

潍柴动力国 III 柴油机 闪码表

说明

1. 本手册仅针对国三柴油机电控方面的故障，机械方面的故障可以按照国二方法解决。
2. 国三系列柴油机采用电控系统，与采用机械泵时有本质区别，需要采用专用的诊断工具。
3. 潍柴动力国三系列柴油机采用 bosch 公司的第二代共轨系统。共轨系统对油路（包括低压油路和高压油路）要求较高，很多问题都是由油路问题引起的；其次，整车线束问题也是主要的故障源。
4. 闪码是对 ECU 错误内部错误的一个初步判断，更进一步的判断要用诊断仪。

闪码表

Blink code can be displayed in three levels of blinking.

闪码以三位的形式显示

1. First level of blinking will classify an error specific to part of a system, for e.g. if error is because of ECU, Hydraulics, Sensors, Actuators

第一位将错误按系统分类，比如说一个错误是否是由 ECU、液压部件、传感器、执行器引起的；

2. Second Level of Blinking will indicate details about component identified.

第二位表明发生错误的部件；

3. Third Level will uniquely identify the Fault Path.

第三位确定错误路径。

闪码按系统的基本分类

1	2	3	4	5
system running relative 系统运行相关	important Sensors 重要的传感器	accessary functions 附件及功能	injector & CAN message 喷油器及 CAN 通讯	external tests 外部测试
1 start relative, synconization 启动相关的同步	fuel filter 柴油粗滤器	cooling component 冷却系统	network manage 网络管理	misfire-dection 失火检测
2 start relative, components 启动相关部件	propulsion component 驱动部件	air heater 进气加热	Frame manager CAN 通讯	engine test 发动机测试
3 power supply, main relay 电源供应, 主继电器	air system component 进气系统	ErlpCD 故障灯	Frame manager CAN 通讯	
4 Bank & Chip 喷油器控制	cooling & lubrication 冷却与润滑系统	accessory button 按钮	Frame manager CAN 通讯	
5 injector system 喷射系统	rail pressure monitoring 轨压检测	EGR(not used in EIII) EGR(国三暂不用)	governor deviation 系统偏移	
6 CRS component 共轨系统部件	ECU&overrun monitoring ECU 及超速检测			

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码		
start relative	ECU Supply AD 转换器出错	Dfp_ADCMon	1	1	1
start relative		Dfp_EngMCrS1	1	1	2
start relative	Synconisation 凸轮轴转速\曲轴转速传感器错误	Dfp_EngMCaS1	1	1	3
start relative		Dfp_EngMBackUp	1	1	4
start relative	ECU 时间处理单元错误	Dfp_TPUMon	1	1	5
start relative	ECU 内部错误	Dfp_SOPTst	1	1	6
start relative	start system 启动继电器错误	Dfp_SrtCDHS	1	2	1
start relative		Dfp_SrtCDLS	1	2	1
start relative	start system T15 开关错误	Dfp_T50CD	1	2	2
start relative	start system T50 开关错误	Dfp_T15CD	1	2	3
start relative	battery 电瓶故障	Dfp_BattCD	1	2	4
start relative	start system/标定错误非单调 map 图	Dfp_FMTC_NonMonotonMap	1	2	5
start relative		Dfp_SSpMon1	1	3	1
start relative	ECU Supply ECU 内部电源出错	Dfp_SSpMon12V	1	3	1
start relative		Dfp_SSpMon2	1	3	1
start relative		Dfp_SSpMon3	1	3	1
start relative		Dfp_MnRly1_SCB	1	3	2
start relative	Main Relay 主继电器错误	Dfp_MnRly1_SCG	1	3	2
start relative		Dfp_MRlyCD	1	3	2
CRS component	轨压传感器	Dfp_RailCD	1	3	3
CRS component		Dfp_RailCDOfsTst	1	3	3
CRS component	共轨泄压阀问题	Dfp_PRVMon	1	3	4
CRS component	流量计量单元错误	Dfp_MeUnCD_ADC	1	3	5
CRS component		Dfp_MeUnCDNoLoad	1	3	5
CRS component		Dfp_MeUnCDSCBat	1	3	5

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码
CRS component		Dfp_MeUnCDSCGnd	1 3 5
Cylinder1	1 缸喷油器错误	Dfp_InjVlvCyl1A	1 4 1
Cylinder1		Dfp_InjVlvCyl1B	1 4 1
Cylinder2	2 缸喷油器错误	Dfp_InjVlvCyl2A	1 4 2
Cylinder2		Dfp_InjVlvCyl2B	1 4 2
Cylinder3	3 缸喷油器错误	Dfp_InjVlvCyl3A	1 4 3
Cylinder3		Dfp_InjVlvCyl3B	1 4 3
Cylinder4	4 缸喷油器错误	Dfp_InjVlvCyl4A	1 4 4
Cylinder4		Dfp_InjVlvCyl4B	1 4 4
Cylinder5	5 缸喷油器错误	Dfp_InjVlvCyl5A	1 4 5
Cylinder5		Dfp_InjVlvCyl5B	1 4 5
Cylinder6	6 缸喷油器错误	Dfp_InjVlvCyl6A	1 4 6
Cylinder6		Dfp_InjVlvCyl6B	1 4 6
Bank	Bank1(控制 1.2.3 喷油器)错误	Dfp_InjVlvBnk1A	1 5 1
Bank		Dfp_InjVlvBnk1B	1 5 1
Bank	Bank2(控制 4.5.6 喷油器)错误	Dfp_InjVlvBnk2A	1 5 2
Bank		Dfp_InjVlvBnk2B	1 5 2
chip	Chip(控制喷油)错误	Dfp_InjVlvChipA	1 5 3
chip		Dfp_InjVlvChipB	1 5 3
injection	最少正常工作的喷油器未达到	Dfp_InjVlvNumMinInj	1 5 4
injection	ECU 内部对喷油的限制	Dfp_InjCrv_InjLim	1 5 5
important function	Fuel Filter 油中有水	Dfp_FISys_WtDet	2 1 1
important function	propulsion 踏板传感器 1 错误	Dfp_APP1	2 2 1
important function	propulsion 踏板传感器 2 错误	Dfp_APP2	2 2 1
important function	propulsion 离合器开关错误	Dfp_ConvCD	2 2 2
important function	propulsion 制动开关错误	Dfp_BrkCD	2 2 3

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码		
important function	propulsion 油门与制动可信检测错误	Dfp_AccPedPlausBrk	2	2	5
important function	Propulsion 发动机超速	Dfp_EngPrtOvrSpd	2	2	6
important function	Propulsion 电子变速箱控制不可信	Dfp_GearbxIncMax	2	2	7
important function	propulsion 发动机控制单元内部故障	Dfp_CoVMDCSht	2	2	8
important function	Air system 进气压力传感器	Dfp_BPSCD	2	3	1
important function	Air system 大气压力传感器	Dfp_APSCD	2	3	2
important function	Air system 进气温度传感器	Dfp_IATSCD	2	3	3
important function	Cooling system 冷却水温度传感器	Dfp_CTSCD	2	4	1
important function	Cooling system 水温过高报警	Dfp_CTSCDOvrTemp	2	4	2
important function	Cooling system 机油压力传感器	Dfp_OPSCD	2	4	3
important function	Cooling system 油压太低报警	Dfp_OPSCD1	2	4	3
important function	Cooling system 机油温度传感器	Dfp_OTSCD	2	4	4
important function	Cooling system 机油温度过高报警	Dfp_OTSCD1	2	4	4
important function	Cooling system 水温传感器测试	Dfp_Clg_AbsTst	2	4	5
important function		Dfp_Clg_DynTst	2	4	5
Rail Pressure Monitoring	Rail Meun 高压油路\低压油路问题(有泄露)	Dfp_RailMeUn0	2	5	1
Rail Pressure Monitoring		Dfp_RailMeUn1	2	5	2
Rail Pressure Monitoring		Dfp_RailMeUn3	2	5	3
Rail Pressure Monitoring		Dfp_RailMeUn4	2	5	3
Rail Pressure Monitoring		Dfp_RailMeUn12	2	5	4
Rail Pressure Monitoring		Dfp_RailMeUn2	2	5	4
Rail Pressure Monitoring		Dfp_RailMeUn7	2	5	5
Rail Pressure Monitoring		Dfp_RailMeUn10	2	5	6
Rail Pressure Monitoring		Dfp_RailMeUn6	2	5	7
start relative	ECU Recovery 发动机控制单元内部故障	Dfp_HWEMonRcyLocked	2	6	1
start relative	ECU Recovery 发动机控制单元内部故障	Dfp_HWEMonRcySuppressed	2	6	1

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码		
start relative	ECU Recovery 发动机控制单元内部故障	Dfp_HWEMonRcyVisible	2	6	1
start relative	OvrMon 超速检测	Dfp_OvRMon	2	6	2
start relative		Dfp_OvRMonSigA	2	6	2
start relative	发动机控制单元内部故障	Dfp_HWEMonCom	2	6	3
start relative	ECU Monitoring 发动机控制单元内部故障	Dfp_HWEMonUMaxSupply	2	6	3
start relative	ECU Monitoring 发动机控制单元内部故障	Dfp_HWEMonUMinSupply	2	6	3
start relative	ECU Monitoring 发动机控制单元内部故障	Dfp_Montr	2	6	4
start relative	ECU Monitoring 发动机控制单元内部故障	Dfp_HWEMonEEPROM	2	6	5
accessory		Dfp_ExFICD_Max	3	1	1
accessory	Exhaust Flap 排气制动阀错误	Dfp_ExFICD_Min	3	1	1
accessory		Dfp_ExFICD_SigNpl	3	1	1
accessory	空调压缩机继电器故障	Dfp_ACCDCmpr	3	1	3
accessory		Dfp_ArHt1	3	2	1
accessory	glow system 进气加热继电器	Dfp_AirHtStickOn	3	2	2
accessory		Dfp_AirHt_Test1	3	2	3
accessory		Dfp_AirHt_Test2	3	2	3
important function		Dfp_VSSCD1	3	2	4
important function	propulsion 车速传感器故障	Dfp_VSSCD2	3	2	4
important function		Dfp_VSSCD3	3	2	4
accessory	多态开关	Dfp_MSSCD	3	2	7
accessory	系统灯	Dfp_SysLamp	3	3	1
accessory	cold start lamp 冷启动灯	Dfp_CSLPCD	3	3	2
accessory	报警灯	Dfp_Wrn	3	3	2
accessory	water in fuel lever sensor 油中有水灯	Dfp_Gen1	3	3	4
accessory	warning lamp 报警灯	Dfp_Gen3	3	3	4
accessory	巡航开关故障	Dfp_MFLvCrCtlMode	3	4	1

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码		
accessory	排气制动开关	Dfp_EBSwPreSelPlaus	3	4	2
accessory	车下启动开关错误	Dfp_ECBtCD	3	4	3
external test		Dfp_CmbChbMisfire1	5	1	1
external test	external test 1.2.3 缸失火故障	Dfp_CmbChbMisfire2	5	1	2
external test		Dfp_CmbChbMisfire3	5	1	3
external test	external test 多缸失火错误	Dfp_CmbChbMisfireMul	5	1	4
external test		Dfp_ComprTst	5	2	1
external test	external test 外部测试	Dfp_HpTst	5	2	2
external test		Dfp_RunUpTst	5	2	3
external test		Dfp_CmbChbMisfire4	5	3	1
external test	external test 4.5.6 缸失火故障	Dfp_CmbChbMisfire5	5	3	2
external test		Dfp_CmbChbMisfire6	5	3	3
external test	external test 外部测试	Dfp_ShOffTst	5	3	4
start relative	Synconisation 同步信号问题	Dfp_EngMOfsCaSCrS	5	4	1

注：当出现“ECU（控制单元）故障”时请联系办事处处理。

主机厂安装 CAN 总线以后，可能出现的闪码：（现在暂时不用）

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码		
accessory		Dfp_ACCDSwtin	3	1	3
CAN message	Network manage	Dfp_NetMngCANAOFF	4	1	1
CAN message	Network manage	Dfp_NetMngCANBOFF	4	1	2
CAN message	Network manage	Dfp_NetMngCANCOFF	4	1	3
CAN message	Communication Monitoring	Dfp_WdCom	4	1	4
CAN message	Receive timeout	Dfp_FrmMngTOEngGsFlowRt	4	1	5
CAN message	Receive timeout	Dfp_FrmMngTOHRVD	4	1	6
CAN message	Receive timeout	Dfp_FrmMngTOTimeDate	4	1	7
CAN message		Dfp_FrmMngTOTSC1AE	4	2	1
CAN message		Dfp_FrmMngTOTSC1AR	4	2	1
CAN message		Dfp_FrmMngTOTSC1DE	4	2	2
CAN message		Dfp_FrmMngTOTSC1DR	4	2	2
CAN message		Dfp_FrmMngTOTSC1PE	4	2	3
CAN message		Dfp_FrmMngTOTSC1TE	4	2	4
CAN message		Dfp_FrmMngTOTSC1TR	4	2	4
CAN message		Dfp_FrmMngTOTSC1VE	4	2	5
CAN message		Dfp_FrmMngTOTSC1VR	4	2	5
CAN message	Communication Monitoring	Dfp_FrmMngTxTO	4	3	1
CAN message	Receive timeout	Dfp_FrmMngRxEngTmp2Sens	4	3	2
CAN message	Receive timeout	Dfp_FrmMngEngGsFIRtHtr	4	3	3
CAN message	Receive timeout-no used	Dfp_FrmMngTODashDspl	4	3	4
CAN message		Dfp_FrmMngTOWSI	4	3	5
CAN message	Receive timeout	Dfp_FrmMngTOEBC1	4	4	1
CAN message	Receive timeout	Dfp_FrmMngTOERC1DR	4	4	2
CAN message	Receive timeout	Dfp_FrmMngTOETC1	4	4	3
CAN message	Receive timeout-no used	Dfp_FrmMngTORxAMCON	4	4	4

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码		
CAN message	Receive timeout-no used	Dfp_FrmMngTORxCCVS	4	4	5
CAN message	Receive timeout	Dfp_FrmMngTOTCO1	4	4	6
CAN message	Receive timeout	Dfp_FrmMngTORxEngTemp2	4	5	1
CAN message	Receive timeout	Dfp_FrmMngTOTF	4	5	2

目前国三上没有用到的功能及传感器、执行器：（现在暂时不用）

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码		
important function	Fuel Filter	Dfp_FISys_FltFoul	2	1	2
important function	Fuel Filter	Dfp_FIFCD_FltFoulMax	2	1	3
important function	Fuel Filter	Dfp_FIFCD_FltFoulMin	2	1	3
important function	Fuel Filter	Dfp_FIFCD_FltFoulNpl	2	1	3
important function	Fuel Filter	Dfp_FIFCD_WtLvlMax	2	1	4
important function	Fuel Filter	Dfp_FIFCD_WtLvlMin	2	1	4
important function	Fuel system	Dfp_FTSCD	2	1	5
important function	Fuel Filter	Dfp_FIFCD_Htg	2	1	6
important function	Air system	Dfp_AFSCD_AirTemp	2	3	4
important function	Air system	Dfp_AFSCD_PIOffsDrft	2	3	4
important function	Air system	Dfp_AFSCD_PISetyDrft	2	3	4
important function	Air system	Dfp_AFSCD_SRCAirm	2	3	4
important function	Air system	Dfp_EATSCD	2	3	5
important function	Air system	Dfp_EATSCDBET	2	3	5
important function	Air system	Dfp_EATSCDClgZn	2	3	5
important function	Air system	Dfp_EATSCDInAir	2	3	5
important function	Cooling system	Dfp_CLSCD	2	4	6
important function	Cooling system	Dfp_OLSCD	2	4	7
important function	Air system	Dfp_IAHSCD	2	3	6

System/系统	Component/部件	Dfps/错误路径	Blink Code/闪码		
accessory		Dfp_FanCD	3	1	2
accessory		Dfp_FanCD2	3	1	2
accessory		Dfp_FanCDEval	3	1	2
accessory		Dfp_ASLLCD	3	3	3
accessory		Dfp_MIL	3	3	3
accessory		Dfp_Gen2	3	3	4
accessory		Dfp_EGPpCDP3	3	4	5
not used		Dfp_CABCD	2	2	4
not used		Dfp_CRERCD_Actr	3	2	5
not used		Dfp_PSPCD_Actr	3	2	6
not used	PWM-no used	Dfp_BPACD_ADC	3	4	4
not used	PWM-no used	Dfp_BPACD_Max	3	4	4
not used	PWM-no used	Dfp_BPACD_Min	3	4	4
not used	PWM-no used	Dfp_BPACD_SigNpl	3	4	4
not used	EGR	Dfp_ECBED	3	5	1
not used	EGR	Dfp_EGRCD_Max	3	5	1
not used	EGR	Dfp_EGRCD_Min	3	5	1
not used	EGR	Dfp_EGRCD_SigNpl	3	5	1
not used	Air system-no used	Dfp_TVACD_Max	3	5	2
not used	Air system-no used	Dfp_TVACD_Min	3	5	2
not used	Air system-no used	Dfp_TVACD_SigNpl	3	5	2
not used	Governor deviation-not used	Dfp_AirCtlGvnrdvtMax	4	5	3
not used	Governor deviation-not used	Dfp_AirCtlGvnrdvtMin	4	5	3
not used	Governor deviation-not used	Dfp_PCRGVnrdvtMax	4	5	4
not used	Governor deviation-not used	Dfp_PCRGVnrdvtMin	4	5	4
not used	external test	Dfp_VarMngCodDs	5	2	4