensor Circuit
P202500	Evaporative Emissions (EVAP) Fuel Vapor Temperature Sensor Performance
P202600	Evaporative Emissions (EVAP) Fuel Vapor Temperature Sensor Circuit Low Voltage
P202700	Evaporative Emissions (EVAP) Fuel Vapor Temperature Sensor Circuit High Voltage

P202A00	Reductant Tank Heater Control Circuit/Open
P202B00	Reductant Tank Heater Control Circuit Low
P202C00	Reductant Tank Heater Control Circuit High
P203100	Exhaust Gas Temperature Sensor 2, Bank 1 Circuit
P203200	Exhaust Gas Temperature Sensor 2, Bank 1 Circuit Low
P203300	Exhaust Gas Temperature Sensor 2, Bank 1 Circuit High
P203400	Exhaust Gas Temperature Sensor 2 Bank 2 Circuit
P203500	Exhaust Gas Temperature Sensor 2 Bank 2 Circuit Low
P203600	Exhaust Gas Temperature Sensor 2 Bank 2 Circuit High
P203A00	Reductant Level Sensor Circuit
P203B00	Reductant Level Sensor Circuit Range/Performance
P203C00	Reductant Level Sensor Circuit Low
P203D00	Reductant Level Sensor Circuit High
P204700	Reductant Injection Valve Circuit/Open Bank 1 Unit 1
P204800	Reductant Injection Valve Circuit Low Bank 1 Unit 1
P204900	Reductant Injection Valve Circuit High Bank 1 Unit 1
P204A00	Reductant Pressure Sensor Circuit
P204B00	Reductant Pressure Sensor Circuit Range/Performance
P204D00	Reductant Pressure Sensor Circuit High
P205A00	Reductant Tank Temperature Sensor Circuit
P205B00	Reductant Tank Temperature Sensor Circuit Range/Performance
P205C00	Reductant Tank Temperature Sensor Circuit Low
P207000	Intake Manifold Tuning (IMT) Valve Stuck Open
P207100	Intake Manifold Tuning (IMT) Valve Stuck Closed
P207300	Manifold Absolute Pressure/Mass Air Flow - Throttle Position Correlation at Idle
P207400	Manifold Absolute Pressure/Mass Air Flow - Throttle Position Correlation at Higher Load
P207500	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit
P207600	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit Range/Performance
P207700	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit Low
P207800	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit High

P207900	Intake Manifold Tuning (IMT) Valve Position Sensor/Switch Circuit Intermittent
P207F00	Reductant Quality Performance
P208000	Exhaust Gas Temperature Sensor Circuit Bank1 Range/Performance
P208200	Exhaust Gas Temperature Sensor Circuit Bank2 Range/Performance
P208400	Exhaust Gas Temperature Sensor 2 Circuit Range/Performance
P208600	Exhaust Gas Temperature Sensor 2 Circuit Bank 2 Range/Performance
P208800	A Camshaft Position Actuator Control Circuit Low - Bank 1
P208900	A Camshaft Position Actuator Control Circuit High - Bank 1
P208A00	Reductant Pump "A" Control Circuit/Open
P208B00	Reductant Pump "A" Control Range/Performance
P208C00	Reductant Pump "A" Control Circuit Low
P208D00	Reductant Pump "A" Control Circuit High
P208E00	Reductant Injection Valve Stuck Closed Bank 1 Unit 1
P209000	B Camshaft Position Actuator Control Circuit(Bank1) Low
P209100	B Camshaft Position Actuator Control Circuit(Bank1) High
P209200	A Camshaft Position Actuator Control Circuit(Bank2) Low
P209300	A Camshaft Position Actuator Control Circuit(Bank2) High
P209400	B Camshaft Position Actuator Control Circuit(Bank2) Low
P209500	B Camshaft Position Actuator Control Circuit(Bank2) High
P209600	Post Catalyst Fuel Trim System Bank1 Too Lean
P209700	Post Catalyst Fuel Trim System Bank 1 Too Rich
P209800	Post Catalyst Fuel Trim System Bank 2 Too Lean
P209900	Post Catalyst Fuel Trim System Bank2 Too Rich
P209F00	Reductant Tank Heater Control Circuit Performance
P20A000	Reductant Purge Control Valve Circuit /Open
P20A200	Reductant Purge Control Valve Circuit Low
P20A300	Reductant Purge Control Valve Circuit High
P20A500	Reductant Purge Control Valve Stuck Closed
P20B500	Reductant Metering Unit Heater Control Circuit/Open
P20B700	Reductant Metering Unit Heater Control Circuit Low
P20B800	Reductant Metering Unit Heater Control Circuit High

P20B900	Reductant Heater "A" Control Circuit/Open
P20BB00	Reductant Heater "A" Control Circuit Low
P20BC00	Reductant Heater "A" Control Circuit High
P20BD00	Reductant Heater "B" Control Circuit/Open
P20BF00	Reductant Heater "B" Control Circuit Low
P20C000	Reductant Heater "B" Control Circuit High
P20D800	Exhaust Aftertreatment Fuel Supply Control Performance
P20E800	Reductant Pressure Too Low
P20E900	Reductant Pressure Too High
P20EE00	SCR NOx Catalyst Efficiency Below Threshold Bank 1
P20F400	Reductant Consumption Too Low
P20F500	Reductant Consumption Too High
P210000	Throttle Actuator Control Motor Circuit/Open
P210100	Throttle Actuator Control Motor Circuit Range/performance
P210200	Throttle Actuator Control Motor Circuit Low
P210300	Throttle Actuator "A" Control Motor Circuit High
P210600	Throttle Actuator Control System Forced Limited Power
P210800	Throttle Actuator Control Module Performance
P210A00	Throttle Actuator "B" Control Motor Circuit/Open
P210B00	Throttle Actuator "B" Control Motor Circuit Range/Performance
P210C00	Throttle Actuator "B" Control Motor Circuit Low
P210D00	Throttle Actuator "B" Control Motor Circuit High
P211000	Throttle Actuator Control System - Forced Limited RPM
P211100	Throttle Actuator Control System - Stuck Open
P211200	Throttle Actuator Control System - Stuck closed
P211900	Throttle Actuator Control Throttle Body Range/Performance
P212200	Throttle/Pedal Pos. Sens./Switch D Circuit Low Input
P212300	Throttle/Pedal Pos. Sens./Switch D Circuit High Input
P212700	Throttle/Pedal Pos. Sens./Switch E Circuit Low Input
P212800	Throttle/Pedal Pos. Sens./Switch E Circuit High Input
P212B00	Throttle Position Sensor/Switch "G" Circuit Range/Performance

P212C00	Throttle Position Sensor/Switch "G" Circuit Low
P212D00	Throttle Position Sensor/Switch "G" Circuit High
P213100	Throttle/Pedal Position Sensor/Switch "F" Circuit Range/Performance
P213200	Throttle/Pedal Position Sensor/Switch "F" Circuit Low
P213300	Throttle/Pedal Position Sensor/Switch "F" Circuit High
P213500	Throttle/Pedal Position Sensor/Switch "A"/"B" Voltage Correlation
P213800	Throttle/Pedal Position Sensor/Switch D/E Voltage Correlation
P214600	Fuel Injector Group "A" Supply Voltage Circuit Open
P214700	Fuel Injector Group "A" Supply Voltage Circuit Low
P214800	Fuel Injector Group "A" Supply Voltage Circuit High
P214900	Fuel Injector Group "B" Supply Voltage Circuit Open
P215000	Fuel Injector Group "B" Supply Voltage Circuit Low
P215100	Fuel Injector Group "B" Supply Voltage Circuit High
P215200	Fuel Injector Group "C" Supply Voltage Circuit/Open
P215300	Fuel Injector Group "C" Supply Voltage Circuit Low
P215400	Fuel Injector Group "C" Supply Voltage Circuit High
P215500	Fuel Injector Group "D" Supply Voltage Circuit/Open
P215600	Fuel Injector Group "D" Supply Voltage Circuit Low
P215700	Fuel Injector Group "D" Supply Voltage Circuit High
P215900	Vehicle Speed Sensor "B" Range/Performance
P216A00	Fuel Injector Group "E" Supply Voltage Circuit/Open
P216B00	Fuel Injector Group "E" Supply Voltage Circuit/Low
P216C00	Fuel Injector Group "E" Supply Voltage Circuit/High
P216D00	Fuel Injector Group "F" Supply Voltage Circuit/Open
P216E00	Fuel Injector Group "F" Supply Voltage Circuit/Low
P216F00	Fuel Injector Group "F" Supply Voltage Circuit/High
P217300	Throttle Actuator Control System - High Airflow Detected
P217500	Throttle Actuator Control System - Low Airflow Detected
P217700	System too lean off idle, Bank 1
P217800	System too rich off idle, Bank 1
P217900	System too lean off idle, Bank 2

P218000	System too rich off idle, Bank 2
P218100	Cooling System Performance
P218300	Engine Coolant Temperature Sensor 2 Circuit Range/Performance
P218400	Engine Coolant Temperature Sensor 2 Circuit Low
P218500	Engine Coolant Temperature Sensor 2 Circuit High
P218700	System too lean at idle, Bank 1
P218800	System too rich at idle, Bank 1
P218900	System too lean at idle, Bank 2
P219000	System too rich at idle, Bank 2
P219100	System Too Lean at Higher Load; Bank 1
P219200	System Too Rich at Higher Load; Bank 1
P219300	System Too Lean at Higher Load; Bank 2
P219400	System Too Rich at Higher Load; Bank 2
P219500	O2 Sensor Signal Stuck Lean Bank 1 Sensor 1
P219600	O2 Sensor Signal Stuck Rich Bank 1 Sensor 1
P219700	O2 Sensor Signal Stuck Lean Bank 2 Sensor 1
P219800	O2 Sensor Signal Stuck Rich Bank 2 Sensor 1
P219900	Intake Air Temperature Sensor 1/2 Correlation
P219A00	Bank 1 Air-Fuel Ratio Imbalance
P219B00	Bank 2 Air-Fuel Ratio Imbalance
P219C00	Cylinder 1 Air-Fuel Ratio Imbalance
P219D00	Cylinder 2 Air-Fuel Ratio Imbalance
P219E00	Cylinder 3 Air-Fuel Ratio Imbalance
P219F00	Cylinder 4 Air-Fuel Ratio Imbalance
P21A000	Cylinder 5 Air-Fuel Ratio Imbalance
P21A100	Cylinder 6 Air-Fuel Ratio Imbalance
P21A200	Cylinder 7 Air-Fuel Ratio Imbalance
P21A300	Cylinder 8 Air-Fuel Ratio Imbalance
P21A400	Cylinder 9 Air-Fuel Ratio Imbalance
P21A500	Cylinder 10 Air-Fuel Ratio Imbalance
P21A600	Cylinder 11 Air-Fuel Ratio Imbalance

P21A700	Cylinder 12 Air-Fuel Ratio Imbalance
P220000	NOx Sensor Bank 1 Sensor 1 Circuit
P220100	NOx Sensor Circuit Range/Performance Bank 1 Sensor 1
P220200	NOx Sensor Bank 1 Sensor 1 Circuit Low
P220300	NOx Sensor Bank 1 Sensor 1 Circuit High
P220900	NOx Sensor Heater Sense Bank 1 Sensor 1 Circuit Range/Performance
P220A00	NOx Sensor Supply Voltage Bank 1 Sensor 1 Circuit
P220B00	NOx Sensor Supply Voltage Bank 1 Sensor 2 Circuit
P222700	Barometric Pressure Circuit Range/Performance
P222800	Barometric Pressure Circuit Low
P222900	Barometric Pressure Circuit high
P223100	O2 Sensor Bank 1 Sensor 1 Signal Circuit Shorted to Heater Circuit
P223200	O2 Sensor Bank 1 Sensor 2 Signal Circuit Shorted to Heater Circuit
P223300	O2 Sensor Bank 1 Sensor 3 Signal Circuit Shorted to Heater Circuit
P223400	O2 Sensor Bank 2 Sensor 1 Signal Circuit Shorted to Heater Circuit
P223500	O2 Sensor Bank 2 Sensor 2 Signal Circuit Shorted to Heater Circuit
P223600	O2 Sensor Bank 2 Sensor 3 Signal Circuit Shorted to Heater Circuit
P223700	O2 Sensor Positive Current Control Circuit Bank 1 Sensor 1 Open
P223800	O2 Sensor Positive Current Control Circuit Bank 1 Sensor 1 Low
P223900	O2 Sensor Positive Current Control Circuit Bank 1 Sensor 1 High
P224000	O2 Sensor Positive Current Control Circuit Bank 2 Sensor 1 Open
P224100	O2 Sensor Positive Current Control Circuit Bank 2 Sensor 1 Low
P224200	O2 Sensor Positive Current Control Circuit Bank 2 Sensor 1 High
P224300	O2 Sensor Reference Voltage Circuit Bank 1 Sensor 1 Open
P224400	O2 Sensor Reference Voltage Bank 1 Sensor 1 Performance
P224500	O2 Sensor Reference Voltage Circuit Bank 1 Sensor 1 Low
P224600	O2 Sensor Reference Voltage Circuit Bank 1 Sensor 1 High
P224700	O2 Sensor Reference Voltage Circuit Bank 2 Sensor 1 Open
P224800	O2 Sensor Reference Voltage Bank 2 Sensor 1 Performance
P224900	O2 Sensor Reference Voltage Circuit Bank 2 Sensor 1 Low
P225000	O2 Sensor Reference Voltage Circuit Bank 2 Sensor 1 High

P225100	O2 Sensor Negative Current Control Circuit Bank 1 Sensor 1 open
P225200	O2 Sensor Negative Current Control Circuit Bank 1 Sensor 1 Low
P225300	O2 Sensor Negative Current Control Circuit Bank 1 Sensor 1 High
P225400	O2 Sensor Negative Current Control Circuit Bank 2 Sensor 1 open
P225500	O2 Sensor Negative Current Control Circuit Bank 2 Sensor 1 Low
P225600	O2 Sensor Negative Current Control Circuit Bank 2 Sensor 1 High
P225700	Secondary air injektion System Control "A" Circuit low
P225800	Secondary air injektion System Control "A" Circuit high
P226100	Turbo Boost Pressure Not Detected Mechanical
P226200	Turbocharger/Supercharger Boost Pressure Not Detected Mechanical
P226300	Turbocharger/Supercharger Boost System Performance
P227000	O2 Sensor Signal Stuck Lean; Bank 1 Sensor 2
P227100	O2 Sensor Signal Stuck Rich; Bank 1 Sensor 2
P227200	O2 Sensor Signal Stuck Lean; Bank 2 Sensor 2
P227300	O2 Sensor Signal Stuck Rich; Bank 2 Sensor 2
P227400	O2 Sensor Signal Stuck Lean; Bank 1 Sensor 3
P227500	O2 Sensor Signal Stuck Rich; Bank 1 Sensor 3
P227600	O2 Sensor Signal Stuck Lean; Bank 2 Sensor 3
P227700	O2 Sensor Signal Stuck Rich; Bank 2 Sensor 3
P227800	O2 Sensor Signals Swapped Bank 1 Sensor 3 / Bank 2 Sensor 3
P227900	Intake Air System Leak
P228C00	Fuel Pressure Regulator 1 Exceeded Control Limits Pressure Too Low
P228D00	Fuel Pressure Regulator 1 Exceeded Control Limits Pressure Too High
P228E00	Fuel Pressure Regulator 1 Exceeded Learning Limits Too Low
P228F00	Fuel Pressure Regulator 1 Exceeded Learning Limits Too High
P229300	Fuel Pressure Regulator 2 Performance
P229400	Fuel Pressure Regulator 2 Control Circuit
P229500	Fuel Pressure Regulator 2 Control Circuit Low
P229600	Fuel Pressure Regulator 2 Control Circuit High
P229700	O2 Sensor Bank 1 Sensor 1 Out of Range During Deceleration
P229800	O2 Sensor Bank 2 Sensor 1 Out of Range During Deceleration

P229A00	Fuel Pressure Regulator 2 Exceeded Control Limits Pressure Too Low
P229B00	Fuel Pressure Regulator 2 Exceeded Control Limits Pressure Too High
P229E00	NOx Sensor Bank 1 Sensor 2 Circuit
P229F00	NOx Sensor Circuit Range/Performance Bank 1 Sensor 2
P22A000	NOx Sensor Bank 1 Sensor 2 Circuit Low
P22A100	NOx Sensor Bank 1 Sensor 2 Circuit High
P22A700	NOx Sensor Heater Sense Bank 1 Sensor 2 Circuit Range/Performance
P230000	Ignition Coil "A" Primary Control Circuit Low
P230100	Ignition Coil "A" Primary Control Circuit High
P230200	Ignition Coil "A" Secondary Circuit
P230300	Ignition Coil "B" Primary Control Circuit Low
P230400	Ignition Coil "B" Primary Control Circuit High
P230500	Ignition Coil "B" Secondary Circuit
P230600	Ignition Coil "C" Primary Control Circuit Low
P230700	Ignition Coil "C" Primary Control Circuit High
P230800	Ignition Coil "C" Secondary Circuit
P230900	Ignition Coil "D" Primary Control Circuit Low
P231000	Ignition Coil "D" Primary Control Circuit High
P231100	Ignition Coil "D" Secondary Circuit
P231200	Ignition Coil "E" Primary Control Circuit Low
P231300	Ignition Coil "E" Primary Control Circuit High
P231400	Ignition Coil "E" Secondary Circuit
P231500	Ignition Coil "F" Primary Control Circuit Low
P231600	Ignition Coil "F" Primary Control Circuit High
P231700	Ignition Coil "F" Secondary Circuit
P231800	Ignition Coil "G" Primary Control Circuit Low
P231900	Ignition Coil "G" Primary Control Circuit High
P232000	Ignition Coil "G" Secondary Circuit
P232100	Ignition Coil "H" Primary Control Circuit Low
P232200	Ignition Coil "H" Primary Control Circuit High
P232300	Ignition Coil "H" Secondary Circuit

P232400	Ignition Coil "I" Primary Control Circuit Low
P232500	Ignition Coil "I" Primary Control Circuit High
P232600	Ignition Coil "I" Secondary Circuit
P232700	Ignition Coil "J" Primary Control Circuit Low
P232800	Ignition Coil "J" Primary Control Circuit High
P232900	Ignition Coil "J" Secondary Circuit
P233000	Ignition Coil "K" Primary Control Circuit Low
P233100	Ignition Coil "K" Primary Control Circuit High
P233200	Ignition Coil "K" Secondary Circuit
P233300	Ignition Coil "L" Primary Control Circuit Low
P233400	Ignition Coil "L" Primary Control Circuit High
P233500	Ignition Coil "L" Secondary Circuit
P233600	Cylinder #1 Above Knock Threshold
P233700	Cylinder #2 Above Knock Threshold
P233800	Cylinder #3 Above Knock Threshold
P233900	Cylinder #4 Above Knock Threshold
P234000	Cylinder #5 Above Knock Threshold
P234100	Cylinder #6 Above Knock Threshold
P234200	Cylinder #7 Above Knock Threshold
P234300	Cylinder #8 Above Knock Threshold
P234400	Cylinder #9 Above Knock Threshold
P234500	Cylinder #10 Above Knock Threshold
P234600	Cylinder #11 Above Knock Threshold
P234700	Cylinder #12 Above Knock Threshold
P240000	Evaporative Emission System Leak Detection Pump Control Circuit/Open
P240100	Evaporative Emission System Leak Detection Pump Control Circuit Low
P240200	Evaporative Emission System Leak Detection Pump Control Circuit High
P240300	Evaporative Emission System Leak Detection Pump Sense Circuit/Open
P240400	Evaporative Emission System Leak Detection Pump Sense Circuit Range/Performance
P241300	Exhaust Gas Recirculation System Performance

P241400	O2 Sensor Exhaust Sample Error, Bank 1 Sensor 1
P241500	O2 Sensor Exhaust Sample Error, Bank 2 Sensor 1
P241600	Oxygen Sensor Signals Swapped Bank 1 Sensor 2 / Bank 1 Sensor 3
P241700	Oxygen Sensor Signals Swapped Bank 2 Sensor 2 / Bank 2 Sensor 3
P242100	Evaporative Emission System Vent Valve Stuck Open
P242200	Evaporative Emission System Vent Valve Stuck Closed
P242500	Exhaust Gas Recirculation Cooling Valve Control Circuit Open
P242600	Exhaust Gas Recirculation Cooling Valve Control Circuit Low
P242700	Exhaust Gas Recirculation Cooling Valve Control Circuit High
P242800	Exhaust Gas Temperature Too High Bank1
P242900	Exhaust Gas Temperature Too High Bank2
P242A00	Exhaust Gas Temperature Sensor Circuit Bank 1 Sensor 3
P242B00	Exhaust Gas Temperature Sensor Circuit Bank 1 Sensor 3 Range/Performance
P242C00	Exhaust Gas Temperature Sensor Circuit Low Bank 1 Sensor 3
P242D00	Exhaust Gas Temperature Sensor Circuit High Bank 1 Sensor 3
P242F00	Diesel Particulate Filter Restriction - Ash Accumulation
P243000	Secondary Air Injection System Air Flow/Pressure Bank 1 Sensor Circuit
P243100	Secondary Air Injection System Air Flow/Pressure Bank 1 Sensor Circuit Range/Performance
P243200	Secondary Air Injection System Air Flow/Pressure Bank 1 Sensor Circuit Low
P243300	Secondary Air Injection System Air Flow/Pressure Bank 1 Sensor Circuit High
P244000	Secondary Air Injection System Switching Valve Stuck Open Bank1
P244200	Secondary Air Injection System Switching Valve Stuck Open Bank2
P244C00	Exhaust Temperature Too Low For Particulate Filter Regeneration Bank 1
P245200	Diesel Particulate Filter Differential Pressure Sensor Circuit
P245300	Diesel Particulate Filter Differential Pressure Sensor Circuit Range/Performance
P245400	Diesel Particulate Filter Differential Pressure Sensor Circuit Low
P245500	Diesel Particulate Filter Differential Pressure Sensor Circuit High
P245600	Diesel Particulate Filter Pressure Sensor "A" Circuit Intermittent/Erratic
P245700	Exhaust Gas Recirculation Cooling System Performance
P245B00	Exhaust Gas Recirculation Cooler Bypass Control Circuit Range/Performance

P245E00	Diesel Particulate Filter Pressure Sensor "B" Circuit
P246000	Diesel Particulate Filter Pressure Sensor "B" Circuit Low
P246300	Diesel Particulate Filter - Soot Accumulation
P246600	Exhaust Gas Temperature Sensor Circuit Bank 2 Sensor 3
P246700	Exhaust Gas Temperature Sensor Circuit Range/Performance Bank 2 Sensor 3
P246800	Exhaust Gas Temperature Sensor Circuit Low Bank 2 Sensor 3
P246E00	Exhaust Gas Temperature Sensor Circuit Bank 1 Sensor 4
P246F00	Exhaust Gas Temperature Sensor Circuit Bank 1 Sensor 4 Range/Performance
P247000	Exhaust Gas Temperature Sensor Circuit Low Bank 1 Sensor 4
P247100	Exhaust Gas Temperature Sensor Circuit High Bank 1 Sensor 4
P247300	Exhaust Gas Temperature Sensor Circuit Bank 2 Sensor 4
P247400	Exhaust Gas Temperature Sensor Circuit Bank 2 Sensor 4 Range/Performance
P247500	Exhaust Gas Temperature Sensor Circuit Low Bank 2 Sensor 4
P247600	Exhaust Gas Temperature Sensor Circuit High Bank 2 Sensor 4
P247800	Exhaust Gas Temperature Out of Range Bank 1 Sensor 1
P247A00	Exhaust Gas Temperature Out of Range Bank 1 Sensor 3
P251000	ECM/PCM Power Relay Sense Circuit Range/Performance
P251900	A/C Request "A" Circuit
P252000	A/C Request "A" Circuit Low
P252100	A/C Request "A" Circuit High
P253300	Ignition Switch Run/ Start Position Curciut
P253500	Ignition Switch Run/ Start Position Curciut High
P253900	Low Pressure Fuel System Sensor Circuit
P254000	Low Pressure Fuel System Sensor Circuit Range/Performance
P254100	Low Pressure Fuel System Sensor Circuit Low Input
P254200	Low Pressure Fuel System Sensor Circuit High Input
P254300	Low Pressure Fuel System Sensor Circuit Intermittent
P254500	Torque Management Request Input Signal "A" Range/Performance
P256200	Turbocharger Boost Control Position Sensor "A" Circuit
P256300	Turbocharger Boost Control Position Sensor Circuit Range/Performance
P256400	Turbocharger Boost Control Position Sensor Circuit Low

P256500	Turbocharger Boost Control Position Sensor Circuit High
P256600	Turbocharger Boost Control Position Sensor Circuit Intermittent
P256800	Direct Ozone Reduction Catalyst Temperature Sensor Circuit Range/Performance
P256900	Direct Ozone Reduction Catalyst Temperature Sensor Circuit Low
P257000	Direct Ozone Reduction Catalyst Temperature Sensor Circuit High
P257800	Turbocharger Speed Sensor "A" Circuit
P257900	Turbocharger Speed Sensor "A" Circuit Range/Performance
P258000	Turbocharger Speed Sensor "A" Circuit Low
P258100	Turbocharger Speed Sensor "A" Circuit High
P258200	Turbocharger Speed Sensor "A" Circuit Intermittent
P258800	Turbocharger Boost Control Position Sensor "B" Circuit Low
P258900	Turbocharger Boost Control Position Sensor "B" Circuit High
P259300	Turbocharger Speed Sensor "B" Circuit
P259400	Turbocharger Speed Sensor "B" Circuit Range/Performance
P259500	Turbocharger Speed Sensor "B" Circuit Low
P259600	Turbocharger Speed Sensor "B" Circuit High
P259700	Turbocharger Speed Sensor "B" Circuit Intermittent
P260000	Coolant Pump Control Circuit open
P260100	Coolant Pump Control Circuit range/performance
P260200	Coolant Pump Control Circuit low
P260300	Coolant Pump Control Circuit high
P261000	ECM/PCM Internal Engine Off Timer Performance
P261200	A/C Refrigerant Distribution Valve Control Circuit Low
P261300	A/C Refrigerant Distribution Valve Control Circuit High
P261A00	Coolant Pump "B" Control Circuit/Open
P261B00	Coolant Pump "B" Control Circuit Range/Performance
P261C00	Coolant Pump "B" Control Circuit Low
P261D00	Coolant Pump "B" Control Circuit High
P262600	O2 Sensor Pumping Current Trim Circuit/Open Bank 1, Sensor 1
P262900	O2 Sensor Pumping Current Trim Circuit/Open Bank 2, Sensor 1
P263200	Fuel Pump "B" Control Circuit Open

P263300	Fuel Pump "B" Control Circuit Low
P263400	Fuel Pump "B" Control Circuit High
P263700	Torque Management Feedback Signal "A"
P270000	Transmission Friction Element "A" Apply Time Range/Performance
P270100	Transmission Friction Element "B" Apply Time Range/Performance
P270200	Transmission Friction Element "C" Apply Time Range/Performance
P270300	Transmission Friction Element "D" Apply Time Range/Performance
P270400	Transmission Friction Element "E" Apply Time Range/Performance
P270500	Transmission Friction Element "F" Apply Time Range/Performance
P270800	Shift Solenoid F Stuck On
P271100	Unexpected Mechanical Gear Disengagement
P271400	Pressure Control Solenoid "D" Performance or Stuck Off
P271500	Pressure Control Solenoid "D" Stuck On
P271600	Pressure Control Solenoid "D" Electrical
P271700	Pressure Control Solenoid "D" Intermittent
P272300	Pressure Control Solenoid "E" Performance or Stuck Off
P272400	Pressure Control Solenoid "E" Stuck On
P272500	Pressure Control Solenoid "E" Electrical
P272600	Pressure Control Solenoid "E" Intermittent
P273200	Pressure Control Solenoid "F" Performance or Stuck Off
P273300	Pressure Control Solenoid "F" Stuck On
P273400	Pressure Control Solenoid "F" Electrical
P273500	Pressure Control Solenoid "F" Intermittent
P275300	Transmission Fluid Cooler Control Circuit/Open
P275400	Transmission Fluid Cooler Control Circuit Low
P275500	Transmission Fluid Cooler Control Circuit High
P276500	Input Turbine/Speed Sensor "B" Circuit
P276600	Input Turbine/Speed Sensor "B" Circuit Range/Performance
P278700	Clutch Temperature Too High
P278900	Clutch Adaptive Learning at Limit
P278B00	Kick Down Switch Circuit Range/Performance

P281000	Pressure Control Solenoid "G" Electrical
P281200	Pressure Control Solenoid "G" Control Circuit/Open
P281400	Pressure Control Solenoid "G" Control Circuit Low
P281500	Pressure Control Solenoid "G" Control Circuit High
P2BA700	NOx Exceedence - Empty Reagent Tank
P300000	Glow Plug Indicator Light -K29- Malfunction message from instrument cluster
P300100	Operating RPM regulation Control difference
P300200	Kick Down Switch -F8- Implausible signal
P300300	Low heat output relay-J359 Short circuit to B+
P300400	Low heat output relay-J359 Open circuit/short circuit to ground
P300500	High heat output relay -J360 Short circuit to B+
P300600	High heat output relay -J360 Open circuit/short circuit to ground
P300700	Camshaft Position (CMP) Sensor -G40- No signal
P300800	Camshaft Position (CMP) Sensor -G40- Signal outside tolerance
P300900	Relay for pump, fuel cooling -J445- Short circuit to B+
P300A00	Diesel Particulate Filter Differential Pressure Sensor Implausible signal
P300B00	Diesel Particulate Filter Differential Pressure Sensor Short-circuit to ground
P300C00	Diesel Particulate Filter Differential Pressure Sensor Short circuit to B+
P300D00	Diesel Particulate Filter Differential Pressure Sensor Electrical malfunction
P300E00	Particulate Trap Bank 2 restriction
P300F00	Fuel bypass valve Open circuit
P301000	Relay for pump, fuel cooling -J445- Open circuit/short circuit to ground
P301100	Fuel Pump (FP) 2 Relay -J49- Short circuit to B+
P301200	Fuel Pump (FP) 2 Relay -J49- Open circuit/short circuit to ground
P301300	Wastegate Bypass Regulator Valve 2 -N274- Short circuit to B+
P301400	Wastegate Bypass Regulator Valve 2 -N274- Open circuit/short circuit to ground
P301500	Fuel Bypass Valve -N312- Short circuit to B+
P301600	Fuel Bypass Valve -N312- Open circuit/short circuit to ground
P301700	Exhaust Flap Valve 1 -N321- Short circuit to B+
P301800	Exhaust Flap Valve 1 -N321- Short-circuit to ground
P301900	Exhaust Flap Valve 1 -N321- Open circuit

P301A00	Exhaust flap sensor bank 2 Electrical malfunction
P301B00	Exhaust flap sensor bank 2 Implausible signal
P301C00	Exhaust flap sensor bank 2 Short circuit to B+
P301D00	Exhaust flap bank 2 Electrical malfunction
P301E00	Exhaust flap bank 2 Control difference
P301F00	Exhaust flap bank 2 Short circuit to B+
P302000	Exhaust Flap Valve 1 -N321- Electrical malfunction in circuit
P302100	Exhaust Flap Valve 2 -N322- Short circuit to B+
P302200	Exhaust Flap Valve 2 -N322- Short-circuit to ground
P302300	Exhaust Flap Valve 2 -N322- Open circuit
P302400	Exhaust Flap Valve 2 -N322- Electrical malfunction in circuit
P302500	Throttle Drive Angle Sensor 1 -G297 Implausible signal
P302600	Throttle Drive Angle Sensor 1 -G297 Signal too low
P302700	Throttle Drive Angle Sensor 1 -G297 Signal too high
P302800	Throttle Drive Angle Sensor 2 -G298 Implausible signal
P302900	Throttle Drive Angle Sensor 2 -G298 Signal too low
P302A00	Low heat output relay Open circuit
P302B00	Relay for Preheating Coolant, High Heat Output Open circuit
P302C00	Low heat output relay Short-circuit to ground
P302D00	Relay for Preheating Coolant, High Heat Output Short-circuit to ground
P302E00	Relay for pump, fuel cooling Open circuit
P302F00	Relay for pump, fuel cooling Short-circuit to ground
P303000	Throttle Drive Angle Sensor 2 -G298 Signal too high
P303100	Throttle Actuator 2 electrical malfunction in circuit
P303200	Throttle Valve Control Module 2 -J544- Malfunction in basic settings
P303300	Intake Air Temp.Circ.2 Signal too low
P303400	Intake Air Temp.Circ.2 Signal too high
P303500	Throttle Valve Control Module 2 -J544- Mechanical malfunction
P303600	Throttle Valve Control Module 2 -J544- insufficient voltage during basic settings
P303700	Throttle Valve Control Module 2 -J544- Adaptation not initiated
P303800	Throttle Valve Control Module 2 -J544- lower stop not reached

P303900	Transmission request torque reduction Implausible
P303A00	Auxiliary Fuel Pump (FP) Relay Open circuit
P303B00	Auxiliary Fuel Pump (FP) Relay Short-circuit to ground
P303C00	Auxiliary Fuel Pump (FP) Relay Short circuit to B+
P303D00	Cold start valve Open circuit
P303E00	Cold start valve Short circuit to B+
P303F00	Cold start valve Short-circuit to ground
P304000	Transmission ratio Implausible
P304100	Databus drivetrain implausible engine temperature message from instrument ECU
P304200	Heater regulation Implausible signal
P304300	Throttle Transfer Fuel Pump (FP) Mechanical malfunction
P304400	Throttle Transfer Fuel Pump (FP) Short circuit
P304500	Fuel pump electronics Defective
P304600	Starter relay 1 Electrical malfunction in circuit (relay stuck/does not switch)
P304700	Activation starter relay 2 Short circuit to B+
P304800	Activation starter relay 2 Short-circuit to ground
P304900	Activation starter relay 2 Open circuit
P304A00	Starter relay 1 Short-circuit to ground
P304B00	Potentiometer for heater control Electrical malfunction
P305000	Starter relay 2 Electrical malfunction in circuit (relay stuck/does not switch)
P305100	Starter activation, return message terminal 50 Implausible signal
P305200	Starter activation, return message terminal 50 Short circuit to B+
P305300	Starter activation, return message terminal 50 Short circuit to ground/open circuit
P305400	Starter does not turn Mechanically blocked or electrical malfunction
P305500	Exhaust Pressure Sensor 2 Open circuit
P305600	Exhaust Pressure Sensor 2 Short-circuit to ground
P305700	Exhaust Pressure Sensor 2 Short circuit to B+
P305800	Exhaust Gas Recirc.Flow 2 Flow too Low
P305900	Exhaust Gas Recirc.Flow 2 throughput too large
P305A00	Gasoline operation Random/Multiple Cylinder. Misfire Detected
P306000	Cooling Bypass Valve, Exhaust Gas Recirculation Flow Electrical malfunction

P306100	Cooling Bypass Valve 2, Exhaust Gas Recirculation Flow Electrical malfunction
P306200	Turbo/Super Charger 2 Overboost Condition
P306300	Turbo/Super Charger 2 Underboost condition
P306400	Boost Pressure Contr.Valve 3 Circuit Electrical malfunction
P306500	Boost Pressure Contr.Valve 3 Circuit Short-circuit to ground
P306600	Boost Pressure Contr.Valve 3 Circuit Short circuit to B+
P306700	Boost Pressure Contr.Valve 4 Circuit Electrical malfunction
P306800	Boost Pressure Contr.Valve 4 Circuit Short-circuit to ground
P306900	Boost Pressure Contr.Valve 4 Circuit Short circuit to B+
P307000	Metering pump for cleaning solution Defective
P307100	Additive tank for particle filter empty
P307200	Voltage supply relay Electrical malfunction in circuit
P307300	Throttle Transfer Fuel Pump (FP) Electrical malfunction in circuit
P307400	Fuel Pump 2 Electrical malfunction in circuit
P307500	Turbo boost 1/2 Trim Adaptation Limit Attained
P307600	Engine Control Module (ECM) Error during coding
P307700	Fuel Pump Electronics, voltage supply Electrical malfunction
P307800	Throttle Valve Control Module Air Flow at idle too Low
P307900	Cold Start Fuel Pump (FP) Relay Short circuit to B+
P307A00	Intake system Air flow too low
P307B00	Activation Fuel pump module 2 Electrical malfunction/open
P307C00	Activation Fuel pump module 2 Implausible signal
P307D00	Activation Fuel pump module 2 Short-circuit to ground
P307E00	Activation Fuel pump module 2 Short circuit to B+
P308000	Cold Start Fuel Pump (FP) Relay -J748 Short circuit to ground/open circuit
P308100	Engine temperature too low
P308200	Clutch positioning sensor Implausible signal
P308300	Fuel level sensor for additive tank particulate trap, Electrical malfunction in circuit
P308400	Recirculating valve for turbocharger bank 2 Mechanical malfunction
P308500	Activation Intake Manifold Runner Bank 2 Control Electrical malfunction
P308600	Intake Manifold Runner Bank 2 Basic settings not carried out

P308700	Supply relay for engine components Electrical malfunction in circuit
P308800	Starter relay Electrical malfunction in circuit
P308900	Fuel pump electronics signal wire Electrical malfunction
P308A00	Fuel pump electronics NG operation signal wire Short circuit to B+
P308B00	Fuel pump electronics NG operation signal wire Short-circuit to ground
P308C00	Fuel pump electronics NG operation signal wire Open circuit
P308D00	Throttle Transfer Fuel Pump (FP) Engine speed too low
P308E00	Fuel pump electronics Excess temperature
P309000	Auxiliary heater signal not recognized
P309100	Auxiliary heater signal constant detected
P309200	Control module defective
P309300	Control module defective
P309400	Control module defective
P309500	Control module defective
P309600	Control module defective
P309700	Control module defective
P309800	Control module defective
P309900	Control module defective
P310000	Intake Flap Motor -V157 Short circuit to B+
P310100	Intake Flap Motor -V157 Open circuit/short circuit to ground
P310200	Intake Flap Motor -V157 No signal
P310300	Intake Flap Motor -V157 Defective
P310400	Intake manifold flap change-over valve- N239 Short circuit to B+
P310500	Intake manifold flap change-over valve- N239 Open circuit/short circuit to ground
P310600	Cylinder 7 Pump/Injector -N303- Implausible signal
P310700	Cylinder 7 Pump/Injector -N303- Value above upper control limit
P310800	Cylinder 7 Pump/Injector -N303- Value below lower control limit
P310900	Cylinder 7 Pump/Injector -N303- Electrical malfunction in circuit
P310A00	Low Fuel Pressure regulation Fuel pressure fluctuates
P310B00	Low Fuel Pressure regulation Fuel pressure outside specification
P310C00	Low Fuel Pressure regulation Fuel pressure breaks down sporadically

P310D00	Fuel Pressure Regulation Fuel pressure fluctuates
P310E00	Exhaust gas recirculation cooler bypass valve 2 Implausible signal
P311000	Cylinder 8 Pump/Injector -N304- Implausible signal
P311100	Cylinder 8 Pump/Injector -N304- Value above upper control limit
P311200	Cylinder 8 Pump/Injector -N304- Value below lower control limit
P311300	Cylinder 8 Pump/Injector -N304- Electrical malfunction in circuit
P311400	Cylinder 9 Pump/Injector -N305- Implausible signal
P311500	Cylinder 9 Pump/Injector -N305- Value above upper control limit
P311600	Cylinder 9 Pump/Injector -N305- Value below lower control limit
P311700	Cylinder 9 Pump/Injector -N305- Electrical malfunction in circuit
P311800	Cylinder 10 Pump/Injector -N306- Implausible signal
P311900	Cylinder 10 Pump/Injector -N306- Value above upper control limit
P312000	Cylinder 10 Pump/Injector -N306- Value below lower control limit
P312100	Cylinder 10 Pump/Injector -N306- Electrical malfunction in circuit
P312200	Cylinder 11 Pump/Injector -N307- Implausible signal
P312300	Cylinder 11 Pump/Injector -N307- Value above upper control limit
P312400	Cylinder 11 Pump/Injector -N307- Value below lower control limit
P312500	Cylinder 11 Pump/Injector -N307- Electrical malfunction in circuit
P312600	Cylinder 12 Pump/Injector -N308- Implausible signal
P312700	Cylinder 12 Pump/Injector -N308- Value above upper control limit
P312800	Cylinder 12 Pump/Injector -N308- Value below lower control limit
P312900	Cylinder 12 Pump/Injector -N308- Electrical malfunction in circuit
P313000	Exhaust Gas Recirculation (EGR) system Value above upper control limit
P313100	Exhaust Gas Recirculation (EGR) system Value below lower control limit
P313200	Glow Plug Module 2, Control Circuit Electrical malfunction in circuit
P313300	Automatic Glow Time Control Relay 2-J609 Implausible signal
P313400	Intake Manifold Runner Control (IMRC) Upper stop not reached
P313500	Intake Manifold Runner Control (IMRC) lower limit not reached
P313600	Intake Manifold Runner Control (IMRC) Target value not reached
P313700	Intake Manifold Runner Control (IMRC) Basic settings not carried out
P313800	Intake Manifold Runner Control (IMRC) Control difference

P313900	Intake Manifold Runner Control (IMRC) Signal outside tolerance
P313A00	Intake Manifold Runner Control (IMRC), bank 2 Signal outside tolerance
P313B00	Intake Manifold Runner Control (IMRC), bank 2 Control difference
P313C00	Intake Manifold Runner Control (IMRC), bank 2 difficulty of movement or blocked
P313D00	Intake Manifold Runner Control (IMRC) difficulty of movement or blocked
P314000	Valve for starting with empty tank -N349 Open circuit/short circuit to ground
P314100	Valve for starting with empty tank -N349 Short circuit to B+
P314200	Exhaust-bank2,sensor1,oxygen sensor signal implausible lean
P314300	Exhaust-bank2,sensor1,oxygen sensor signal Implausible rich
P314400	Exhaust-bank3,sensor1,oxygen sensor signal implausible lean
P314500	Exhaust-bank3,sensor1,oxygen sensor signal Implausible rich
P314600	Exhaust-bank4,sensor1,oxygen sensor signal implausible lean
P314700	Exhaust-bank4,sensor1,oxygen sensor signal Implausible rich
P314800 impact	Exhaust bank 3, O2 sensor before cat. conv., heater circuit Regulation at upper
P314900 impact	Exhaust bank 3, O2 sensor before cat. conv., heater circuit Regulation at lower
P315000 impact	Exhaust bank 4, O2 sensor before cat. conv., heater circuit Regulation at upper
P315100 impact	Exhaust bank 4, O2 sensor before cat. conv., heater circuit Regulation at lower
P315200	Exhaust gas bank3, sensor1 Internal resistance too Large
P315300	Exhaust gas bank4, sensor1 Internal resistance too Large
P315400	Exhaust-bank2-sensor1 Voltage too low/air leak
P315500	Emissions-bank3-sensor1 Voltage too low/air leak
P315600	Emissions-bank4-sensor1 Voltage too low/air leak
P315700	Exhaust-bank1,sensor1,oxygen sensor signal Voltage too low during deceleration
P315800	Exhaust-bank2,sensor1,oxygen sensor signal Voltage too low during deceleration
P315900	Exhaust-bank3,sensor1,oxygen sensor signal Voltage too low during deceleration
P316000	Exhaust-bank4,sensor1,oxygen sensor signal Voltage too low during deceleration
P316100	Linear oxy. sensor,exh-bank1/compensat. wire pump current Open circuit
P316200	Linear oxy. sensor,exh-bank2/compensat. wire pump current Open circuit

P316300	Linear oxy. sensor,exh-bank3/compensat. wire pump current Open circuit
P316400	Linear oxy. sensor,exh-bank4/compensat. wire pump current Open circuit
P316500	Exhaust-bank3,oxygen sensor correction behind cat Lean control limit exceeded
P316600	Exhaust-bank3,oxygen sensor correction behind cat Rich control limit exceeded
P316700	Exhaust-bank4,oxygen sensor correction behind cat Lean control limit exceeded
P316800	Exhaust-bank4,oxygen sensor correction behind cat Rich control limit exceeded
P316900	Exhaust-bank3 main catalytic converter Efficiency below threshold
P317000	Exhaust-bank4 main catalytic converter Efficiency below threshold
P317100	Exhaust-bank1, mixture adaptation range 3 System too lean
P317200	Exhaust-bank1, mixture adaptation range 3 System too rich
P317300	Exhaust-bank2, mixture adaptation range 3 System too lean
P317400	Exhaust-bank2, mixture adaptation range 3 System too rich
P317500	Exhaust bank3, mixture adaptation range 3 System too lean
P317600	Exhaust bank3, mixture adaptation range 3 System too rich
P317700	Exhaust bank4, mixture adaptation range 3 System too lean
P317800	Exhaust bank4, mixture adaptation range 3 System too rich
P317900	Cyl.13-Fuel Inj.Circ. Short-circuit to ground
P318000	Cyl.13-Fuel Inj.Circ. Short circuit to B+
P318100	Cyl.13-Fuel Inj.Circ. Open circuit
P318200	Cyl.14-Fuel Inj.Circ. Short-circuit to ground
P318300	Cyl.14-Fuel Inj.Circ. Short circuit to B+
P318400	Cyl.14-Fuel Inj.Circ. Open circuit
P318500	Cyl.15-Fuel Inj.Circ. Short-circuit to ground
P318600	Cyl.15-Fuel Inj.Circ. Short circuit to B+
P318700	Cyl.15-Fuel Inj.Circ. Open circuit
P318800	Cyl.16-Fuel Inj.Circ. Short-circuit to ground
P318900	Cyl.16-Fuel Inj.Circ. Short circuit to B+
P319000	Cyl.16-Fuel Inj.Circ. Open circuit
P319100 open	Intake Manifold Runner Control (IMRC) Basic setting aborted with mechanical impact
P319200 open	Intake Manifold Runner Control (IMRC) Basic setting aborted with mechanical impact

P319300	Intake Manifold Runner Control (IMRC) open impact outside valid range
P319400	Mass Air Flow (MAF) Sensor 3 -G456 Signal too low
P319500	Mass Air Flow (MAF) Sensor 3 -G456 Signal too high
P319600	Mass Air Flow (MAF) Sensor 4 -G457 Signal too low
P319700	Mass Air Flow (MAF) Sensor 4 -G457 Signal too high
P319800	Intake manifold Runner Control (IMRC) Implausible signal
P319900	Activation Intake Manifold Runner Bank 2 Control Implausible signal
P319A00	Air mass meter 3/4 Correlation
P319B00	Mass Air Flow (MAF) Sensor 3 -G456 Implausible signal
P319C00	Mass Air Flow (MAF) Sensor 4 -G457 Implausible signal
P319D00	Activation Intake Manifold Runner Bank 2 Control Short circuit to B+
P319E00	Activation Intake Manifold Runner Bank 2 Control Open circuit/short circuit to ground
P320000	Exhaust-bank3 -sensor1, heating circuit Short-circuit to ground
P320100	Exhaust-bank3 -sensor1, heating circuit Short circuit to B+
P320200	Exhaust-bank3 -sensor1, heating circuit Open circuit
P320300	Exhaust-bank3 -sensor1, heating circuit Malfunction
P320400	Emissions-bank3-sensor1 Internal resistance too Large
P320500	Emissions-bank3-sensor1 Low Voltage
P320600	Emissions-bank3-sensor1 High Voltage
P320700	Emissions-bank3-sensor1 electrical malfunction in circuit
P320800	Emissions-bank3-sensor1 No Activity Detected
P320900	Emissions-bank3-sensor1 Slow Response
P321000	Exhaust-bank3 -sensor1, heating circuit Performance too low
P321100	Exhaust-bank1-sensor1 Heater back-coupling
P321200	Exhaust-bank2-sensor1 Heater back-coupling
P321300	Emissions-bank3-sensor1 Heater back-coupling
P321400	Emissions-bank4-sensor1 Heater back-coupling
P321500	Emissions-bank3-sensor2,heater circuit Short-circuit to ground
P321600	Emissions-bank3-sensor2,heater circuit Short circuit to B+
P321700	Emissions-bank3-sensor2,heater circuit Open circuit

P321800	Emissions-bank3-sensor2,heater circuit Malfunction
P321900	Emissions-bank3-sensor2 Internal resistance too Large
P322000	Emissions-bank3-sensor2 Low Voltage
P322100	Emissions-bank3-sensor2 High Voltage
P322200	Emissions-bank3-sensor2 electrical malfunction in circuit
P322300	Emissions-bank3-sensor2 No Activity Detected
P322400	Emissions-bank3-sensor2 Slow Response
P322500	Exhaust-bank3,oxygen sensor correction behind cat Control limit reached
P322600	Exhaust-bank4,oxygen sensor correction behind cat Control limit reached
P322700	Exhaust-Bank1,Sensor1,Individual Cylinder Control Sensor dynamic to low
P322800	Exhaust-bank1,sensor1,oxygen sensor signal implausible lean
P322900	Exhaust-bank1,sensor1,oxygen sensor signal Implausible rich
P323000	Exhaust-bank4 -sensor1, heating circuit Short-circuit to ground
P323100	Exhaust-bank4 -sensor1, heating circuit Short circuit to B+
P323200	Exhaust-bank4 -sensor1, heating circuit Open circuit
P323300	Exhaust-bank4 -sensor1, heating circuit Malfunction
P323400	Emissions-bank4-sensor1 Internal resistance too Large
P323500	Emissions-bank4-sensor1 Low Voltage
P323600	Emissions-bank4-sensor1 High Voltage
P323700	Emissions-bank4-sensor1 electrical malfunction in circuit
P323800	Emissions-bank4-sensor1 No Activity Detected
P323900	Emissions-bank4-sensor1 Slow Response
P324000	Exhaust-bank4 -sensor1, heating circuit Performance too low
P324100	Intake Manifold Runner Control (IMRC) Temperature too high
P324200	Intake Manifold Runner Bank 2 Temperature too high
P324300	Idle Speed Contr.Throttle Pos. Electrical malfunction
P324400	Idle Speed Control Throttle Position 2 Electrical malfunction
P324500	Emissions-bank4-sensor2,heater circuit Short-circuit to ground
P324600	Emissions-bank4-sensor2,heater circuit Short circuit to B+
P324700	Emissions-bank4-sensor2,heater circuit Open circuit
P324800	Emissions-bank4-sensor2,heater circuit Malfunction

P324900	Emissions-bank4-sensor2 Internal resistance too Large
P325000	Emissions-bank4-sensor2 Low Voltage
P325100	Emissions-bank4-sensor2 High Voltage
P325200	Emissions-bank4-sensor2 electrical malfunction in circuit
P325300	Emissions-bank4-sensor2 No Activity Detected
P325400	Emissions-bank4-sensor2 Slow Response
P325500	Bank 1, O2 sensor before cat. conv., heater circuit Regulation at upper impact
P325600	Bank 1, O2 sensor before cat. conv., heater circuit Regulation at lower impact
P325700	Bank 2, O2 sensor before cat. conv., heater circuit Regulation at upper impact
P325800	Bank 2, O2 sensor before cat. conv., heater circuit Regulation at lower impact
P325900	Auxiliary fuel pump for engine start Malfunction
P326000	Exhaust bank 1/2 oxygen sensors before catalytic converter swapped
P326100	Exhaust bank 3/4 oxygen sensors before catalytic converter swapped
P326200	Exhaust bank 1/2 oxygen sensors behind catalytic converter swapped
P326300	Exhaust bank 3/4 oxygen sensors behind catalytic converter swapped
P326400	Pre-catalytic converter, emissions bank 3 Efficiency below threshold
P326500	Pre-catalytic converter, exhaust bank 4 Efficiency below threshold
P326600	Bank 1, sensor 1 Internal resistance too Large
P326700	Bank 2, sensor 1 Internal resistance too Large
P326800	Linear Lambda probe, exhaust gas bank 2 / pump current Open circuit
P326900	Linear Lambda probe, exhaust gas bank 2 / pump current Short-circuit to ground
P327000	Linear Lambda probe, exhaust gas bank 2 / pump current Short circuit to B+
P327100	Linear Lambda probe, exhaust gas bank 2 / reference voltage Open circuit
P327200	Linear Lambda probe, exhaust gas bank 2 / reference voltage Short-circuit to ground
P327300	Linear Lambda probe, exhaust gas bank 2 / reference voltage Short circuit to B+
P327400	Linear Lambda probe, exhaust gas bank 2 / reference voltage Implausible
P327500	Linear Lambda probe, exhaust bank 2 / common Ground (GND) wire Open circuit
P327600	Linear Lambda probe, exhaust bank 2 / common Ground (GND) wire Short-circuit to ground
P327700	Linear Lambda probe, exhaust bank 2 / common Ground (GND) wire Short circuit to B+
P327800	Linear Lambda probe, exhaust gas bank 3 / pump current Open circuit

P327900	Linear Lambda probe, exhaust gas bank 3 / pump current Short-circuit to ground
P328000	Linear Lambda probe, exhaust gas bank 3 / pump current Short circuit to B+
P328100	Linear Lambda probe, exhaust gas bank 3 / reference voltage Open circuit
P328200	Linear Lambda probe, exhaust gas bank 3 / reference voltage Short-circuit to ground
P328300	Linear Lambda probe, exhaust gas bank 3 / reference voltage Short circuit to B+
P328400	Linear Lambda probe, exhaust gas bank 3 / reference voltage Implausible
P328500	Linear Lambda probe, exhaust bank 3 / common Ground (GND) wire Open circuit
P328600	Linear Lambda probe, exhaust bank 3 / common Ground (GND) wire Short-circuit to ground
P328700	Linear Lambda probe, exhaust bank 3 / common Ground (GND) wire Short circuit to B+
P328800	Linear Lambda probe, exhaust gas bank 4 / pump current Open circuit
P328900	Linear Lambda probe, exhaust gas bank 4 / pump current Short-circuit to ground
P329000	Linear Lambda probe, exhaust gas bank 4 / pump current Short circuit to B+
P329100	Linear Lambda probe, exhaust gas bank 4 / reference voltage Open circuit
P329200	Linear Lambda probe, exhaust gas bank 4 / reference voltage Short-circuit to ground
P329300	Linear Lambda probe, exhaust gas bank 4 / reference voltage Short circuit to B+
P329400	Linear Lambda probe, exhaust gas bank 4 / reference voltage Implausible
P329500	Linear Lambda probe, exhaust bank 4 / common Ground (GND) wire Open circuit
P329600	Linear Lambda probe, exhaust bank 4 / common Ground (GND) wire Short-circuit to ground
P329700	Linear Lambda probe, exhaust bank 4 / common Ground (GND) wire Short circuit to B+
P329800	Catalytic converter system, exhaust-bank 3 Efficiency below threshold
P329900	Catalytic converter system, exhaust-bank 4 Efficiency below threshold
P330000	Bank1, Camshaft Position (CMP) Sensor, exhaust =>-G300 Short-circuit to ground
P330100	Bank1, Camshaft Position (CMP) Sensor, exhaust =>-G300 Open circuit/short circuit to B+
P330200	Bank2, Camshaft Position (CMP), exhaust =>Sensor -G301- Short-circuit to ground
P330300	Bank2, Camshaft Position (CMP), exhaust =>Sensor -G301- Open circuit/short circuit to B+
P330400	Bank1,exhaust-Camshaft Position (CMP) Sensor-G300/-G28 Incorrect allocation
P330500	Bank2, exhaust - Camshaft Position (CMP) Sensor-G301- / -G28- Incorrect allocation

P330600	Ignition control cylinder 13 Short-circuit to ground
P330700	Ignition control cylinder 13 Short circuit to B+
P330800	Ignition control cylinder 13 Open circuit
P330900	Ignition control cylinder 14 Short-circuit to ground
P331000	Ignition control cylinder 14 Short circuit to B+
P331100	Ignition control cylinder 14 Open circuit
P331200	Ignition control cylinder 15 Short-circuit to ground
P331300	Ignition control cylinder 15 Short circuit to B+
P331400	Ignition control cylinder 15 Open circuit
P331500	Ignition control cylinder 16 Short-circuit to ground
P331600	Ignition control cylinder 16 Short circuit to B+
P331700	Ignition control cylinder 16 Open circuit
P331800	Glow Plug/Heater Relay 2 Circ. Short circuit to B+
P331900	Glow Plug/Heater Relay 2 Circ. Open circuit/short circuit to ground
P332000	Unit Injector Valve Control 2 Short circuit to B+
P332100	Unit Injector Valve Control 2 Electrical malfunction in circuit
P332200	Relay 2 for Power Supply (B+) Terminal 30 Implausible signal
P332300	Voltage supply terminal 15 High Voltage
P332400	Voltage supply terminal 15 Open circuit
P332500	Voltage supply terminal 15 Implausible
P332600	Change-over valve for intake manifold flap 2 Short circuit to B+
P332700	Change-over valve for intake manifold flap 2 Open circuit/short circuit to ground
P332800	Intake Flap Motor 2 Short circuit to B+
P332900	Intake Flap Motor 2 Open circuit/short circuit to ground
P333000	Intake Flap Motor 2 No signal
P333100	Intake Flap Motor 2 Defective
P333200	Combustion detection in deceleration mode
P333300	Turbocharger (TC) control module 1 implausible message
P333400	Turbocharger (TC) control module 2 implausible message
P333500	Turbocharger (TC) control module 1 missing message
P333600	Turbocharger (TC) control module 2 missing message

P333700	Engine databus/engine implausible message
P333800	Activation glow time control module 1 Electrical malfunction in circuit
P333900	Activation glow time control module 2 Electrical malfunction in circuit
P334000	Charge Pressure Cooler Fan Relay Short circuit to B+
P334100	Charge Pressure Cooler Fan Relay Short-circuit to ground
P334200	Charge Pressure Cooler Fan Relay Open circuit
P334300	Exhaust turbocharger control module 1 Temperature too high
P334400	Exhaust turbocharger control module 1 Voltage supply outside the permissible range
P334500	Turbocharger 2 Control Module Temperature too high
P334600	Turbocharger 2 Control Module Voltage supply outside the permissible range
P334700	Glow Plug/Heater Relay Circ. Electrical malfunction
P334800	Activation turbocharger control unit bank 1 Electrical malfunction in circuit
P334900	Activation Turbocharger 2 Control Module Electrical malfunction in circuit
P334A00	Charge pressure actuator position sensor Electrical malfunction
P335000	Long Term Fuel Trim, NG Range 1 Too Lean
P335100	Long Term Fuel Trim, NG Range 1 Too Rich
P335200	Long Term Fuel Trim, NG Range 2 Too Lean
P335300	Long Term Fuel Trim, NG Range 2 Too Rich
P335400	Long Term Fuel Trim, NG Range 3 Too Lean
P335500	Long Term Fuel Trim, NG Range 3 Too Rich
P335600	Catalyst System,Bank1 during NG operation Efficiency below threshold
P335700	O2 Correction during NG operation Control limit reached
P335800	O2 Sensor Circ., exhaust gas Bank1-Sensor1 at NG operation Slow Response
P335900	O2 Sensor Circ., exhaust gas Bank1-Sensor1 at NG operation Heater back-coupling
P335A00	System too Lean at NG operation
P335B00	System Too Rich at NG operation
P335C00	Fuel tank pressure sensor high pressure Signal too high
P335D00	Fuel tank pressure sensor high pressure Signal too low
P336000	O2 Sensor Circ., exhaust gas Bank1-Sensor1 at NG operation No Activity Detected
P336100	NG operation Random/Multiple Cylinder. Misfire Detected
P336200	NG operation Cyl.1 Random/Multiple Cylinder. Misfire Detected

P336300	NG operation Cyl.2 Random/Multiple Cylinder. Misfire Detected
P336400	NG operation Cyl.3 Random/Multiple Cylinder. Misfire Detected
P336500	NG operation Cyl.4 Random/Multiple Cylinder. Misfire Detected
P336600	System pressure, NG too High
P336700	System pressure, NG too Low
P336800	O2 Sensor Signal Stuck Rich Bank 3 Sensor 1
P336900	O2 Sensor Signal Stuck Rich Bank 2 Sensor 1
P336A00	System pressure, NG Implausible signal
P336B00	NG temperature sensor Short circuit to B+
P336C00	NG temperature sensor Short-circuit to ground
P336D00	NG temperature sensor Implausible signal
P336E00	NG fuel pump relay Short circuit to B+
P336F00	NG fuel pump relay Short-circuit to ground
P337000	O2 Sensor Signal Stuck Rich Bank 3 Sensor 1
P337100	O2 Sensor Signal Stuck Rich Bank 2 Sensor 1
P337200	Intake Manifold Change-Over Valve Short circuit to B+
P337300	Intake Manifold Change-Over Valve Open circuit/short circuit to ground
P337400	Intake Manifold 2 Change-Over Valve Short circuit to B+
P337500	Intake Manifold 2 Change-Over Valve Open circuit/short circuit to ground
P337600	Intake Air Temperature Sensor 3 Signal too low
P337700	Intake Air Temperature Sensor 3 Signal too high
P337800	Intake Air Temperature Sensor 3 Implausible signal
P337900	NG High Pressure Valve Open circuit
P337A00	Voltage supply relay Short circuit to B+
P337B00	Voltage supply relay Short-circuit to ground
P337C00	Voltage supply relay Open circuit
P337D00	Relay for shut-off valve for high pressure valve Short circuit to B+
P337E00	Relay for shut-off valve for high pressure valve Short-circuit to ground
P337F00	Relay for shut-off valve for high pressure valve Open circuit
P338000	NG High Pressure Valve Short circuit to B+
P338100	NG High Pressure Valve Short-circuit to ground

P338200	Fuel Tank Pressure (FTP) Sensor -G400 Open circuit
P338300	Fuel Tank Pressure (FTP) Sensor -G400 Short circuit to B+
P338400	Fuel Tank Pressure (FTP) Sensor -G400 Short-circuit to ground
P338500	Fuel Rail Sensor Open circuit
P338600	Fuel Rail Sensor Short circuit to B+
P338700	Fuel Rail Sensor Short-circuit to ground
P338800	Fuel Injection Valve 1 Open circuit
P338900	Fuel Injection Valve 1 Short circuit to B+
P338A00	Fuel Tank Pressure (FTP) Sensor -G400 Implausible signal
P338B00	Fuel Tank Level Sensor Short circuit to B+
P338C00	Fuel Tank Level Sensor Short-circuit to ground
P338D00	Fuel Tank Level Sensor Implausible signal
P338E00	Indicator light for operating mode switch-over Short circuit to B+
P338F00	Indicator light for operating mode switch-over Short-circuit to ground
P339000	Fuel Injection Valve 1 Short-circuit to ground
P339100	Fuel Injection Valve 2 Open circuit
P339200	Fuel Injection Valve 2 Short circuit to B+
P339300	Fuel Injection Valve 2 Short-circuit to ground
P339400	Fuel Injection Valve 3 Open circuit
P339500	Fuel Injection Valve 3 Short circuit to B+
P339600	Fuel Injection Valve 3 Short-circuit to ground
P339700	Fuel Injection Valve 4 Open circuit
P339800	Fuel Injection Valve 4 Short circuit to B+
P339900	Fuel Injection Valve 4 Short-circuit to ground
P339A00	Shut-Off valve 1 for NG fuel tank Short circuit to B+
P339B00	Shut-Off valve 1 for NG fuel tank Short-circuit to ground
P339C00	Shut-Off valve 1 for NG fuel tank Open circuit
P339D00	Shut-Off valve 2 for NG fuel tank Short circuit to B+
P339E00	Shut-Off valve 2 for NG fuel tank Short-circuit to ground
P339F00	Shut-Off valve 2 for NG fuel tank Open circuit
P33A000	Shut-Off valve 3 for NG fuel tank Short circuit to B+

P33A100	Shut-Off valve 3 for NG fuel tank Short-circuit to ground
P33A200	Shut-Off valve 3 for NG fuel tank Open circuit
P33A300	Shut-Off valve 4 for NG fuel tank Short circuit to B+
P33A400	Shut-Off valve 4 for NG fuel tank Short-circuit to ground
P33A500	Shut-Off valve 4 for NG fuel tank Open circuit