

三菱发动机故障码及故障类型描述汇总

Description on the fault code and failure type

故障码 P-Code	故障类型描述	Fault Path Type Description
P0031-00	前氧传感器加热器短路到低电压	H02S Heater Control Circuit Low (Bank 1 Sensor 1)
P0032-00	前氧传感器加热器短路到高电压	H02S Heater Control Circuit High (Bank 1 Sensor 1)
P0037-00	后氧传感器加热器短路到低电压	H02S Heater Control Circuit Low (Bank 1 Sensor 2)
P0038-00	后氧传感器加热器短路到高电压	H02S Heater Control Circuit High (Bank 1 Sensor 2)
P0068-00	电子节气门空气流量错误	MAP/MAF - Throttle Position Correlation
P0105-00	进气压力传感器信号钳住	Manifold Absolute Pressure/Barometric Pressure Circuit
P0106-00	进气压力 / 油门位置合理性故障	Manifold Absolute Pressure/Barometric Pressure Circuit Range/Performance
P0107-00	进气压力传感器线路低电压或断路	Manifold Absolute Pressure/Barometric Pressure Circuit Low
P0108-00	进气压力传感器线路高电压	Manifold Absolute Pressure/Barometric Pressure Circuit High
P0112-00	进气温度传感器线路低电压	Intake Air Temperature Sensor 1 Circuit Low
P0113-00	进气温度传感器线路高电压或断路	Intake Air Temperature Sensor 1 Circuit High
P0117-00	冷却液温度传感器线路低电压	Engine Coolant Temperature Sensor 1 Circuit Low
P0118-00	冷却液温度传感器线路高电压或断路	Engine Coolant Temperature Sensor 1 Circuit High
P0122-00	电子节气门位置传感器 1# 线路低电压	Throttle/Pedal Position Sensor/Switch “A” Circuit Low
P0123-00	电子节气门位置传感器 1# 线路高电压	Throttle/Pedal Position Sensor/Switch “A” Circuit High
P0131-00	前氧传感器短路到低电压	O2 Sensor Circuit Low Voltage (Bank 1 Sensor 1)
P0132-00	前氧传感器短路到高电压	O2 Sensor Circuit High Voltage (Bank 1 Sensor 1)
P0133-00	前氧传感器响应过慢	O2 Sensor Circuit Slow Response (Bank 1 Sensor 1)
P0134-00	前氧传感器断路	O2 Sensor Circuit No Activity Detected (Bank 1 Sensor 1)

三菱发动机故障码维修指导 Repair guidance for Mitsubishi engine DTC

故障码 P-Code	故障类型描述	Fault Path Type Description
P0137-00	后氧传感器短路到低电压	02 Sensor Circuit Low Voltage (Bank 1 Sensor 2)
P0138-00	后氧传感器短路到高电压	02 Sensor Circuit High Voltage (Bank 1 Sensor 2)
P0140-00	后氧传感器断路	02 Sensor Circuit No Activity Detected (Bank 1 Sensor 2)
P0171-00	非怠速工况燃油系统过稀	Fuel Trim System too Lean (Bank 1)
P0172-00	非怠速工况燃油系统过浓	Fuel Trim System too Rich (Bank 1)
P0222-00	电子节气门位置传感器 2# 线路低电压	Throttle/Pedal Position Sensor/Switch “B” Circuit Low
P0223-00	电子节气门位置传感器 2# 线路高电压	Throttle/Pedal Position Sensor/Switch “B” Circuit High
P0230-00	油泵继电器故障	Fuel Pump Primary Circuit
P0261-00	1 缸喷嘴线路低电压故障	Cylinder 1 Injector Circuit Low
P0262-00	1 缸喷嘴线路高电压故障	Cylinder 1 Injector Circuit High
P0264-00	2 缸喷嘴线路低电压故障	Cylinder 2 Injector Circuit Low
P0265-00	2 缸喷嘴线路高电压故障	Cylinder 2 Injector Circuit High
P0267-00	3 缸喷嘴线路低电压故障	Cylinder 3 Injector Circuit Low
P0268-00	3 缸喷嘴线路高电压故障	Cylinder 3 Injector Circuit High
P0270-00	4 缸喷嘴线路低电压故障	Cylinder 4 Injector Circuit Low
P0271-00	4 缸喷嘴线路高电压故障	Cylinder 4 Injector Circuit High
P0300-00	单缸或多缸失火	Random/Multiple Cylinder Misfire Detected
P0324-00	爆震控制系统故障	Knock Control System Error
P0325-00	爆震传感器故障	Knock Sensor 1 Circuit (Bank 1 or Single Sensor)
P0335-00	曲轴位置传感器线路无信号	Crankshaft Position Sensor “A” Circuit
P0336-00	曲轴位置传感器线路信号干扰	Crankshaft Position Sensor “A” Circuit Range/Performance
P0340-00	凸轮轴位置传感器线路无信号	Camshaft Position Sensor “A” Circuit (Bank 1 or Single Sensor)
P0341-00	凸轮轴位置传感器线路合理性故障	Camshaft Position Sensor “A” Circuit Range/Performance (Bank 1 or Single Sensor)
P0351-00	1、4 缸点火线圈故障	Ignition Coil “A” Primary/Secondary Circuit
P0352-00	2、3 缸点火线圈故障	Ignition Coil “B” Primary/Secondary Circuit

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故障码 P-Code	故障类型描述	Fault Path Type Description
P0420-00	催化转化器转化效率低	Catalyst System Efficiency Below Threshold (Bank 1)
P0458-00	碳罐电磁阀线路短路到低电压或断路	Evaporative Emission System Purge Control Valve Circuit Low
P0459-00	碳罐电磁阀线路短路到高电压	Evaporative Emission System Purge Control Valve Circuit High
P0480-00	低速风扇故障	Fan 1 Control Circuit
P0481-00	高速风扇故障	Fan 2 Control Circuit
P0504-00	制动开关相关性故障	Brake Switch "A" /" B" Correlation
P0506-00	怠速控制系统故障 — 转速过低	Idle Air Control System RPM Lower Than Expected
P0507-00	怠速控制系统故障 — 转速过高	Idle Air Control System RPM Higher Than Expected
P0562-00	系统电压低	System Voltage Low
P0563-00	系统电压高	System Voltage High
P0571-00	制动时制动灯的开关状态没有发生改变	Brake Switch "A" Circuit
P0602-00	ECM 编程错误（软件版本不匹配）	Control Module Programming Error (select this one)
P0606-00	ECM 处理器故障	ECM/PCM Processor (22.1/80)
P060A-00	ECM 处理器故障	Internal Control Module Monitoring Processor Performance
P0616-00	起动电机继电器低电压	Starter Relay Circuit Low
P0617-00	起动电机继电器高电压	Starter Relay Circuit High
P0633-00	防盗器未学习故障	Immobilizer Key Not Programmed - ECM/PCM
P0641-00	ETC 参考电压 A# 幅值故障	Sensor Reference Voltage "A" Circuit/Open
P0646-00	空调离合器继电器线路短路到低电压或断路	A/C Clutch Relay Control Circuit Low
P0647-00	空调离合器继电器线路短路到高电压	A/C Clutch Relay Control Circuit High
P0651-00	ETC 参考电压 B# 幅值故障	Sensor Reference Voltage "B" Circuit/Open
P0685-00	主继电器故障	ECM/PCM Power Relay Control Circuit/Open
P0831-00	离合器开关线路信号常低（短接到电源或断路）	Clutch Pedal Switch "A" Circuit Low
P0832-00	离合器开关线路信号常高（短接到地）	Clutch Pedal Switch "A" Circuit High
P1167-00	前氧减速断油时过浓	Too thick of oxygen sensor deceleration broken fuel
P1171-00	前氧加速加浓时过稀	Too thin of oxygen sensor deceleration broken fuel

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故障码 P-Code	故障类型描述	Fault Path Type Description
P1336-00	58 齿齿轮误差未学习	Crankshaft Position System Variation Not Learned
P1516-00	ETC 驱动稳态诊断错误	Manufacturer controlled vehicle speed, idle control, and auxiliary inputs
P1502-00	车速信号源故障 (车速信号通过 CAN 来自 TCM/ABS/ESP)	Manufacturer Controlled DTC
P2101-00	ETC 驱动二阶诊断错误	Throttle Actuator Control Motor Circuit Range/Performance
P2104-00	发动机强制怠速	Throttle Actuator Control Motor Circuit Range/Performance
P2105-00	发动机强制停机	Throttle Actuator Control System - Forced Engine Shutdown
P2106-00	发动机性能限制	Throttle Actuator Control System - Forced Limited Power
P2110-00	发动机功率管理	Throttle Actuator Control System - Forced Limited RPM
P2119-00	电子节气门回位故障	Throttle Actuator Control Throttle Body Range/Performance
P2122-00	电子油门踏板位置传感器 1# 线路低电压	Throttle/Pedal Position Sensor/Switch “D” Circuit Low
P2123-00	电子油门踏板位置传感器 1# 线路高电压	Throttle/Pedal Position Sensor/Switch “D” Circuit High
P2127-00	电子油门踏板位置传感器 2# 线路低电压	Throttle/Pedal Position Sensor/Switch “E” Circuit Low
P2128-00	电子油门踏板位置传感器 2# 线路高电压	Throttle/Pedal Position Sensor/Switch “E” Circuit High
P2135-00	电子节气门位置传感器 1#、2# 线路相关性故障	Throttle/Pedal Position Sensor/Switch “A” / “B” Voltage Correlation
P2138-00	电子油门踏板位置传感器 1#、2# 线路相关性故障	Throttle/Pedal Position Sensor/Switch “D” / “E” Voltage Correlation
P2187-00	怠速工况燃油系统过稀	System Too Lean at Idle (Bank 1)
P2188-00	怠速工况燃油系统过浓	System Too Rich at Idle (Bank 1)
P2A01-00	后氧传感器减速断油响应过慢	O2 Sensor Circuit Range/Performance (Bank 1 Sensor 2)
U0001-00	CAN 通讯故障 (C001)	High Speed CAN Communication Bus
U0073-00	CAN 总线关闭 (C073)	Control Module Communication Bus Off
U0121-00	ECM 与 ABS 控制模块通讯丢失 (C121)	Lost Communication With Anti-Lock Brake System (ABS) Control Module
U0140-00	ECM 与车身控制模块通讯丢失 (C140)	Lost Communication With Body Control Module

三菱发动机故障码维修指导 Repair guidance for Mitsubishi engine DTC

故障码 P-Code	故障类型描述	Fault Path Type Description
U0151-00	ECM 与安全气囊控制模块通信丢失 (C151)	Lost Communication With Restraints Control Module
U0155-00	ECM 与仪表盘控制模块通信丢失 (C155)	Lost communication with Instrument Panel Cluster control module
U0167-00	防盗器无响应 (C167)	Lost Communication With Vehicle Immobilizer Control Module
U0426-00	防盗器认证失败 (C426)	Lost Communication With Vehicle Immobilizer Control Module

三菱发动机故障详解

Fault Details for Mitsubishi Engine

故障码 P-Code	P0031-00
故障类型描述	前氧传感器加热线路短路到低电压
Fault Path Type Description	HO2S Heater Control Circuit Low (Bank 1 Sensor 1)
故障发生的可能原因	1 前氧传感器与 ECM 之间的加 热线路发生短路故障 2 前氧传感器接插件接触不良 3 发动机线束与 ECM 中前氧加 热频脚接触不良
Potential Causes	1 Heating circuit with front oxygen sensor short circuit 2 Bad contact of inserts of O2 sensor 3 Bad contact of engine harness and O2 foot on ECM
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V

故障码 P-Code	P0032-00
故障类型描述	前氧传感器加热线路短路到高电压
Fault Path Type Description	HO2S Heater Control Circuit High (Bank 1 Sensor 1)
故障发生的可能原因	1 前氧传感器与 ECM 之间的加 热线路发生短路故障 2 前氧传感器接插件接触不良 3 发动机线束与 ECM 中前氧加 热频脚接触不良
Potential Causes	1 Heating circuit with O2 sensor short circuit 2 Bad contact of inserts on front oxygen sensor 3 Bad contact of engine harness and O2 heat foo
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting	1 3 Engine runs longer than 0.5s 不再更新自学习值
Emergency Control Plan	1 Fuel control works in open- loop mode 2 Disable modified fuel pulse width 3 Auto self-learning value is not updated

故障码 P-Code	P0037-00
故障类型描述	后氧传感器加热线路短路到低电压
Fault Path Type Description	HO2S Heater Control Circuit Low (Bank 1 Sensor 2)
故障发生的可 能原因	1 后氧传感器与 ECM 之间的加 热线路发生短路故障 2 后氧传感器接插件接触不良 3 发动机线束与 ECM 中后氧加 热频脚接触不良
Potential Causes	1 Short trouble in heating circuit wuith HO2S 2 Bad contact of inserts of rear oxygen sensor 3 Bad contact between engine harness and HO2S heating foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到后氧传感器加热线路与地 短路
Fault criteria	HO2S heating short circuit to earth
应急控制方案	1 燃油控制工作在开环模式 2 禁用燃油修正脉宽 3 不再更新自学习值
Emergency control plan	1 Fuel control works in open- loop mode 2 Disable modified fuel pulse width 3 Auto self-learning value is not updated

故障码 P-Code	P0038-00
故障类型描述	后氧传感器加热线路短路到高电压
Fault Path Type Description	HO2S Heater Control Circuit High (Bank 1 Sensor 2)
故障发生的可 能原因	1 后氧传感器与 ECM 之间的加 热线路发生短路故障 2 后氧传感器接插件接触不良 3 发动机线束与 ECM 中后氧加 热频脚接触不良
Potential Causes	1 HO2S heat circuit 2 Bad contact of inserts in rear oxygen sensor 3 Bad contact between engine harness and HO2S heating foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到后氧传感器加热线路与 12V 电源短路
Fault criteria	ECM detects HO2S heat circuit short to 12 V power supply
应急控制方案	1 燃油控制工作在开环模式 2 禁用燃油修正脉宽 3 不再更新自学习值
Emergency control plan	1 Fuel control works in open- loop mode 2 Disenable modified fuel pulse width 3 Auto self-learning value is not updated

故障码 P-Code	P0068-00
故障类型描述	电子节气门空气流量错误
Fault Path Type Description	MAP/MAF - Throttle Position Correlation
检测启动条件	1 发动机运转时间 >0.5 秒 2 无 进 气 压 力 传 感 器 (P0105,P0106,P0107,P0108)、进 气 温 度 传 感 器 (P0112,P0113) 故障 3 利用速度密度法计算所得空气 流量与基于电子节气门位置预 测空气流量差值 >9 克 / 秒 4 持续时间 >4 秒
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 No air intake pressure sensor, failure of air intake temperature sensor 3 Difference between calculated AMF by speed & density method and predicated AMF based on throttle valve is larger than 9 g/s 4 Duration: >4 s
故障判定标准	ECM 监测到前氧传感器加热线路与 12V 电源短路
Fault criteria	ECM detects HO2S heat circuit short to 12 V power supply
应急控制方案	系统进入 " 发动机功率管理 " 模式， 同时呈报 P2106， P2110 故障
Emergency control plan	Enter "Engine power management" mode and submit P2106 and P2110 failures

故障码 P-Code	P0105-00
故障类型描述	进气压力传感器信号钳住
Fault Path Type Description	Manifold Absolute Pressure/ Barometric Pressure Circuit
故障发生的可 能原因	1 MAP 传感器故障 2 MAP 传感器与 ECM 之间的线 路损坏 3 连接不良
Potential Causes	1 MAP sensor failure 2 Line with MAP sensor damaged 3 Poor contact
检测启动条件	发动机启动
Detect Starting Conditions	Engine starts
故障判定标准	进气歧管进气压力在一定时间内没有 变化
Fault criteria	No variation in air manifold pressure during a specified period
应急控制方案	1 禁用燃油修正脉宽 2 不再更新自学习值 3 禁止调整目标怠速转速 4 不再更新大气压力
Emergency control plan	1 Disenable modified fuel pulse width 2 Auto self-learning value is not updated 3 Adjusting target idle speed is not allowed 4 Barometric pressure is not updated

故障码 P-Code	P0106-00
故障类型描述	进气压力 / 油门位置合理性故障
Fault Path Type Description	Manifold Absolute Pressure/Barometric Pressure Circuit Range/Performance
故障发生的可 可能原因	1 MAP 传感器故障 2 传感器测量孔阻塞 3 MAP 传感器与 ECM 之间的线路损坏 4 连接不良
Potential Causes	1 MAP sensor failure 2 Sensor measuring hole is blocked 3 Line between MAP sensor and ECM is damaged 4 Poor contact
检测启动条件	无歧管绝对压力传感器、节气门位置传感器及冷却液温度传感器的相关故障码
Detect Starting Conditions	No manifold absolute pressure sensor/throttle position/sensor and relevant fault codes of cooling liquid temperature sensor
故障判定标准	海拔补偿进气压力值超出了控制系统按照发动机转速与节气门开度设定的限值范围
Fault criteria	Altitude compensate intake pressure exceeds the limits as specified by control system in accordance with engine speed and throttle percentage
应急控制方案	1 禁用燃油修正脉宽 2 不再更新自学习值 3 禁止调整目标怠速转速 4 不再更新大气压力
Emergency control plan	1 Disenable modified fuel pulse width 2 Auto self-learning value is not updated 3 Adjusting target idle speed is not allowed 4 Barometric pressure is not updated

故障码 P-Code	P0107-00
故障类型描述	进气压力传感器线路低电压或断路
Fault Path Type Description	Manifold Absolute Pressure/ Barometric Pressure Circuit Low
故障发生的可 能原因	1 MAP 传感器与 ECM 之间的线 路对地短路或者断路 2 MAP 传感器故障 3 连接不良 4 发动机进气系统异常
Potential Causes	1 Lines between MAP sensor and ECM are short circuit to earth or open circuit 2 MAP sensor failure 3 Poor contact 4 Engine intake system exception
检测启动条件	1 无节气门位置传感器故障 2 蓄电池电压高于 11.5V
Detect Starting Conditions	1 No throttle position sensor failure 2 Voltage of battery is higher than 11.5V
故障判定标准	ECM 监测到 MAP 传感器信号值小于 6.5%
Fault criteria	ECM detects that signal value of MAP sensor is less than 6.5%.
应急控制方案	1 禁用燃油修正脉宽 2 不再更新自学习值 3 禁止调整目标怠速转速 4 不再更新大气压力 5 歧管绝对压力值采用默认值
Emergency control plan	1 Disenable modified fuel pulse width 2 Auto self-learning value is not updated 3 Adjusting target idle speed is not allowed 4 Barometric pressure is not updated 5 Manifold absolute pressure value will be default

故障码 P-Code	P0108-00
故障类型描述	进气压力传感器线路高电压
Fault Path Type Description	Manifold Absolute Pressure/ Barometric Pressure Circuit High
故障发生的可 能原因	1 MAP 传感器与 ECM 之间的线 路对电源短路 2 MAP 传感器故障 3 连接不良 4 发动机进气系统异常
Potential Causes	1 Lines between MAP sensor and ECM are short circuit to power supply 2 MAP sensor failure 3 Poor contact 4 Engine intake system exception
检测启动条件	1 无节气门位置传感器故障 2 发动机处于运转状态 3 发 动 机 转 速 小 于 等 于 2400RPM 且节气门开度小于 15%，或者发动机转速高于 2400RPM 且节气门开度大于 35%
Detect Starting Conditions	1 No throttle position sensor failure 2 Engine is working 3 Engine speed is less than and equal to 2400RPM. And throttle percentage is less than 15% or engine speed is higher than 2400RPM and throttle percentage is larger than 35%
故障判定标准	ECM 监测到 MAP 传感器信号值大于 94.5%
Fault criteria	ECM detects that MAP sensor signal value is larger than 94.5%
应急控制方案	1 禁用燃油修正脉宽 2 不再更新自学习值 3 禁止调整目标怠速转速 4 不再更新大气压力 5 歧管绝对压力值采用默认值
Emergency control plan	1 Disenable modified fuel pulse width 2 Auto self-learning value is not updated 3 Adjusting target idle speed is not allowed 4 Barometric pressure is not updated 5 Manifold absolute pressure value will be default

故障码 P-Code	P0112-00
故障类型描述	进气温度传感器线路低电压
Fault Path Type Description	Intake Air Temperature Sensor 1 Circuit Low
故障发生的可 能原因	1 IAT 传感器与 ECM 之间的线 路对地短路 2 传感器故障 3 连接不良
Potential Causes	1 Lines between sensor and ECM are short circuit to earth 2 Sensor failure 3 Poor contact
检测启动条件	1 无车速传感器、冷却液温度传 感器等相关故障 2 车速低于 25 km/h 3 冷却液温度大于 50° C 4 发动机运转时间大于 120 秒
Detect Starting Conditions	1 No driving speed sensor, cooling liquid temperature sensor failures 2 Vehicle speed is lower than 25 km/h 3 Cooling liquid is above 50 °C 4 Engine rotating time is longer than 120s
故障判定标准	ECM 监测到 IAT 传感器信号值大于 98%
Fault criteria	ECM detects that IAT sensor signal value is larger than 98%
应急控制方案	采用系统设定的默认进气温度值
Emergency Control Plan	Use the air intake temperature default by system setting

故障码 P-Code	P0113-00
故障类型描述	进气温度传感器线路高电压或断路
Fault Path Type Description	Intake Air Temperature Sensor 1 Circuit High
故障发生的可 能原因	1 IAT 传感器与 ECM 之间的线 路对电源短路、断路 2 连接不良 3 接地线束断路
Potential Causes	1 Lines with IAT sensor Circuit/ Open 2 Poor contact 3 Open circuit occurs to earth harness
检测启动条件	1 无车速传感器、冷却液温度传 感器等相关故障 2 车速低于 25 km/h 3 冷却液温度大于 50° C 4 发动机运转时间大于 120 秒
Detect Starting Conditions	1 No driving speed sensor, cooling liquid temperature sensor failures 2 Vehicle speed is lower than 25 km/h 3 Cooling liquid is above 50 °C 4 Engine rotating time is longer than 120s
故障判定标准	ECM 监测到 IAT 传感器信号值大于 98%
Fault criteria	ECM detects that IAT sensor signal value is larger than 98%
应急控制方案	采用系统设定的默认进气温度值
Emergency Control Plan	Use the air intake temperature default by system setting

故障码 P-Code	P0117-00
故障类型描述	冷却液温度传感器线路低电压
Fault Path Type Description	Engine Coolant Temperature Sensor 1 Circuit Low
故障发生的可 能原因	1 CTS 传感器与 ECM 之间的线 路对地短路 2 连接不良 3 CTS 传感器故障
Potential Causes	1 Lines with CTS sensor short circuit to earth 2 Poor contact 3 CTS sensor fault
检测启动条件	发动机运行时间大于 120 秒
Detect Starting Conditions	Engine works longer than 120s
故障判定标准	ECM 监测到 CTS 传感器信号值小于 2.0%
Fault criteria	ECM detects that signal value of CTS sensor is less than 2.0%
应急控制方案	1 控制系统根据默认公式按照发 动机运行时间和进气温度估算 冷却液温度传感器，最大不超 过 90.75° C 2 设置故障码后，高速风扇延迟 0.5 秒后开始工作
Emergency Control Plan	1 Max coolant temperature sensor is estimated not more than 90.75° C based on system running hours and intake air temperature 2 With fault code set, high- speed fan will get to work after waiting 0.5 s

故障码 P-Code	P0118-00
故障类型描述	冷却液温度传感器线路高电压或断路
Fault Path Type Description	Engine Coolant Temperature Sensor 1 Circuit High
故障发生的可 能原因	1 CTS 传感器与 ECM 之间的线 路对电源短路、断路 2 接地线束断路 3 连接不良 4 CTS 传感器故障
Potential Causes	1 Lines with CTS sensor circuit/open 2 Earth Harness Open Circuit 3 Poor contact 4 CTS sensor
检测启动条件	发动机运行时间大于 120 秒
Detect Starting Conditions	Engine works longer than 120s
故障判定标准	ECM 监测到 CTS 传感器信号值大于 97.5%
Fault criteria	ECM detects that CTS sensor signal value is larger than 97.5%
应急控制方案	1 控制系统根据默认公式按照发 动机运行时间和进气温度估算 冷却液温度传感器，最大不超 过 90.75° C 2 设置故障码后，高速风扇延迟 0.5 秒后开始工作
Emergency control plan	1 Max coolant temperature sensor is estimated not more than 90.75° C based on system running hours and intake air temperature 2 With fault code set, high- speed fan will get to work after waiting 0.5 s

故障码 P-Code	P0122-00
故障类型描述	电子节气门位置传感器 1# 线路低电压
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “ A ” Circuit Low
故障发生的可 能原因	1 TPS 传感器与 ECM 之间的线 路对地短路或者断路 2 连接不良 3 TPS 传感器故障
Potential Causes	1 TPS sensor Circuit/Open 2 Poor contact 3 TPS sensor fault
检测启动条件	发动机运行中
Detect Starting Conditions	Engine is operating
故障判定标准	ECM 监测到 TPS 传感器信号值小于 3.5%
Fault criteria	ECM detects that TPS sensor signal is less than 3.5%
应急控制方案	1 按照发动机转速估算节气门开 度 2 清淹功能禁用
Emergency Control Plan	1 Estimate throttle percentage based on engine speed 2 Disenable Clear function

故障码 P-Code	P0123-00
故障类型描述	电子节气门位置传感器 1# 线路高电压
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “ A ” Circuit High
故障发生的可 能原因	1 TPS 传感器与 ECM 之间的线 路对电源短路 2 连接不良 3 TPS 传感器故障
Potential Causes	1 Circuit with TPS sensor short circuit to power supply 2 Poor contact 3 TPS sensor fault
检测启动条件	发动机运行中
Detect Starting Conditions	Engine is operating
故障判定标准	ECM 监测到 TPS 传感器信号值大于 96.5%
Fault criteria	ECM detects that TPS sensor signal value is larger than 96.5%
应急控制方案	1 按照发动机转速估算节气门开 度 2 清淹功能禁用
Emergency Control Plan	1 Estimate throttle percentage based on engine speed 2 Disenable Clear function

故障码 P-Code	P0131-00
故障类型描述	前氧传感器短路到低电压
Fault Path Type Description	O2 Sensor Circuit Low Voltage (Bank 1 Sensor 1)
故障发生的可 能原因	1 氧传感器与 ECM 之间的线路对地短路 2 油泵、供油管路或喷油器阻塞造成的喷油量不足 3 燃油压力调节器损坏 4 ECM 至发动机机体的接地不良 5 进气真空泄漏 6 排气管路漏气 7 燃油污染
Potential Causes	1 Short circuit of oxygen sensor with ECM to earth 2 Insufficient amount of oil injected resulting from oil pump, oil supply pipe or oil sprayer blockage 3 Damage of fuel oil pressure regulator 4 Bad contact of ECM with engine body 5 Intake vacuum leakage 6 Exhaust pipe leak 7 Fuel oil contamination
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P0172、喷油器、失火、曲轴位置传感器、点火系 统、怠速控制系统、碳罐清洗 电路等相关故障码 2 冷却液温度高于 70° C 3 系统电压高于 11 伏 4 发动机运转时间大于 60 秒
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, PO172, oil sprayer, Fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit 2 Coolant is above 70° C 3 System voltage is above 11v 4 Engine running time is more than 60s
故障判定标准	ECM 监测到氧传感器信号电压值小于 0.03 伏
Fault criteria	ECM detects that oxygen sensor signal voltage is less than 0.03V
应急控制方案	停止闭环燃油控制
Emergency control plan	Stop closed-loop fuel oil control

故障码 P-Code	P0132-00
故障类型描述	前氧传感器短路到高电压
Fault Path Type Description	O2 Sensor Circuit High Voltage (Bank 1 Sensor 1)
故障发生的可 能原因	1 氧传感器与 ECM 之间的线路对电源短路 2 燃油压力过高 3 喷油器泄漏 4 燃油压力调节器损坏
Potential Causes	1 Circuit between oxygen sensor and ECM is short circuit to power supply 2 Overpressure of fuel oil 3 Oil sprayer leak 4 Damage of fuel oil pressure regulator
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P0172、喷油器、失火、曲轴位置传感器、点火系 统、怠速控制系统、碳罐清洗 电路等相关故障码 2 冷却液温度高于 70° C 3 系统电压高于 11 伏 4 发动机运转时间大于 60 秒
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, PO172, oil sprayer, Fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit 2 Coolant is above 70° C 3 System voltage is above 11v 4 Engine running time is more than 60s
故障判定标准	ECM 监测到氧传感器信号电压值高于 3.8 伏
Fault criteria	ECM detects that signal voltage of oxygen sensor is higher than 3.8V
应急控制方案	停止闭环燃油控制
Emergency control plan	Stop closed-loop fuel oil control

故障码 P-Code	P0133-00
故障类型描述	前氧传感器响应过慢
Fault Path Type Description	O2 Sensor Circuit Slow Response (Bank 1 Sensor 1)
故障发生的可 能原因	氧传感器损坏
Potential Causes	O2 Sensor Damage
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P0172、喷油器、失火、曲轴位置传感器、点火系 统、怠速控制系统、碳罐清洗 电路等相关故障码 2 冷却液温度高于 70° C，大气 压力 >70KPa 3 系统电压高于 11 伏 4 发动机运转时间大于 60 秒 5 发动机转速 >1700rpm 且 <2550rpm
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, PO172, oil sprayer, Fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit 2 Coolant temperature is above 70° C; barometric pressure is above 70KPa 3 System voltage is above 11v 4 Engine running time is more than 60s 5 Engine speed is between 2550rpm and 1700rpm
故障判定标准	前氧传感器输出信号由稀到浓的平均 时间 （LRA）>0.4 秒 或前氧传感器 输出信号由浓到稀的平均时间 （RLA）>0.13 秒 或 LRA 与 RLA 的比 值 <0.2 或 >8，前氧传感器输出信号 由稀到浓的次数 <15 次或前 氧传感器 输出信号由浓到稀的次数 <15 次
Fault criteria	O2 sensor output signal loose-rich average (LRA) time >0.4s; Or O2 sensor output signal rich- loose average (RLA) time >0.13s; Or ratio between LRA and RLA <0.2 or >8; O2 sensor output signal loose-rich times <15 or O2 sensor output signal rich- loose times <15
应急控制方案	停止闭环燃油控制
Emergency control plan	Stop closed-loop fuel oil control

故障码 P-Code	P0134-00
故障类型描述	前氧传感器断路
Fault Path Type Description	O2 Sensor Circuit No Activity Detected (Bank 1 Sensor 1)
故障发生的可 能原因	1 氧传感器与 ECM 之间的线路 接触不良或损坏 2 氧传感器加热器线路或加热器故障 3 排气泄漏 4 燃油污染 5 机油消耗量过大
Potential Causes	1 Bad contact or damage of oxygen sensor and ECM 2 Failure of oxygen sensor heater circuit or heater 3 Exhaust leaks 4 Fuel oil contamination 5 Two much consumption of engine oil
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P0172、喷油器、失 火、 曲轴位置传感器、点火系 统、怠速控制系统、碳罐清洗 电路等相关故障码 2 冷却液温度高于 70° C 3 系统电压高于 11 伏 4 发动机运转时间大于 60 秒
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, PO172, oil sprayer, Fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit 2 Coolant is above 70° C 3 System voltage is above 11v 4 Engine running time is more than 60s
故障判定标准	ECM 监测到氧传感器信号电压值大于 1.3 伏，小于 3.8 伏
Fault criteria	ECM detects that signal voltage of oxygen sensor is over 1.3V and lower than 3.8V
应急控制方案	停止闭环燃油控制
Emergency control plan	Stop closed-loop fuel oil control

故障码 P-Code	P0137-00
故障类型描述	后氧传感器短路到低电压
Fault Path Type Description	O2 Sensor Circuit Low Voltage (Bank 1 Sensor 2)
故障发生的可 能原因	1 氧传感器与 ECM 之间的线路对地短路 2 连接不良
Potential Causes	1 Short circuit with O2 sensor to earth 2 Poor contact
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P0172、喷油器、失火、曲轴位置传感器、点火系 统、怠速控制系统、碳罐清洗 电路、后氧传感器加热器等相关故障码 2 冷却液温度高于 70 ° C 3 系统电压高于 11 伏 4 发动机运转时间大于 600 秒 5 延迟时间大于 3 秒
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, PO172, oil sprayer, Fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit, and rear oxygen sensor heater 2 Coolant is higher than 70 ° C 3 System voltage is above 11v 4 Engine running time is longer than 600s 5 Delay time is more than 3s
故障判定标准	ECM 监测到后氧传感器电压信号值低 于 0.03 伏
Fault criteria	ECM detects that rear oxygen sensor voltage signal is lower than 0.03 V
应急控制方案	禁用后氧传感器信号
Emergency control plan	Disenable rear sensor signal

故障码 P-Code	P0138-00
故障类型描述	后氧传感器短路到高电压
Fault Path Type Description	O2 Sensor Circuit High Voltage (Bank 1 Sensor 2)
故障发生的可 能原因	1 氧传感器与 ECM 之间的线路 对电源短路 2 连接不良 3 传感器故障
Potential Causes	1 Circuit between oxygen sensor and ECM is short circuit to power supply 2 Poor contact 3 Failure of sensor
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P0172、喷油器、失火、曲轴位置传感器、点火系 统、怠速控制系统、碳罐清洗 电路、后氧传感器加热器等相关故障码 2 冷却液温度高于 70 ° C 3 系统电压高于 11 伏 4 发动机运转时间大于 600 秒
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, PO172, oil sprayer, Fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit, and rear oxygen sensor heater 2 Coolant is higher than 70 ° C 3 System voltage is above 11v 4 Engine running time is longer than 600s
故障判定标准	ECM 监测到后氧传感器电压信号值高 于 3.8 伏
Fault criteria	ECM detects that signal voltage of rear oxygen sensor is higher than 3.8V
应急控制方案	禁用后氧传感器
Emergency control plan	Disenable rear oxygen sensor

故障码 P-Code	P0140-00
故障类型描述	后氧传感器断路
Fault Path Type Description	O2 Sensor Circuit No Activity Detected (Bank 1 Sensor 2)
故障发生的可 能原因	1 连接不良 2 氧传感器与 ECM 之间的线路断路 3 氧传感器故障
Potential Causes	1 Poor contact 2 Line between oxygen sensor and ECM open circuit 3 Failure of oxygen sensor
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P、喷油器、失火、曲轴位置传感器、点火系统、怠速控制系统、碳罐清洗电路、后氧传感器加热器等相关故障码 2 冷却液温度高于 70 ° C 3 系统电压高于 11 伏 4 发动机运转时间大于 600 秒
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, P, oil sprayer, fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit, and rear oxygen sensor heater 2 Coolant is higher than 70 ° C 3 System voltage is above 11v 4 Engine running time is longer than 600s
故障判定标准	ECM 监测到氧传感器信号电压值大于 1.3 伏，小于 3.8 伏
Fault criteria	ECM detects that signal voltage of oxygen sensor is over 1.3V and lower than 3.8V
应急控制方案	禁用后氧传感器信号
Emergency control plan	Disenable rear sensor signal

故障码 P-Code	P0171-00
故障类型描述	非怠速工况燃油系统过稀
Fault Path Type Description	Fuel Trim System too Lean (Bank 1)
故障发生的可 能原因	1 空气泄漏 2 燃油压力不足 3 曲轴箱强制通风阀卡滞 4 喷油器阻塞
Potential Causes	1 Air leak 2 Insufficient fuel oil 3 Crankcase forced draft vent clamped 4 Oil sprayer blockage
检测启动条件	1 无 P0106、MAP 传感器、IAT 传感器、CTS 传感器、TPS 传 感器、氧传感器、喷油器、 曲 轴位置传感器、凸轮轴位置传 感器、怠速控制系统、失火、碳罐清洗电路等相关故障码 2 进入闭环燃油控制工况 3 进气温度大于 -7 ℃ 4 大气压力大于 72KPa 5 系统电压大于 11V
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, IAT sensor, CTS sensor, TPS sensor, oxygen sensor, oil sprayer, crankshaft position sensor, camshaft position sensor, idle control system, fire and carbon tank cleaning circuit 2 Enter Closed-loop Fuel Oil Control Condition 3 Air intake is above -7 ℃ 4 Barometric pressure above 72KPa 5 System voltage is larger than 11V
故障判定标准	燃油闭环学习值大于 1.45，并且持续 时间大于 5 秒
Fault criteria	Fuel Oil Closed-loop Learning Value is Larger Than 1.45 and Lasts for More Than 5s

故障码 P-Code	P0172-00
故障类型描述	非怠速工况燃油系统过浓
Fault Path Type Description	Fuel Trim System too Rich (Bank 1)
故障发生的可 能原因	1 进气系统阻塞 2 喷油器阻塞 3 燃油压力过高
Potential Causes	1 Air intake system blockage 2 Oil sprayer blockage 3 Overpressure of fuel oil
检测启动条件	1 无 P0106、MAP 传感器、IAT 传感器、CTS 传感器、TPS 传 感器、氧传感器、喷油器、 曲 轴位置传感器、凸轮轴位置传 感器、怠速控制系统、失火、碳罐清洗电路等相关故障码 2 进入闭环燃油控制工况 3 进气温度大于 -7 ℃ 4 大气压力大于 72KPa 5 系统电压大于 11V
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, IAT sensor, CTS sensor, TPS sensor, oxygen sensor, oil sprayer, crankshaft position sensor, camshaft position sensor, idle control system, fire and carbon tank cleaning circuit 2 Enter Closed-loop Fuel Oil Control Condition 3 Air intake is above -7 ℃ 4 Barometric pressure above 72KPa 5 System voltage is larger than 11V
故障判定标准	燃油闭环学习值小于 0.76，并且持续时间大于 5 秒
Fault criteria	Fuel Closed-looped Learning Value Smaller Than 0.76; Duration for 5s above

故障码 P-Code	P0222-00
故障类型描述	电子节气门位置传感器 2# 线路低电压
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “B” Circuit Low
故障发生的可 能原因	1 TPS 传感器与 ECM 之间的线 路对地短路或者断路 2 连接不良 3 TPS 传感器故障
Potential Causes	1 Circuit with TPS Sensor Short or Open Circuit 2 Poor contact 3 TPS Sensor Fault
检测启动条件	发动机运行中
Detect Starting Conditions	Engine is operating
故障判定标准	ECM 监测到 TPS 传感器线路 2 信号 值小于 3.5%
Fault Criteria	TPS Sensor Circuit "B" Signal Value Smaller than 3.5%
应急控制方案	1 按照发动机转速估算节气门开 度 2 清淹功能禁用
Emergency Control Plan	1 Estimate throttle percentage based on engine speed 2 Disenable Clear function

故障码 P-Code	P0223-00
故障类型描述	电子节气门位置传感器 2# 线路高电压
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “B” Circuit High
故障发生的可 能原因	1 TPS 传感器与 ECM 之间的线 路对电源短路 2 连接不良 3 TPS 传感器故障
Potential Causes	1 Circuit with TPS Sensor Short Circuit to Power Supply 2 Poor contact 3 TPS Sensor Fault
检测启动条件	发动机运行中
Detect Starting Conditions	Engine is operating
故障判定标准	ECM 监测到 TPS 传感器线路 2 信号 值大于 96.5%
Fault Criteria	TPS Sensor Circuit "B" Signal Value Larger Than 96.5%
应急控制方案	1 按照发动机转速估算节气门开 度 2 清淹功能禁用
Emergency Control Plan	1 Estimate throttle percentage based on engine speed 2 Disenable Clear function

故障码 P-Code	P0230-00
故障类型描述	燃油泵继电器故障
Fault Path Type Description	Fuel Pump Primary Circuit
故障发生的可 能原因	1 燃油泵继电器与 ECM 之间的 线路对电源或对地短路、断路 2 继电器故障
Potential Causes	1 Circuit with Fuel Oil Pump Relay Short Circuit or Open Circuit to Power Supply 2 Relay Fault
检测启动条件	点火开关处于通电位置且通电时间大 于系统设定阈值
Detect Starting Conditions	IGN switch is Powered ON and Power-on Hours Larger Than System Threshold Value
故障判定标准	燃油泵继电器电压过高或过低
Fault criteria	Fuel Oil Pump Relay Over or Under Voltage

故障码 P-Code	P0261-00
故障类型描述	1 缸喷嘴线路低电压故障
Fault Path Type Description	Cylinder 1 Injector Circuit Low
故障发生的可 能原因	1 1 缸喷嘴与 ECM 之间的控制 线路发生短路到地故障 2 缸喷嘴接插件接触不良 3 发动机线束与 ECM 中 1 缸喷 油频脚接触不良
Potential Causes	1 Control Circuit with Cylinder 1 Injector Short Circuit 2 Bad Contact of Cylinder 2 Injector Insert 3 Bad Contact of Engine Harness with Cylinder 1 Injection Foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到 1 缸喷油嘴线路与地短路
Fault Criteria	Cylinder 1 Injector Short Circuit
应急控制方案	1 禁止此路喷嘴输出驱动 2 禁用闭环燃油控制
Emergency Control Plan	1 Disable Injector Output Drive 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0262-00
故障类型描述	1 缸喷嘴线路高电压故障
Fault Path Type Description	Cylinder 1 Injector Circuit High
故障发生的可能原因	1 1 缸喷嘴与 ECM 之间的控制线路发生短路到高电压故障 2 1 缸喷嘴接插件接触不良 3 发动机线束与 ECM 中 1 缸喷油频脚接触不良
Potential Causes	1 Cylinder 1 Injector Circuit High 2 Bad Contact of Cylinder 1 Injector Insert 3 Bad Contact of Engine Harness with Cylinder 1 Injection Foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到 1 缸喷油嘴线路与 12V 电源短路
Fault Criteria	Cylinder 1 Injector Short Circuit with 12V Power Supply
应急控制方案	1 禁止此路喷嘴输出驱动 2 禁用闭环燃油控制
Emergency control plan	1 Disable Injector Output Drive 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0264-00
故障类型描述	2 缸喷嘴线路低电压故障
Fault Path Type Description	Cylinder 2 Injector Circuit Low
故障发生的可能原因	1 2 缸喷嘴与 ECM 之间的控制线路发生短路到地故障 2 2 缸喷嘴接插件接触不良 3 发动机线束与 ECM 中 1 缸喷油频脚接触不良
Potential Causes	1 Cylinder 2 Injector Circuit High 2 Bad Contact of Cylinder 2 Injector Insert 3 Bad Contact of Engine Harness with Cylinder 1 Injection Foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到 1 缸喷油嘴线路与地短路
Fault Criteria	Cylinder 1 Injector Short Circuit
应急控制方案	禁止此路喷嘴输出驱动
Emergency Control Plan	Disable Injector Output Drive

故障码 P-Code	P0265-00
故障类型描述	2 缸喷嘴线路高电压故障
Fault Path Type Description	Cylinder 2 Injector Circuit High
故障发生的可 能原因	1 2 缸喷嘴与 ECM 之间的控制 线路发生短路到高电压故障 2 2 缸喷嘴接插件接触不良 3 发动机线束与 ECM 中 1 缸喷 油频脚接触不良
Potential Causes	1 Circuit with Cylinder 2 Injector Short Circuit High 2 Bad Contact of Cylinder 2 Injector Insert 3 Bad Contact of Engine Harness with Cylinder 1 Injection Foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到 2 缸喷油嘴线路与 12V 电源短路
Fault Criteria	Cylinder 2 Injector Short Circuit with 12V Power Supply
应急控制方案	1 禁止此路喷嘴输出驱动 2 禁用闭环燃油控制
Emergency Control Plan	1 Disable Injector Output Drive 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0267-00
故障类型描述	3 缸喷嘴线路低电压故障
Fault Path Type Description	Cylinder 3 Injector Circuit Low
故障发生的可 能原因	1 3 缸喷嘴与 ECM 之间的控制 线路发生短路到地故障 2 3 缸喷嘴接插件接触不良 3 发动机线束与 ECM 中 1 缸喷 油频脚接触不良
Potential Causes	1 Control Circuit of Cylinder 3 Injector with ECM Short Circuit to Earth 2 Bad Contact of Cylinder 3 Injector Insert 3 Bad Contact of Engine Harness with Cylinder 1 Injection Foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到 1 缸喷油嘴线路与地短路
Fault Criteria	Cylinder 1 Injector Short Circuit
应急控制方案	1 禁止此路喷嘴输出驱动 2 禁用闭环燃油控制
Emergency Control Plan	1 Disable Injector Output Drive 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0268-00
故障类型描述	3 缸喷嘴线路高电压故障
Fault Path Type Description	Cylinder 3 Injector Circuit High
故障发生的可能原因	1 3 缸喷嘴与 ECM 之间的控制线路发生短路到高电压故障 2 3 缸喷嘴接插件接触不良 3 发动机线束与 ECM 中 1 缸喷油频脚接触不良
Potential Causes	1 Short Circuit to Circuit High of Control Circuit with Cylinder 3 Injector 2 Bad Contact of Cylinder 3 Injector Insert 3 Bad Contact of Engine Harness with Cylinder 1 Injection Foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到 1 缸喷油嘴线路与 12V 电源短路
Fault Criteria	Cylinder 1 Injector Short Circuit with 12V Power Supply
应急控制方案	1 禁止此路喷嘴输出驱动 2 禁用闭环燃油控制
Emergency Control Plan	1 Disable Injector Output Drive 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0270-00
故障类型描述	4 缸喷嘴线路低电压故障
Fault Path Type Description	Cylinder 4 Injector Circuit Low
故障发生的可能原因	1 4 缸喷嘴与 ECM 之间的控制线路发生短路到地故障 2 4 缸喷嘴接插件接触不良 3 发动机线束与 ECM 中 1 缸喷油频脚接触不良
Potential Causes	1 Control Circuit of Cylinder 4 Injector with ECM Short Circuit to Earth 2 Bad Contact of Cylinder 4 Injector Insert 3 Bad Contact of Engine Harness with Cylinder 1 Injection Foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到 1 缸喷油嘴线路与地短路
Fault Criteria	Cylinder 1 Injector Short Circuit
应急控制方案	1 禁止此路喷嘴输出驱动 2 禁用闭环燃油控制
Emergency Control Plan	1 Disable Injector Output Drive 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0271-00
故障类型描述	4 缸喷嘴线路高电压故障
Fault Path Type Description	Cylinder 4 Injector Circuit High
故障发生的可 能原因	1 4 缸喷嘴与 ECM 之间的控制 线路发生短路到高电压故障 2 4 缸喷嘴接插件接触不良 3 发动机线束与 ECM 中 1 缸喷 油频脚接触不良
Potential Causes	1 Short Circuit to Circuit High of Control Circuit with Cylinder 4 Injector 2 Bad Contact of Cylinder 4 Injector Insert 3 Bad Contact of Engine Harness with Cylinder 1 Injection Foot
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到 1 缸喷油嘴线路与 12V 电源短路
Fault Criteria	Cylinder 1 Injector Short Circuit to 12 V Power Supply
应急控制方案	1 禁止此路喷嘴输出驱动 2 禁用闭环燃油控制
Emergency Control Plan	1 Disable Injector Output Drive 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0324-00
故障类型描述	爆震控制系统故障
Fault Path Type Description	Knock Control System Error
故障发生的可 能原因	爆震传感器与 ECM 之间控制线路短 路到 5V 电压或者短路到地
Potential Causes	Control Circuit of Blast Sensor with ECM Short Circuit to 5C or Earth
检测启动条件	1 没有爆震相关故障 2 发动机运行时间大于 5 秒 3 冷却液温度大于 50 度 4 发动机转速大于 1600rpm 5 平均指示有效压力值大于 600kpa
Detect Starting Conditions	1 No knocking fault 2 Engine running time exceeds 5s 3 Coolant is above 50 ℃ 4 Engine Speed exceeds 1600rpm 5 Indicated mean effective pressure is above 600kpa
故障判定标准	ECM 监测到爆震传感器的各缸最大信 号的平均值低于系统设定的最低阈 值，或高于系统设定的最高阈值
Fault Criteria	Average max signal of each cylinder of knock sensor is lower than min threshold value or higher than the max threshold value
应急控制方案	点火提前角采用系统设定的默认值
Emergency Control Plan	Advance Angle of Ignition as Defaulted

故障码 P-Code	P0300-00	
故障类型描述	单缸或多缸失火	
Fault Path Type Description	Random/Multiple Cylinder Misfire Detected	
故障发生的可能原因 Potential Causes	1 点火系统故障 2 空气泄漏 3 曲轴位置传感器气隙不正确 4 点火正时不正确 5 喷油器故障 6 燃油压力不正确 7 发动机压缩比不正确 8 ECM 故障	1 IGN System Fails 2 Air leak 3 Crankshaft Position Sensor Air Gap Incorrect 4 Ignition Timing Incorrect 5 Sprayer Fails 6 Fuel Oil Pressure Incorrect 7 Engine Compression Ratio Incorrect 8 ECM fails
检测启动条件	无 MAP 传感器、 CTS 传感器、 TPS 传感器、曲轴位置传感器、凸轮轴位置传感器、车速传感器等相关故障码	
Detect Starting Conditions	No relevant fault codes of MAP sensor, CTS Sensor, TPS Sensor, Crankshaft Position Sensor, Camshaft Position Sensor, Vehicle Speed Sensor	
故障判定标准	稳定工况下， ECM 监测到曲轴转动速度的波动超出系统设定的阈值	
Fault criteria	Fluctuation of Crankshaft Speeds Exceeds the System Set Threshold Value	
应急控制方案	1 失火程度较低，仅影响尾气排 放时：无应急控制方案，仅记 录故障码及冻结数据流，点亮故障 MI 灯 2 失火程度较高，达到可能导致 催化器过热时 a. 强制进入燃油开环控制工况 b. 禁止后氧修正学习 c. 当发动机转速超过 2000 转 / 分或 MAP 超过 50KPA 时， MI 灯以 1Hz 频 率闪烁，提示驾驶员立即降低发动机 转速和负荷， 尽快到维修站维修	
Emergency Control Plan	1 In case of small fire and influence on tail gas: No Emergent Control Scheme; just Record Fault Codes and Frozen Data Flow and Light up the Fault Light MI 2 In Case of Big Fire, Catalysts Are Overheated a.Force Step to Fuel Oil Open-loop Control Status b.Disable Post Oxygen Correction Learning c.When engine speed exceeds 2000 rpm or MAP exceeds 50KPA, MI Light will flash 1Hz and remind driver of reduce rotating speed and load. Drive to maintenance station as soon as possible	

故障码 P-Code	P0325-00
故障类型描述	爆震传感器故障
Fault Path Type Description	Knock Sensor 1 Circuit (Bank 1 or Single Sensor)
故障发生的可 能原因	1 连接不良 2 爆震传感器与 ECM 之间的线 路断路 3 爆震传感器故障
Potential Causes	1 Poor contact 2 Circuit with Knock Sensor Short Circuit 3 Knock Sensor Fails
检测启动条件	1 发动机转速高于 1600 RPM 2 冷却液温度高于 50° C 3 发动机运转时间大于 5 秒 4 平均有效指示压力大于 600KPa 5 没有爆震相关故障
Detect Starting Conditions	1 Engine Speed Exceed 1600 RPM 2 Coolant is above 50° C 3 Engine Running for More than 3s 4 Mean Indicated Effective Pressure is above 600KPa 5 No knocking fault
故障判定标准	ECM 监测到爆震传感器的各缸信号的 差值小于系统设定的最低阈值
Fault Criteria	Difference values among signals of knock sensor is lower than lowest threshold value
应急控制方案	点火提前角采用系统设定的默认值
Emergency Control Plan	Advance Angle of Ignition as Defaulted

故障码 P-Code	P0335-00
故障类型描述	曲轴位置传感器线路无信号
Fault Path Type Description	Crankshaft Position Sensor “A” Circuit
故障发生的可 能原因	1 曲轴位置传感器与 ECM 之间 控制线路短路 2 传感器接插件接触不良 3 传感器损坏
Potential Causes	1 Camshaft Position Sensor Circuit 2 Sensor Inserts Bad Contact 3 Sensor Damage
检测启动条件	1 无凸轮轴位置传感器故障 2 启动发动机过程
Detect Starting Conditions	1 No Camshaft Position Sensor Failure 2 Engine Starting Procedures
故障判定标准	ECM 在一定时间内没有监测到有效的 发动机转速脉冲信号
Fault Criteria	Fail to detect effective pulse signal of engine rotating speed within a specified time

故障码 P-Code	P0336-00
故障类型描述	曲轴位置传感器线路信号干扰
Fault Path Type Description	Crankshaft Position Sensor “A” Circuit Range/Performance
故障发生的可 能原因	1 电气连接不良 2 干扰噪声 3 曲轴位置传感器与 ECM 之间的 线路故障 4 目标轮故障 5 ECM 故障
Potential Causes	1 Bad Electric Contact 2 Interference noise 3 Line with Crankshaft Position Sensor Fails 4 Target Wheel Fails 5 ECM fails
检测启动条件	1 发动机运转 2 传感器监测到的气缸数等于 4
Detect Starting Conditions	1 Engine rotates 2 Detected Number of Cylinders is 4
故障判定标准	传感器监测到的齿信号偏差过大
Fault Criteria	Detected Teeth Signal Deviation Large

故障码 P-Code	P0340-00
故障类型描述	凸轮轴位置传感器线路无信号
Fault Path Type Description	Camshaft Position Sensor “A” Circuit (Bank 1 or Single Sensor)
故障发生的可 能原因	1 凸轮轴位置传感器与 ECM 之 间控制线路短路 2 传感器接插件接触不良 3 传感器损坏
Potential Causes	1 Control Circuit With Crankshaft Sensor Short Circuit 2 Sensor Insert Bad Contact 3 Sensor Damage
检测启动条件	1 无曲轴位置传感器故障 2 发动机处于运转状态 3 系统完成 1 缸信号判断
Detect Starting Conditions	1 No Crankshaft Position Sensor Failure 2 Engine is Operating 3 Cylinder 1 Signal Determination Completed
故障判定标准	ECM 连续两次监测到的凸轮轴状态信 号相同
Fault Criteria	Two Detected Camshaft Status Signal Are Same
应急控制方案	工作在废火模式
Emergency Control Plan	Waste Spark mode

故障码 P-Code	P0341-00
故障类型描述	凸轮轴位置传感器信号合理性故障
Fault Path Type Description	Camshaft Position Sensor “A” Circuit Range/Performance (Bank 1 or Single Sensor)
故障发生的可 能原因	传感器损坏
Potential Causes	Sensor Damage
检测启动条件	1 无曲轴位置传感器故障 2 发动机处于运转状态 3 无凸轮轴传感器无信号故障
Detect Starting Conditions	1 No Crankshaft Position Sensor Failure 2 Engine is Operating 3 No Crankshaft Sensor Signal Fault
故障判定标准	ECM 监测到经过曲轴旋转 2 转的同时 凸轮轴状态信号相同
Fault Criteria	Crankshaft Status Signals are Same passing through Crankshaft Rotate 2
应急控制方案	工作在废火模式
Emergency Control Plan	Waste Spark mode

故障码 P-Code	P0351-00
故障类型描述	1,4 号点火线路故障
Fault Path Type Description	Ignition Coil “A” Primary/ Secondary Circuit
故障发生的可 能原因	1 点火线圈与 ECM 之间的点火 控制线路发生短路或断路故障 2 点火线圈接头接触不良 3 点火线圈损坏
Potential Causes	1 Fire Control Circuit with Ignition Coil Circuit or Break 2 Bad Contact of Ignition Coil Adapter 3 Damage of Ignition Coil
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	1,4 缸的点火线路对电源或对地短路、 断路
Fault Criteria	Ignition Circuit of Cylinder 1 and 4 Short Circuit or Break
应急控制方案	1 停止 1,4 缸的喷油 2 禁用闭环燃油控制
Emergency Control Plan	1 Disable Oil Injection of Cylinder 1 and 4 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0352-00
故障类型描述	2, 3 号点火线路故障
Fault Path Type Description	Ignition Coil “B” Primary/ Secondary Circuit
故障发生的可 能原因	1 点火线圈与 ECM 之间的点火 控制线路发生短路或断路故障 2 连接不良 3 点火线圈损坏
Potential Causes	1 Fire Control Circuit with Ignition Coil Circuit or Break 2 Poor contact 3 Damage of Ignition Coil
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	2,3 缸的点火线路对电源或对地短路、 断路
Fault Criteria	Ignition Line of Cylinder 2 and 3 Circuit or Break
应急控制方案	1 停止 2,3 缸的喷油 2 禁用闭环燃油控制
Emergency Control Plan	1 Stop Oil Injection of Cylinder 2 and 3 2 Disable Closed-loop Fuel Oil Control

故障码 P-Code	P0459-00
故障类型描述	碳罐电磁阀线路短路到高电压
Fault Path Type Description	Evaporative Emission System Purge Control Valve Circuit High
故障发生的可 能原因	1 碳罐电磁阀与 ECM 之间的控 制线路发生短路到 12V 电源故 障 2 碳罐电磁阀接插件接触不良 3 发动机线束与 ECM 碳罐电磁 阀线路频脚接触不良
Potential Causes	1 Control Circuit with Carbon Solenoid Circuit to 12V 2 Carbon Tank Inserts Bad Contact 3 Solenoid Circuit Feet with Engine Harness Bad Contact
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到碳罐电磁阀线路短路到 12V 高电压
Fault Criteria	Carbon Tank Solenoid Circuit to 12V High Voltage
应急控制方案	禁止此路输出
Emergency Control Plan	Disable Circuit Output

故障码 P-Code	P0420-00
故障类型描述	催化转化器转化效率低
Fault Path Type Description	Catalyst System Efficiency Below Threshold (Bank 1)
故障发生的可 能原因	催化器性能劣化
Potential Causes	Catalyst Performance Low
检测启动条件	1 无 MAP 传感器、冷却液温度传感器、TPS 传感器、冷却系统、氧传感器、燃油修正、车速传感器、喷油器、失火、曲轴位置传感器、凸轮轴位置传感器、点火系统、怠速控制、系统电压等相关故障码 2 冷却液温度高于 70° C 3 发动机运转时间大于 440 秒 4 燃油系统处于闭环、车辆匀速行驶一定距离后停车怠速运行
Detect Starting Conditions	1 No relevant fault codes of MAP sensor, coolant temperature sensor, TPS sensor, cooling system, oxygen sensor, fuel oil correction, vehicle speed sensor, oil sprayer, Fire, crankshaft position sensor, camshaft position sensor, ignition system, idle control system, system voltage 2 Coolant is over 70° C 3 Engine rotates for more than 440s 4 Fuel oil system at Closed-loop and the vehicle idles after traveling for a distance at a constant speed
故障判定标准	系统通过比较前后氧传感器信号，计算催化转化器的储氧时间，当加权储氧时间小于设定的阈值时，系统报此故障
Fault criteria	System will calculate the oxygen saving time for catalytic converter by comparing front and rear oxygen sensors signals and when the weighted oxygen saving time is lower than the threshold value, system alarms

故障码 P-Code	P0480-00
故障类型描述	低速风扇故障
Fault Path Type Description	Fan 1 Control Circuit
故障发生的可能原因	风扇与 ECM 之间的控制电路对电源或对地短路、断路
Potential Causes	Control Circuit with Fan Circuit or break
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到控制线路对电源或对地短路、断路
Fault Criteria	Control Short Circuit to Power Supply or Break
应急控制方案	当冷却液温度过高时，开启高速风扇
Emergency Control Plan	Coolant Over Temperature, Start High-speed Fan

故障码 P-Code	P0481-00
故障类型描述	高速风扇故障
Fault Path Type Description	Fan 2 Control Circuit
故障发生的可能原因	风扇与 ECM 之间的控制电路对电源或对地短路、断路
Potential Causes	Fan Short Circuit or Open Circuit
检测启动条件	发动机运转中
Detect Starting Conditions	Engine Operating
故障判定标准	ECM 监测到线路对电源或对地短路、断路
Fault Criteria	Line Short Circuit, Open Circuit

故障码 P-Code	P0504-00
故障类型描述	制动开关相关性故障
Fault Path Type Description	Brake Switch “A” /” B” Correlation
故障发生的可 能原因	1 线束不良 2 刹车开关卡住
Potential Causes	1 Bad Harness 2 Brake Switch Stuck
检测启动条件	发动机运转
Detect Starting Conditions	Engine Operates
故障判定标准	两路刹车开关指示的刹车踏板状态不一致
Fault Criteria	Inconsistent Display of Pedal Statuses on Two Brake Switch Indicators

故障码 P-Code	P0562-00
故障类型描述	系统电压过低
Fault Path Type Description	System Voltage Low
故障发生的可 能原因	1 充电系统故障 2 连接不良 3 ECM 内部损坏
Potential Causes	1 Charging System Failure 2 Poor contact 3 Internal damage
检测启动条件	发动机运转
Detect Starting Conditions	Engine Operates
故障判定标准	系统电压低于 11 伏
Fault Criteria	System voltage is lower than 11V

故障码 P-Code	P0506-00
故障类型描述	怠速转速过低
Fault Path Type Description	Idle Air Control System RPM Lower Than Expected
故障发生的可能原因	1 怠速控制线路故障 2 ETC 故障 3 点火系统故障
Potential Causes	1 Idling Control Circuit Fails 2 ETC Failure 3 IGN System Fails
检测启动条件	1 无 MAP 传感器、冷却液温度 传感器、TPS 传感器、冷却系 统、氧传感器、燃油修正、车 速传感器、喷油器、失火、曲 轴位置传感器、凸轮轴位置传 感器、点火系统等相关故障码 2 碳罐燃油浓度小于 100% 3 大气压力大于 72KPa 4 发动机运转时间大于 60 秒 5 进气温度大于 -20 ℃ 6 冷却液温度大于 60 ℃ 7 歧管进气压力小于 60KPa 8 电瓶电压大于 11V，小于 16V
Detect Starting Conditions	1 No relevant fault codes of MAP sensor, coolant temperature sensor, TPS sensor, cooling system, oxygen sensor, fuel oil correction, vehicle speed sensor, oil sprayer, Fire, crankshaft position sensor, camshaft position sensor and ignition system 2 Carton Tank Is less than 100% rich 3 Barometric Pressure is larger than 72KPa 4 Engine running time is more than 60s 5 Air Intake Temperature is larger than -20 ℃ 6 Coolant is above 60 ℃ 7 Manifold intake air pressure is less than 60KPa 8 Storage battery is between 11V and 16V
故障判定标准	发动机转速低于怠速目标转速 100rpm 以上
Fault criteria	Engine speed is more than 100rpm lower than target idling speed
应急控制方案	禁用怠速调整
Emergency Control Plan	Disable idle adjustment.

故障码 P-Code	P0507-00	
故障类型描述	怠速转速过高	
Fault Path Type Description	Idle Air Control System RPM Higher Than Expected	
故障发生的可 能原因 Potential Causes	1 ETC 与 ECM 之间的线路故障 2 ETC 故障 3 点火系统故障 4 真空泄漏	1 Circuit with ETC Fails 2 ETC Failure 3 IGN System Fails 4 Vacuum leak
检测启动条件 Detect Starting Conditions	1 无 MAP 传感器、冷却液温度 传感 器、TPS 传感器、冷却系 统、氧传 感器、燃油修正、车 速传感器、喷 油器、失火、曲 轴位置传感器、凸 轮轴位置传 感器、点火系统等相关 故障码 2 发动机运转 3 冷却液温度高于 60 ° C 4 碳罐燃油浓度小于 100% 5 大气压力大于 72KPa 6 发动机运转时间大于 60 秒 7 进气温度大于 -20 °C 8 冷却液温度大于 60 °C 9 进气歧管压力大于 22KPa 10 电瓶电压大于 11V，小于 16V	1 No relevant fault codes of MAP sensor, coolant temperature sensor, TPS sensor, cooling system, oxygen sensor, fuel oil correction, vehicle speed sensor, oil sprayer, Fire, crankshaft position sensor, camshaft position sensor and ignition system 2 Engine Operates 3 Coolant is over 60 ° C 4 Carbon Fuel Oil is less than 100% Rich 5 Barometric pressure above 72KPa 6 Engine running time is more than 60s 7 Air Intake Temperature is larger than -20 °C 8 Coolant is above 60 °C 9 Intake Manifold Pressure is less than 22KPa 10 Storage battery is between 11V and 16V
故障判定标准	发动机转速高于怠速目标转速 200rpm 以上	
Fault criteria	Engine speed is 200 rpm higher than idle target speed	
应急控制方案	禁用怠速调整	
Emergency Control Plan	Disable idle adjustment	

故障码 P-Code	P0563-00
故障类型描述	系统电压过高
Fault Path Type Description	System Voltage High
故障发生的可 能原因	1 充电系统故障 2 连接不良 3 线束对地短路或者断路 4 ECM 内部损坏
Potential Causes	1 Charging System Failure 2 Poor contact 3 Harnesses Circuit or Open Circuit 4 Internal damage
检测启动条件	发动机运转
Detect Starting Conditions	Engine Operates
故障判定标准	系统电压高于 16 伏
Fault Criteria	System Voltage is higher than 16V

故障码 P-Code	P0571-00
故障类型描述	制动时制动灯的开关状态没有发生改变
Fault Path Type Description	Brake Switch “A” Circuit
故障发生的可 能原因	制动踏板与制动灯之间线路断路
Potential Causes	Line between brake pedal and lamp breaks
检测启动条件	1 车速大于 20km/h，且持续 1 秒 以上 2 监测到车辆减速度大于 6m/ S2，且使得车速低于 3km/h
Detect Starting Conditions	1 Vehicle speed is above 20km/h and lasts for 1s above 2 Vehicle Speed is larger than 6m/S2 and slow it down to 3km/h
故障判定标准	在一定时间内 ECM 监测制动踏板状 态没有变化
Fault Criteria	Brake status no change within a period
应急控制方案	不能进行巡航控制
Emergency Control Plan	Unable to cruise control

故障码 P-Code	P0602-00
故障类型描述	ECM 编程错误 (软件版本不匹配)
Fault Path Type Description	Control Module Programming Error(select this one)
故障发生的可 能原因	ECM 内部程序的标定程序与应用程 序不匹配
Potential Causes	Calibrated documents inside of ECM fail to match application program
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	ECM 检测到标定文件与程序文件不匹 配
Fault Criteria	Calibrated documents fail to match program files
应急控制方案	ECM 不能运行
Emergency Control Plan	ECM unable to operate

故障码 P-Code	P0606-00
故障类型描述	ECM 处理器故障
Fault Path Type Description	ECM/PCM Processor(22.1/80)
故障发生的可 能原因	1 主处理器故障 2 ECM 内部时钟故障 3 ECM 看门狗故障
Potential Causes	1 Main Processor 2 Internal Clock 3 Watchdog
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	ECM 检测到主处理器功能模块出现故 障
Fault Criteria	Main Processor Functional Module
应急控制方案	发动机停机
Emergency Control Plan	Engine Stop

故障码 P-Code	P060A-00
故障类型描述	ECM 处理器故障
Fault Path Type Description	Internal Control Module Monitoring Processor Performance
故障发生的可 能原因	1 主处理器安全监测出现故障 2 主控制器安全监测应答机制出 现故障 3 主控制器安全监测通讯出现故 障
Potential Causes	1 Main processor security 2 Response Mechanism of security monitoring on main controller 3 Communication fault of main controller security monitoring
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	ECM 检测到安全监测逻辑出现故障
Fault Criteria	Security Monitoring Logic Failure
应急控制方案	发动机停机
Emergency Control Plan	Engine Stop

故障码 P-Code	P0616-00
故障类型描述	起动电机继电器低电压
Fault Path Type Description	Starter Relay Circuit Low
故障发生的可 能原因	起动电机继电器低电压
Potential Causes	Starter Motor Relay Voltage Low
检测启动条件	发动机运转
Detect Starting Conditions	Engine Operates
故障判定标准	系统检测到起动电机继电器持续低电 压
Fault Criteria	Starter Motor Relay Continue Low Voltage

故障码 P-Code	P0617-00
故障类型描述	起动电机继电器高电压
Fault Path Type Description	Starter Relay Circuit High
故障发生的可 能原因	起动电机继电器高电压
Potential Causes	Starter Motor Relay Voltage High
检测启动条件	发动机运转
Detect Starting Conditions	Engine Operates
故障判定标准	系统检测到起动电机继电器持续高电压
Fault Criteria	Starter Motor Relay High Voltage

故障码 P-Code	P0641-00
故障类型描述	ETC 参考电压 A# 幅值故障
Fault Path Type Description	Sensor Reference Voltage “A” Circuit/Open
故障发生的可 能原因	5V 参考电压 A 电路被短路
Potential Causes	5V Reference Voltage Circuit-A Circuit
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	传感器供电的 5V 参考电压 A 电压高于 5.5V 或者低于 4.5V 的时间超过 500ms 秒
Fault Criteria	Time for 5V Reference Voltage A exceeding 5.5V or lower than 4.5V is more than 500ms
应急控制方案	电子节气门工作在保护模式，从而发动机工作在跛行模式，发动机输出的扭矩将会被限制
Emergency control plan	Throttle works in Protect mode and engine works in limp. Output torque of engine will be limited

故障码 P-Code	P0633-00
故障类型描述	防盗器未学习故障
Fault Path Type Description	Immobilizer Key Not Programmed - ECM/PCM
故障发生的可能原因	ECM 内没有存入相应的 PIN 码与 SK 码；学习以后直接拔蓄电池
Potential Causes	ECM don't have into the corresponding PIN code and SK code;After learning directly pull the battery
检测启动条件	IGN 状态由 OFF 变成 ON
Detect Starting Conditions	IGN shifts from OFF to ON
故障判定标准	ECM 未进行防盗的学习
Fault Criteria	ECM not learns guards against theft
应急控制方案	油泵喷油停止工作，发动机不能启动；如果控制启动电机，启动电机不能工作
Emergency control plan	Oil pump stops working and engine won't start; if control starting dynamo, the starting dynamo won't work

故障码 P-Code	P0646-00
故障类型描述	空调离合器继电器线路短路到低电压或断路
Fault Path Type Description	A/C Clutch Relay Control Circuit Low
故障发生的可能原因	1 空调离合器继电器与 ECM 之间的控制线路发生短路到地故障 2 继电器接触不良或损坏
Potential Causes	1 Line with Air conditioner Clutch Short Circuit to Earth 2 Relay Bad Contact or Damage
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到空调离合器继电器线路短路到地或者断路
Fault Criteria	A/C Clutch Relay Short Circuit/Open
应急控制方案	禁止空调空调离合器继电器驱动
Emergency Control Plan	Disable A/C Clutch Relay Drive

故障码 P-Code	P0647-00
故障类型描述	空调离合器继电器线路短路到高电压
Fault Path Type Description	A/C Clutch Relay Control Circuit High
故障发生的可 能原因	1 空调离合器继电器与 ECM 之 间的控制线路发生短路到高电 压故障 2 继电器接触不良或损坏
Potential Causes	1 A/C Clutch Relay Control Circuit High 2 Relay Bad Contact or Damage
检测启动条件	1 发动机运转时间 >0.5 秒 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Engine runs longer than 0.5s 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到空调离合器继电器线路短 路到 12V 电压
Fault Criteria	A/C Clutch Relay Circuit 12 V
应急控制方案	禁止空调空调离合器继电器驱动
Emergency Control Plan	Disable A/C Clutch Relay Drive

故障码 P-Code	P0651-00
故障类型描述	ETC 参考电压 B# 幅值故障
Fault Path Type Description	Sensor Reference Voltage “B” Circuit/Open
故障发生的可 能原因	1 5V 参考电压 B 电路被短路 2 强烈的外界电磁干扰 3 ECM 内部 5V 参考电压 B 电源 电路受损
Potential Causes	1 5v Reference Voltage B Circuit 2 Strong EMI from Outside 3 Internal 5V Reference Voltage "B" Circuit Damage
检测启动条件	控制器上电
Detect Starting Conditions	Controller power on
故障判定标准	传感器供电的 5V 参考电压 B 电压高 于 5.5V 或者低于 4.5V 的时间超过 500ms 秒
Fault Criteria	Duration for 5V reference Voltage B higher than 5.5V or lower than 4.5V exceeds 500ms
应急控制方案	电子节气门工作在保护模式，从而发 动机工作在跛行模式，发动机输出的 扭矩将会被限制
Emergency Control Plan	Throttle works in Protect mode and engine works in limp. Output torque of engine will be limited

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故障码 P-Code	P0685-00
故障类型描述	主继电器故障
Fault Path Type Description	ECM/PCM Power Relay Control Circuit/Open
故障发生的可能原因	主继电器接触不良或者损坏
Potential Causes	Main Relay Bad Contact or Damage
检测启动条件	1 点火开关钥匙在 ON 位置，或者发动机处于运转状态 2 系统电压大于 11V 且低于 16V
Detect Starting Conditions	1 Ignition Switch Key at On or Engine is Operating 2 System voltage is more than 11v while less than 16v
故障判定标准	ECM 监测到主继电器供电的装置失效的情况大于一定数量
Fault criteria	Failure Counts of Main Relay Power Supply Mechanism exceeds a number

故障码 P-Code	P0831-00
故障类型描述	离合器开关线路信号常低 (短接到电源或断路)
Fault Path Type Description	Clutch Pedal Switch “A” Circuit Low
故障发生的可能原因	线束不良；离合器开关卡住
Potential Causes	Bad Harness; Clutch Switch Stuck
检测启动条件	控制器上电
Detect Starting Conditions	Controller power on
故障判定标准	系统检测到离合器的位置一直卡在低位长时间没有变化
Fault Criteria	Clutch Position Stuck Low with no change in length and time

故障码 P-Code	P0832-00
故障类型描述	离合器开关线路信号常高 (短接到地)
Fault Path Type Description	Clutch Pedal Switch “A” Circuit High
故障发生的可 能原因	线束不良；离合器开关故障
Potential Causes	Bad Harness; Clutch Switch Failure
检测启动条件	控制器上电
Detect Starting Conditions	Controller power on
故障判定标准	系统检测到离合器的位置一直卡在高 位长时间没有变化
Fault Criteria	Clutch Position Stuck High with no change in length and time

故障码 P-Code	P1336-00
故障类型描述	58 齿齿轮误差未学习
Fault Path Type Description	Crankshaft Position System Variation Not Learned
故障发生的可 能原因	车辆尚未执行齿讯学习程序
Potential Causes	Vehicle Not Execute Teeth Learning
检测启动条件	1 无冷却液温度传感器、节气门 位置传感器、曲轴位置传感 器、凸轮轴位置传感器、车速 传感器、喷油器、点火系统等 相关故障码 2 冷却液温度大于 60 ℃ 3 发动机运转时间大于 10 秒
Detect Starting Conditions	1 No relevant fault codes of coolant temperature sensor, crankshaft position sensor, camshaft position sensor, Vehicle speed, sensor, oil 2 Coolant is over 60 ℃ 3 Engine running for more than 10s
故障判定标准	齿讯学习标志位未被置位
Fault Criteria	Teeth Learning Sign Not Placed

故障码 P-Code	P1167-00
故障类型描述	前氧减速断油时过浓
Fault Path Type Description	Too thick of oxygen sensor deceleration broken fuel
故障发生的可 能原因	1 氧传感器与 ECM 之间的线路 对电源短路 2 燃油压力过高 3 喷油器泄漏 4 燃油压力调节器损坏
Potential Causes	1 Circuit between oxygen sensor and ECM is short circuit to power supply 2 Overpressure of fuel oil 3 Oil sprayer leak 4 Damage of fuel oil pressure regulator
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P0172、喷油器、失火、曲轴位置传感器、点火系 统、怠速控制系统、碳罐清洗 电路等相关故障码 2 发 动 机 进 入 减 速 断 油 （DFCO）工况 3 冷却液温大于 70 ℃ 4 发动机运转时间大于 60 秒
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, PO172, oil sprayer, Fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit 2 Engine Enters DFCO 3 Coolant is higher than 70 ℃ 4 Engine running time is more than 60s
故障判定标准	ECM 监测到氧传感器信号电压高于 0.55 伏
Fault criteria	Oxygen Sensor Signal Voltage Higher Than 0.55V
应急控制方案	停止闭环燃油控制
Emergency Control Plan	Stop closed-loop fuel oil control

故障码 P-Code	P1171-00		
故障类型描述 Fault Path Type Description	前氧加速加浓时过稀		Too thin of oxygen sensor deceleration broken fuel
故障发生的可能原因	1 氧传感器与 ECM 之间的线路对地短路 2 油泵、供油管路或喷油器阻塞 造成的喷油量不足 3 燃油压力调节器损坏 4 ECM 至发动机机体的接地不良 5 进气真空泄漏 6 排气管路漏气 7 燃油污染		
Potential Causes	1 Short circuit of oxygen sensor with ECM to earth 2 Insufficient amount of oil injected resulting from oil pump, oil supply pipe or oil sprayer blockage 3 Damage of fuel oil pressure regulator 4 Bad contact of ECM with engine body 5 Intake vacuum leakage 6 Exhaust pipe leak 7 Fuel oil contamination		
检测启动条件	1 无 P0106、MAP 传感器、CTS 传感器、TPS 传感器、P0171、P0172、喷油器、失火、曲轴位置传感器、点火系 统、怠速控制系统、碳罐清洗 电路等相关故障码 2 发动机进入功率加浓（PE）工况 3 水温大于 70 ℃ 4 发动机运转时间大于 60 秒 5 空燃比小于 13.5		
Detect Starting Conditions	1 No relevant fault codes of P0106, MAP sensor, CTS sensor, TPS sensor, PO171, PO172, oil sprayer, Fire, crankshaft position sensor, ignition system, idle control system, carbon tank cleaning circuit 2 Engine Enters PE 3 Water Temperature is over 70 ℃ 4 Engine running time is more than 60s 5 Air-fuel Ratio is lower than 13.5		
故障判定标准	氧传感器信号电压低于 0.35 伏		
Fault criteria	Oxygen Sensor Signal Voltage is lower than 0.35V		
应急控制方案	停止闭环燃油控制		
Emergency Control Plan	Stop closed-loop fuel oil control		

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故障码 P-Code	P1502-00		
故障类型描述	车速信号源故障 （车速信号通过 CAN 来自 TCM/ABS/ESP）		
Fault Path Type Description	Manufacturer Controlled DTC		
故障发生的可 能原因	Potential Causes	线束断开	Harness Disconnected
检测启动条件	1 发动机运转 2 系统电压大于 11V 且低于 16V 3 水温大于 60 摄氏度 4 无进气压力传感器、水温传感 器、电子节气门位置传感器、喷油器、点火线圈及失火故障		
Detect Starting Conditions	1 Engine Operates 2 System Voltage is larger than 11V and lower than 16V 3 Water is larger than 60 ℃ 4 No faults of air intake pressure sensor, water temperature sensor, oil sprayer, ignition coil or fire		
故障判定标准	1 减速模式 a. 进气压力补偿值 < = 22kPa、发动 机转速 >1600rpm 且 <6500rpm、电 子节气门位置 <0.8%，发动机转速波 动 <75rpm b. 车速小于 5km/h 大于 7.5 秒 2 加速模式 a. 进气压力补偿值 >60kPa、发动机 转速 >1600rpm 且 <4500rpm、电子 节气门位置 <70% 且 >20% b. 车速小于 5km/h 大于 45 秒 （由于 零部件诊断还没有完成，上述的转速 以及节气门位置等 参数可能与最终发 放标定不一致，请知悉）		
Fault criteria	1 DCEL modes a.Air intake compensation value < = 22kPa; 1600rpm < Engine speed <6500rpm; Throttle <0.8%; Engine Speed fluctuation <75rpm b.Vehicle speed is less than 5km/h but larger than 7.5s 2 Accel mode a.Air intake compensation value >60kPa; 1600rpm< Engine speed <4500rpm; 20% < Throttle Position <70% b.Vehicle speed is less than 5km/h and larger than 45s. (Since parts diagnosis have finished yet, so we keep you aware that rotation speed, throttle position and other parameters above said may be inconsistent with final calibration values)		
应急控制方案	车速输出为默认值		
Emergency Control Plan	Vehicle output as default		

故障码 P-Code	P1516-00
故障类型描述	ETC 驱动稳态诊断错误
Fault Path Type Description	Manufacturer controlled vehicle speed, idle control, and auxiliary inputs
故障发生的可 能原因	1 强烈的外界电磁干扰 2 电子节气门被异物卡住（即使时间很短） 3 电子节气门驱动不正常（即使时间很短）
Potential Causes	1 Strong EMI from Outside 2 Throttle Valve Stuck (even if for a short time) 3 Throttle Valve Drive abnormal (even if for a short time)
检测启动条件	1 控制器上电 2 节气门开度波动值小于 5% 并稳定至少 1 秒钟
Detect Starting Conditions	1 Controller power on 2 Throttle percentage is less than 5% and stable for at least 1s
故障判定标准	节气门开度实际值和预估值之间的差别（绝对值）超过一定值（20%），并且这种状态持续时间超过 300ms
Fault Criteria	Difference between actual and predicated throttle percentages exceeds a set value (20%) and lasts for more than 300ms
应急控制方案	电子节气门工作在保护模式，从而发动机工作在跛行模式，发动机输出的扭矩将会被限制
Emergency Control Plan	Throttle works in Protect mode and engine works in limp. Output torque of engine will be limited

故障码 P-Code	P2101-00
故障类型描述	ETC 驱动二阶诊断错误
Fault Path Type Description	Throttle Actuator Control Motor Circuit Range/Performance
故障发生的可 能原因	1 强烈的外界电磁干扰 2 电子节气门被异物卡住（即使时间很短） 3 两路节气门位置信号线路接反 4 两路节气门阀片驱动线路接反 5 电子节气门驱动不正常（即使时间很短）
Potential Causes	1 Strong EMI from Outside 2 Throttle valve stuck (even of for a short time) 3 Two throttle valve positions signals reversed 4 Two throttle valve plates drive reversed 5 Throttle valve drive incorrect (even if for a short time)
检测启动条件	控制器上电
Detect Starting Conditions	Controller power on
故障判定标准	节气门开度实际值和预估值之间的差别（绝对值）超过一定值（5%），并且这种状态持续时间超过 240ms
Fault Criteria	Difference between actual and predicated throttle percentages exceeds a set value (20%) and lasts for more than 300ms
应急控制方案	电子节气门工作在保护模式，从而发动机工作在跛行模式，发动机输出的扭矩将会被限制
Emergency Control Plan	Throttle works in Protect mode and engine works in limp. Output torque of engine will be limited

故障码 P-Code	P2104-00
故障类型描述	发动机强制怠速
Fault Path Type Description	Throttle Actuator Control System - Forced Idle
故障发生的可能原因	1 踏板位置传感器 1 短路，断路 2 踏板位置传感器 2 短路，断路 3 踏板位置传感器 1 和踏板位置 传感器 2 显示的位置不匹配（两路输入的相关性校验故障）
Potential Causes	1 Pedal Position Sensor 1 Circuit/Open 2 Pedal Position Sensor 2 Circuit/Open 3 Pedal Position Sensor 1 and 2 Not Matched (Two-way Input Correlation Check Failure)
检测启动条件	控制器上电
Detect Starting Conditions	Controller power on
故障判定标准	当检测到如下故障中的两个或更多个 时时判定此故障： a. 踏板位置传感器 1 短路，或者断路 b. 踏板位置传感器 2 短路，或者断路 c. 节气门传感器 1 和踏板位置传感器 2 显示的位置不匹配 （两路输入的相关性校验故障） d. 节气门传感器 1 短路，或者断路 e. 节气门传感器 2 短路，或者断路 f. 节气门传感器 1 和踏板位置传感器 2 显示的位置不匹配 （两路输入的相关性校验故障）
Fault criteria	Determine the fault once detect two or two more of faults: a.Pedal Position Sensor 1 Circuit/Open b.Pedal Position Sensor 2 Circuit/Open c.Throttle Sensor 1 and pedal position sensor 2 Not Matched (Two-way Input Correlation Check Failure) d.Throttle Sensor 1 Circuit/Open e.Throttle Sensor 2 Circuit/Open f.Throttle Sensor 1 and pedal position sensor 2 Not Matched (Two-way Input Correlation Check Failure)
应急控制方案	1 电子节气门工作在保护模式，从而发动机工作在跛行模式，发动机输出的扭矩将会被限制 2 发动机不响应油门踏板信号，发动机只能工作在 800rpm 左右的怠速状态 （包括空档怠速和在挡蠕动）， 小心的挂上档位汽车可以以极低的速度蠕动，由于车速很低并且发动机发出的功率很小，这种情况下很难跛行回家
Emergency Control Plan	1 Throttle Works in Protect Mode and Engine Works Limp Mode. Output Torque Will Be Limited 2 Engine makes no response to accelerator pedal signal; engine has to work at 800rpm (idling, including neutral idle, gear creep). Take care to shift gear and creep at an extremely slow speed. Because of low speed and small power, it's hard to limp home

故障码 P-Code	P2105-00
故障类型描述	发动机强制停机
Fault Path Type Description	Throttle Actuator Control System - Forced Engine Shutdown
故障发生的可 能原因	此故障为极为严重的故障，发生此故 障时， 需要检查下面多个故障同时存 在的可能性： a. 节气门驱动故障 b. MAP 传感器故障 c. 节气门传感器故障 d. 极为强烈的外界电磁
Potential Causes	Since it is classified as serious fault, check the presence of following faults: a.Throttle valve drive b. MAP Sensor c.Throttle valve sensor d.Strong external EM
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	当同时检测到如下故障时判定此故 障： a.MAP 传感器故障 b. 气门传感器故障或者节气门驱动故 障
Fault Criteria	Determine the failure once detect the two faults: a.MAP sensor b.Throttle sensor or drive
应急控制方案	ECM 切断喷油点火，关闭对电子节 气门的控制，发动机立即熄火
Emergency Control Plan	Disconnect oil injection and close control of throttle. Engine will shut down immediately

故障码 P-Code	P2119-00
故障类型描述	电子节气门回位过慢故障
Fault Path Type Description	Throttle Actuator Control Throttle Body Range/Performance
故障发生的可 能原因	1 电子节气门回位弹簧故障 2 电子节气门阀片被异物卡住
Potential Causes	1 Throttle Return Spring Fault Failure 2 Throttle Valve Stuck
检测启动条件	点火开关关闭
Detect Starting Conditions	IGN Switch Close
故障判定标准	1 电子节气门默认位置在10%~ 34% 之间 2 节气门回到默认位置的时间大 于某一定值 （如 1 秒钟）
Fault Criteria	1 Throttle Valve at Default 10%~ 34% de 2 Throttle Valve Back to Default Position Exceeds a Constant Value (like, 1s)
应急控制方案	如果没有其他故障，发动机将工作在 正常状态，但是如果同时出现节气门 开度传感器故障或者 MAP 传感器故 障，则电子节气门会工作在保护模 式，从而发动机工作在跛行模式，发 动机输出的扭矩将会被限制
Emergency Control Plan	Without Other Faults, Engine Works in Normal Mode. When Throttle Percentage Fails or MAP Sensor Fails, It Will Enter Protect Mode and Engine Works Limp Mode. Output Torque Will Be Limited

故障码 P-Code	P2106-00
故障类型描述	发动机性能限制
Fault Path Type Description	Throttle Actuator Control System - Forced Limited Power
故障发生的可 可能原因	1 踏板位置传感器 1 短路，或者断路 2 踏板位置传感器 2 短路，或者断路 3 踏板位置传感器 1 和踏板位置传感器 2 显示的位置不匹配（两路输入的相关性校验故障） 4 强烈的外界电磁干扰
Potential Causes	1 Pedal Position Sensor 1 Circuit/Open 2 Pedal Position Sensor 2 Circuit/Open 3 Pedal Position Sensor 1 and 2 Not Matched (Two-way Input Correlation Check Failure) 4 Strong EMI from Outside
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	当检测到如下故障时判定此故障： a. 踏板位置传感器 1 短路，或者断路 b. 踏板位置传感器 2 短路，或者断路 c. 踏板位置传感器 1 和踏板位置传感器 2 显示的位置不匹配（两路输入的相关性校验故障）
Fault criteria	Determine the fault once detect the following faults: a.Pedal Position Sensor 1 Circuit/Open b.Pedal Position Sensor 2 Circuit/Open c.Pedal Position Sensor 1 and 2 Not Matched (Two-way Input Correlation Check Failure)
应急控制方案	1 电子节气门工作在保护模式，从而发动机工作在跛行模式，发动机输出的扭矩将会被限制 2 如果没有其他故障，车辆的最大扭矩会限制住，但是可以跟随正常的车流以及跛行回家
Emergency Control Plan	1 Throttle Will Enter Protect Mode and Engine Works Limp Mode. Output Torque Will Be Limited 2 Without Other Sensor Faults, Max Torque Restrained but Still Limp Home by Following Normal Traffic

故障码 P-Code	P2110-00
故障类型描述	发动机功率管理
Fault Path Type Description	Throttle Actuator Control System - Forced Limited RPM
故障发生的可 能原因	1 节气门传感器 1 短路，或者断路 2 节气门传感器 2 短路，或者断路 3 强烈的外界电磁干扰
Potential Causes	1 Throttle Sensor 1 Circuit/Open 2 Throttle Sensor 2 Circuit/Open 3 Strong EMI from Outside
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	当检测到如下故障时判定此故障： a. 节气门传感器 1 短路，或者断路 b. 节气门传感器 2 短路，或者断路（验故障）
Fault criteria	Determine the failure once detect the two faults: a.Throttle Sensor 1 Circuit/Open b.Throttle Sensor 2 Circuit/Open
应急控制方案	1 电子节气门工作在保护模式，从而发动机工作在跛行模式，发动机输出的扭矩将会被限制 2 怠速时，发动机输出波动比较明显，该模式保证汽车勉强可以驾驶，但难以控制在正常的交通车流中驾驶或爬陡坡
Emergency Control Plan	1 Throttle Will Enter Protect Mode and Engine Works Limp Mode. Output Torque Will Be Limited 2 At idle, Engine output fluctuation is obvious which makes sure vehicle barely drivable but hard to control it in normal traffic or climb steep slopes

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故障码 P-Code	P2122-00
故障类型描述	电子油门踏板位置传感器 1# 线路低电压
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “D” Circuit Low
故障发生的可能原因	1 APS 传感器线路 1 与 ECM 之间的线路对地短路或者断路 2 连接不良 3 APS 传感器故障
Potential Causes	1 Lines with APS sensor short circuit to earth or breaks 2 Poor contact 3 APS sensor failure
检测启动条件	发动机运行中
Detect Starting Conditions	Engine is operating
故障判定标准	ECM 监测到 APS 传感器线路 1 信号值小于 3.5%
Fault Criteria	APS Sensor Line 1 Signal Value is smaller than 3.5%

故障码 P-Code	P2123-00
故障类型描述	电子油门踏板位置传感器 1# 线路高电压
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “D” Circuit High
故障发生的可能原因	1 APS 传感器线路 1 与 ECM 之间的线路短路到 5V 电压 2 连接不良 3 APS 传感器故障
Potential Causes	1 Line with APS Sensor Line 1 Short Circuit to 5V 2 Poor contact 3 APS sensor failure
检测启动条件	发动机运行中
Detect Starting Conditions	Engine is operating
故障判定标准	ECM 监测到 APS 传感器线路 1 信号值大于 97.5%
Fault Criteria	APS Sensor Line 1 Signal Value Above 97.5%

故障码 P-Code	P2127-00
故障类型描述	电子油门踏板位置传感器 2# 线路低电压
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “E” Circuit Low
故障发生的可能原因	1 APS 传感器线路 2 与 ECM 之间的线路对地短路或者断路 2 连接不良 3 APS 传感器故障
Potential Causes	1 Lines with APS sensor 2 short circuit to earth or break 2 Poor contact 3 APS sensor failure
检测启动条件	发动机运行中
Detect Starting Conditions	Engine is operating
故障判定标准	ECM 监测到 APS 传感器线路 2 信号值小于 3.5%
Fault Criteria	APS Sensor Line 2 Signal Value Lower 3.5%

故障码 P-Code	2128-00
故障类型描述	电子油门踏板位置传感器 2# 线路高电压
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “E” Circuit High
故障发生的可能原因	1 APS 传感器线路 2 与 ECM 之间的线路短路到 5V 电压 2 连接不良 3 APS 传感器故障
Potential Causes	1 Line with APS Sensor Line 2 Short Circuit to 5V 2 Poor contact 3 APS sensor failure
检测启动条件	发动机运行中
Detect Starting Conditions	Engine is operating
故障判定标准	ECM 监测到 APS 传感器线路 2 信号值大于 97.5%
Fault Criteria	APS Sensor Line 2 Signal Value Above 97.5%

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故障码 P-Code	P2135-00
故障类型描述	电子节气门位置传感器 1#、2# 线路相关性故障
Fault Path Type Description	Throttle/Pedal Position Sensor/Switch “A” / “B” Voltage Correlation
故障发生的可 能原因	1 强烈的外界电磁干扰 2 节气门传感器 1,2 线路连接不良 3 节气门传感器故障
Potential Causes	1 Strong EMI from Outside 2 Bad Contact of Throttle Sensor Line 1 and 2 3 Throttle Sensor Fails
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	两路节气门传感器读到的电压值所代表的节气门位置之差大于一定值（12%），并且持续的时间超过 400ms
Fault Criteria	Throttle Sensor Read Out Voltage, as representative of Throttle Position Difference, exceeds a constant value (12%) and duration exceeds 400 ms
应急控制方案	无。发动机仍然工作在正常模式，但是由于此故障意味着节气门开度信号可能不正确，因此在某些工况下，可能会引起发动机转速波动加速无力等现象
Emergency Control Plan	None, Engine is in NORMAL mode. But Throttle Percentage Signal May Be Incorrect. Engine Fluctuates speed/Accelerates or Be Powerless under Some Working Conditions

故障码 P-Code	P2A01-00
故障类型描述	后氧传感器减速断油响应过慢
Fault Path Type Description	O2 Sensor Circuit Range/ Performance (Bank 1 Sensor 2)
故障发生的可 能原因	后氧传感器损坏
Potential Causes	O2 sensor damage
检测启动条件	1 发动机处于运行状态，时间大于 120s 2 没有后氧断线及后氧加热故障 3 水温大于 60 度 4 后氧加热处于稳定状态 5 后氧信号大于 650mv，且处于下降方向 6 没有进入断缸逻辑 7 进入 DFCO 工况
Detect Starting Conditions	1 Engine at working mode, more than 120s 2 No O2 Breaking or Heating Fault 3 Water is above 60 ℃ 4 O2 Heating Stable 5 O2 signal is above 650mv and at DOWN 6 No Enter Cylinder Cutoff logics 7 Enter DFCO
故障判定标准	ECM 监测到后氧信号从 550mv 降至 300mv 的时间超过 8s
Fault Criteria	Detect that O2 signal 550mv dropping to 300mv exceeds 8s

故障码 P-Code	2138-00
故障类型描述	电子油门踏板位置传感器 1#、2# 线路相关性故障
Fault Path Type Description	Throttle /Pedal Position Sensor Line 1 and 2 Failure Correlation
故障发生的可 能原因	1 强烈的外界电磁干扰 2 油门位置传感器 1,2 线路连接不良 3 油门位置传感器故障
Potential Causes	1 Strong EMI from Outside 2 Bad Contact of Throttle Position Sensor Line 1 and 2 3 Throttle Position Sensor fails
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	1 两路油门位置传感器读到的电压值所代表的节气门位置之差大于一定值（10%），或者两路油门位置传感器的最小位置学习值之差大于一定值（8%） 2 上述状态持续的时间超过 400ms
Fault criteria	1 Throttle Position Sensor Read Out Voltage, Representative of Throttles Position Difference Exceeds a Constant Value (10%); Or Difference OF Min Position Learning Values for Throttle Position Sensor Exceeds a Constant Value (8%) 2 Duration exceeds 400ms
应急控制方案	1 电子节气门工作在保护模式，从而发动机工作在跛行模式，发动机输出的扭矩将会被限制 2 如果没有其他传感器故障，车辆的最大扭矩会限制住，但是可以跟随正常的车流以及跛行回家
Emergency Control Plan	1 Throttle in Protect Mode, Engine will work in Limp-in Mode and Output Torque will be restrained 2 Without Other Sensor Faults, Max Torque Restrained but still Limp Home by following Normal Traffic

故障码 P-Code	P2187-00
故障类型描述	怠速工况燃油系统过稀
Fault Path Type Description	System Too Lean at Idle (Bank 1)
故障发生的可 能原因	1 油箱内燃油不足 2 燃油压力过低
Potential Causes	1 Insufficient Fuel in Oil Tank 2 Fuel Pressure Too Low
检测启动条件	1 发动机处于怠速状态 2 大气压力大于 72kpa 3 进气温度大于－ 7 度 4 电瓶电压大于 11V 5 怠速 BLMCELL 已学习
Detect Starting Conditions	1 Engine Idles 2 Barometric Pressure above 72kpa 3 Air intake temperature above -7 °C 4 Battery Voltage Larger than 11V 5 Idling BLMCELL learned
故障判定标准	ECM 监测到的系统燃油学习值大于 (1.4)
Fault Criteria	System Fuel Value above 1.4
应急控制方案	禁止催化器诊断
Emergency Control Plan	Disenable catalyst diagnosis

故障码 P-Code	P2188-00
故障类型描述	怠速工况燃油系统过浓
Fault Path Type Description	System Too Rich at Idle (Bank 1)
故障发生的可 能原因	1 油箱内燃油不足 2 燃油压力过低
Potential Causes	1 Insufficient Fuel in Oil Tank 2 Fuel Pressure Too Low
检测启动条件	1 发动机处于怠速状态 2 大气压力大于 72kpa 3 进气温度大于－ 7 度 4 电瓶电压大于 11V 5 怠速 BLMCELL 已学习
Detect Starting Conditions	1 Engine Idles 2 Barometric Pressure above 72kpa 3 Air intake temperature above -7 °C 4 Battery Voltage Larger than 11V 5 Idling BLMCELL learned
故障判定标准	ECM 监测到的系统燃油学习值小于 (0.7)
Fault Criteria	System Fuel Learning Value Below 0.7
应急控制方案	禁止催化器诊断
Emergency Control Plan	Disenable catalyst diagnosis

故障码 P-Code	U0001-00
故障类型描述	CAN 通讯故障 (C001)
Fault Path Type Description	High Speed CAN Communication Bus
故障发生的可 能原因	CAN 线接触不良或者断路
Potential Causes	CAN Lines Bad Contact or Break
检测启动条件	ECM 上电或者发动机运转
Detect Starting Conditions	Power on or engine rotates
故障判定标准	ECM 收不到其他 CAN 节点的信息
Fault Criteria	Not Receiving Message of other CAN Nodes
应急控制方案	采用默认信息
Emergency Control Plan	Default Setting

故障码 P-Code	U0073-00
故障类型描述	CAN 总线关闭 (C073)
Fault Path Type Description	Control Module Communication Bus Off
故障发生的可 能原因	1 CANHi 和 CAN Lo 相互短接 2 CAN Hi 短接到地 3 CAN Lo 短接到高电压
Potential Causes	1 CANHi and CAN Lo mutual circuit 2 CAN High circuit to Earth 3 CAN Low Circuit to High voltage
检测启动条件	ECM 上电或者发动机运转
Detect Starting Conditions	Power on or engine rotates
故障判定标准	CAN 通讯模块检测到总线关闭
Fault Criteria	CAN Communication Modules Detect Bus Closed
应急控制方案	采用默认信息
Emergency Control Plan	Default Setting

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故障码 P-Code	U0121-00
故障类型描述	ECM 与 ABS 控制模块通讯丢失 (C121)
Fault Path Type Description	Lost Communication With Anti-Lock Brake System (ABS) Control Module
故障发生的可能原因	CAN 线接触不良或者断路
Potential Causes	CAN Lines Bad Contact or Break
检测启动条件	ECM 上电或者发动机运转
Detect Starting Conditions	Power on or engine rotates
故障判定标准	ECM 收不到 CAN 节点 ABS 的信息
Fault Criteria	No Receiving ABS Information From CAN Node
应急控制方案	采用默认信息
Emergency Control Plan	Default Setting

故障码 P-Code	U0140-00
故障类型描述	ECM 与车身控制模块通讯丢失 (C140)
Fault Path Type Description	Lost Communication With Body Control Module
故障发生的可能原因	1 车身线束故障 2 车身控制模块 CAN 通讯故障
Potential Causes	1 Body Harness Fault 2 CAN Communication Fault With Body Control Module
检测启动条件	控制器上电
Detect Starting Conditions	Controller Powered on
故障判定标准	ECM 没有收到车身控制模块相关的 CAN 信息
Fault Criteria	No Receiving CAN information of Control Module
应急控制方案	若防盗器被集成在车身控制模块内，发动机不能启动
Emergency Control Plan	With burglar alarm assembled at control module, engine won't start

故障码 P-Code	U0151-00
故障类型描述	ECM 与气囊控制模块通讯丢失 (C151)
Fault Path Type Description	Lost Communication With Restraints Control Module
故障发生的可 能原因	CAN 线接触不良或者断路
Potential Causes	CAN Lines Bad Contact or Break
检测启动条件	ECM 上电或者发动机运转
Detect Starting Conditions	Power on or engine rotates
故障判定标准	ECM 收不到 CAN 节点 ACU 的信息
Fault Criteria	No Receiving ACU Information From CAN Node
应急控制方案	采用默认信息
Emergency Control Plan	Default Setting

故障码 P-Code	U0155-00
故障类型描述	ECM 与仪表盘控制模块模块通信丢失 (C155)
Fault Path Type Description	Lost communication with Instrument Panel Cluster control module
故障发生的可 能原因	CAN 线接触不良或者断路
Potential Causes	CAN Lines Bad Contact or Break
检测启动条件	ECM 上电或者发动机运转
Detect Starting Conditions	Power on or engine rotates
故障判定标准	ECM 收不到 CAN 节点 CLU 的信息
Fault Criteria	No Receiving CLU Information From CAN Node
应急控制方案	采用默认信息
Emergency Control Plan	Default Setting

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故障码 P-Code	U0167-00
故障类型描述	防盗器无响应 (C167)
Fault Path Type Description	Lost Communication With Vehicle Immobilizer Control Module
故障发生的可能原因	认证需要的线束和 KW 通讯线连接问题
Potential Causes	Authenticate harness and KW communications
检测启动条件	IGN 状态由 OFF 变为 ON， ECM 学习过防盗
Detect Starting Conditions	IGN shifts from OFF to ON, ECM learns guards against theft
故障判定标准	IGN on 之后 ,ECM 请求发起认证后，在标定时间内防盗器响应
Fault Criteria	After IGN on, ECM requests authentication and burglar alarm will respond to it within nominal time
应急控制方案	油泵喷油停止工作，发动机不能启动；如果控制启动电机，启动电机不能工作
Emergency Control Plan	Oil pump stops working and engine won't start; if control starting dynamo, the starting dynamo won't work

故障码 P-Code	U0426-00
故障类型描述	防盗器认证失败 (C426)
Fault Path Type Description	Lost Communication With Vehicle Immobilizer Control Module
故障发生的可能原因	防盗器与 ECM 的 PIN/secret key 不匹配
Potential Causes	Burglar alarm is not match to ECM PIN/secret key
检测启动条件	IGN 状态由 OFF 变成 ON， ECM 学习过防盗
Detect Starting Conditions	IGN shifts from OFF to ON, ECM learns guards against theft
故障判定标准	油泵喷油停止工作，发动机不能启动；如果控制启动电机，启动电机不能工作
Fault Criteria	Oil pump stops working and engine won't start; if control starting dynamo, the starting dynamo won't work
应急控制方案	发动机不能启动；若为 stall 状态，则切断喷油
Emergency Control Plan	Engine won't start; In case in Stall mode, disconnect oil injection