

NZDG2G/1/1

DSM Handbook_FAWSH_30-102351_CA4D2.8TC_C452V61_OBD	
Customer	FAWSH
Engine description	CA4D28CRZ TC
Vehicle	PK
Name of the creator	Zou Yanhua
date / time	
dataset name	102351YZPKSH70E3_60_20-Jun-08_M07
SAP No.	30-102351

Fault Path description				Error simulation & system reaction								
Fault Path Name	Description	NO.	Type	Fault type description	P-code	error class	error entry	system lamp	MIL	Environmental Conditions	Fid calibration	
Dfp_ACCDCmpr	Fault path of air condition power stage	1	Bit0	Short Circuit Battery	P0647	1	YES	OFF	OFF	ACCIl_stLogicOut_OneToOne_DLen1 ACCD_stMnSwRawVal_OneToOne_DLen1 InjCil_qCurr_q_DLen1	Fid_ACTrqC Fid_FanCil_ACCmpr	
			Bit1	Short Circuit Ground	P0646							
			Bit2	No Load	P0645							
Dfp_ACCDEvp	Evaporator Temperature sensor	2	Bit0	Excess Temperature	P0645	0	NO	OFF	OFF			
			Bit1	Voltage above upper limit	P0538							
			Bit1	Voltage below lower limit	P0537							
Dfp_ACCDPres	Fault path 1 for air condition pressure	3	Bit0	Period Max error = SRC-High	P0531	1	YES	OFF	OFF	ACCIl_stLogicOut_OneToOne_DLen1 ACCD_stMnSwRawVal_OneToOne_DLen1 InjCil_qCurr_q_DLen1	Fid_ACTrqC	
			Bit1	Period Min error = SRC-Low	P0531							
			Bit2	Duty Cycle Min error	P0533							
Dfp_ACCDPres1	Fault path 2 for air condition pressure	4	Bit0	Duty Cycle Max error	P0532	1	YES	OFF	OFF	ACCIl_stLogicOut_OneToOne_DLen1 ACCD_stMnSwRawVal_OneToOne_DLen1 InjCil_qCurr_q_DLen1	Fid_ACTrqC	
			Bit1	entering the Special Operation sector	P0531							
			Bit1	PresDSMDebTType	P0530							
Dfp_ACCDPresAna	Fault path for analog air condition pressure	5	Bit0	Voltage above upper limit	P2518	1	YES	OFF	OFF	ACCIl_stLogicOut_OneToOne_DLen1 ACCD_stMnSwRawVal_OneToOne_DLen1 InjCil_qCurr_q_DLen1	Fid_FanCil_pACAna	
			Bit1	Voltage below lower limit	P2517							
Dfp_ACCDSwin	Fault path of air condition power stage	6	Bit2	CAN Msg. TimeOut error	P2519	1	YES	OFF	OFF	ACCIl_stLogicOut_OneToOne_DLen1 ACCD_stMnSwRawVal_OneToOne_DLen1		
			Bit3	Non-Plausible CAN Msg. Value	P2519							
			Bit0	SRC-High error of ADC reference voltage	P060B							
Dfp_ADCMon	Error status of ADC monitoring	7	Bit1	SRC-Low error of ADC reference voltage	P060B	12	YES	OFF	ON	BattCD_uLin_Carb_uBatt_DLen2 HWEMon_numRecovery_stLow_DLen1	Fid_APP1 Fid_APP2 Fid_AccPed Fid_RailCDSubstVal	
			Bit2	Test impulse error	P060B							
			Bit3	ADC queue error	P060B							
Dfp_AFSCDIAdjVal	error path for checking the drift factors out of the range in the low-idle mode	8	Bit0	IAdjVal above the maximum drift limit	P110D	0	NO	OFF	OFF		Fid_AFSCD_PiSetyDrft	
			Bit1	IAdjVal below the minimum drift limit	P110E							
Dfp_AFSCDLdAdjVal	error path for checking the drift factors out of range in the load mode	9	Bit0	LdAdjVal above the maximum drift limit	P110F	0	NO	OFF	OFF		Fid_AFSCD_PiSetyDrft	
			Bit1	LdAdjVal below the minimum drift limit	P110G							
Dfp_AFSCD_AirTemp	Intake Air Temperature sensor	10	Bit0	Voltage above upper limit	P0113	8	NO	OFF	OFF	AFSCD_dmAirRawPerTime_Carb_mAirTim_DLen2 AFSCD_tAir_t_DLen2	Fid_AFSCD Fid_AFSCD_AirPerTime	
			Bit1	Voltage below lower limit	P0112							
Dfp_AFSCD_AirTempDcyc	error path for signal range check of duty cycle of air temperature signal	11	Bit0	SRC max error for the duty cycle	P1102	8	YES	OFF	ON	AFSCD_dmAirRawPerTime_Carb_mAirTim_DLen2 AFSCD_tAir_t_DLen2	Fid_AFSCD Fid_AFSCD_PiSetyDrft Fid_AFSCD_SRCorrAirm Fid_AFSCD_SRCRawAirm	Fid_AirCil Fid_CoEng_trqLimErr Fid_AFSCD_PiOfsDrft Fid_AFSCD_AirPerTime
			Bit1	SRC min error for the duty cycle	P1102							
Dfp_AFSCD_PiOfsDrft	error path for plausibility check of offset drift of airmass	12	Bit0	airmass ADC raw value > threshold high	P1101	9	YES	OFF	2DC	AFSCD_dmAirRawPerTime_Carb_mAirTim_DLen2 AFSCD_tAir_t_DLen2	Fid_AFSCD Fid_AirCil Fid_CoEng_trqLimErr	Fid_AFSCD_AirPerTime
			Bit1	airmass ADC raw value < threshold low	P1103							
Dfp_AFSCD_PiSetyDrft	fault path for plausibility check of sensitivity drift of airmass	13	Bit0	airmass ratio is higher then threshold high	P1104	9	YES	OFF	2DC	AFSCD_dmAirRawPerTime_Carb_mAirTim_DLen2 AFSCD_tAir_t_DLen2 InjCil_qSet_q_DLen1	Fid_AFSCD Fid_AirCil Fid_CoEng_trqLimErr	Fid_AFSCD_AirPerTime
			Bit1	airmass ratio is lower then threshold low	P1105							
Dfp_AFSCD_SRCAirTemp	error path for signal range check of air temperature; do not enter into fault code memory, always use fault class 0	14	Bit0	air temperature above upper Limit	P0113	8	NO	OFF	OFF		Fid_AFSCD Fid_AFSCD_PiSetyDrft Fid_AFSCD_SRCorrAirm	Fid_AFSCD_SRCRawAirm Fid_AirCil Fid_CoEng_trqLimErr Fid_AFSCD_AirPerTime
			Bit1	air temperature below lower Limit	P0112							
Dfp_AFSCD_SRCBatt	error path for signal range check of battery voltage; do not enter into fault code memory, always use fault class 0	15	Bit0	Voltage above upper Limit	P1562	8	NO	OFF	OFF		Fid_AFSCD Fid_AFSCD_PiSetyDrft Fid_AFSCD_SRCorrAirm Fid_AFSCD_SRCRawAirm	Fid_AirCil Fid_AFSCD_PiOfsDrft Fid_AFSCD_SRCRelSig Fid_AFSCD_SRCDcyc Fid_AFSCD_AirPerTime
			Bit1	Voltage below lower Limit	P1562							
Dfp_AFSCD_SRCorrAirm	error path for the raw air mass signal	16	Bit0	Signal range check high error	P0101	8	YES	OFF	ON	AFSCD_dmAirRawPerTime_Carb_mAirTim_DLen2 AFSCD_tAir_t_DLen2 InjCil_qSet_q_DLen1	Fid_AFSCD Fid_AFSCD_PiOfsDrft Fid_AFSCD_PiSetyDrft	Fid_AirCil Fid_CoEng_trqLimErr Fid_AFSCD_AirPerTime
			Bit1	Signal range check low error	P0101							
Dfp_AFSCD_SRCRawAirm	error path for the raw air mass signal	17	Bit0	Signal range check high error	P0100	8	YES	OFF	ON	AFSCD_dmAirRawPerTime_Carb_mAirTim_DLen2 AFSCD_tAir_t_DLen2 InjCil_qSet_q_DLen1	Fid_AFSCD Fid_AFSCD_PiOfsDrft Fid_AFSCD_PiSetyDrft	Fid_AirCil Fid_CoEng_trqLimErr Fid_AFSCD_AirPerTime
			Bit1	Signal range check low error	P0100							
			Bit2	signal cutoff or short circuit to either battery or ground	P0100							
Dfp_AFSCD_SRCRelSigPer	error path for signal range check of reference signal	18	Bit0	SRC max error for the time period	P1106	8	YES	OFF	ON	AFSCD_dmAirRawPerTime_Carb_mAirTim_DLen2 AFSCD_tAir_t_DLen2 InjCil_qSet_q_DLen1	Fid_AFSCD Fid_AFSCD_PiSetyDrft Fid_AFSCD_SRCorrAirm Fid_AFSCD_SRCDcyc	Fid_AFSCD_SRCRawAirm Fid_AirCil Fid_CoEng_trqLimErr Fid_AFSCD_PiOfsDrft Fid_AFSCD_AirPerTime
			Bit1	SRC min error for the time period	P1107							
			Bit2	signal error for the time period	P0110							
Dfp_APP1	fault path of Accelerator Pedal 1	19	Bit0	Voltage above upper limit	P0123	2	YES	ON	OFF	APPCD_uRawAPP1_u_DLen1 APPCD_rLinAPP1_Carb_r_DLen1	Fid_AccPed Fid_CoVehqLimErr Fid_CrCtShutOffRev	
			Bit1	Voltage below lower limit	P0122							
			Bit3	plausibility with APP2 violated	P2135							
Dfp_APP2	fault path of Accelerator Pedal 2	20	Bit0	Voltage above upper limit	P0223	2	YES	ON	OFF	APPCD_uRawAPP2_u_DLen1 APPCD_rLinAPP2_Carb_r_DLen1	Fid_AccPed Fid_CoVehqLimErr Fid_CrCtShutOffRev	
			Bit1	Voltage below lower limit	P0222							
			Bit3	plausibility with APP1 violated	P2135							
Dfp_APSCD	error path of atmospheric pressure sensor	21	Bit0	Voltage above upper limit	P2229	8	YES	OFF	ON	AFSCD_uRaw_u_DLen1 AFSCD_pVal_p_DLen1 BPSCD_pOutVal_p_DLen1	Fid_AFSCD_PiSetyDrft Fid_AirCil Fid_DIUMPRDenom	Fid_SiSysAddCor Fid_CoVeh_Prim1
			Bit1	Voltage below lower limit	P2228							
			Bit2	CAN signal defect	P0000							
Dfp_APSOBD	Error path for Atmospheric Pressure Sensor SRCPhy range error	22	Bit0	Voltage above upper Physical range	P1406	0	NO	OFF	OFF			
			Bit1	Voltage below lower Physical range	P1407							
Dfp_AccPedPlausBrk	Error path for AccPed and Brake Plausibility	23	Bit3	AccPed signal not plausible	P2299	1	YES	OFF	OFF	APPCD_rAPP1UnFit_r_DLen1 BrkCD_stMnSwRawVal_OneToOne_DLen1 BrkCD_stPressed_OneToOne_DLen1 InjCil_qSet_q_DLen1	Fid_HpTst Fid_InjCnShutOffTst Fid_CompTst	Fid_RunUpTst
Dfp_AirCilGvnrDvtMax	AirCil permanent positive governor deviation	34	Bit0	Positive governor deviation above limit	P0401	11	YES	OFF	ON after 2DC	EGRCD_rOut_Carb_r2_DLen1 AirCil_rTVA_dcy_DLen2 AFSCD_dmAirRawPerTime_Carb_mAirTim_DLen2 AFSCD_tAir_t_DLen2 InjCil_qSet_q_DLen1	Fid_AFSCD_PiSetyDrft Fid_AirCilGvnrDvt Fid_PCR	Fid_ZFCIBActv Fid_CoVeh_Prim1 Fid_AirCil

Dfp_AirCtIGvnrDvtMin	AirCtI permanent negative governor deviation	25	Bit1	negative governor deviation below limit	P0402	11	YES	OFF	ON after 2DC	EGRCd_rOut__Carb_r2_DLen1 AirCtI_rTVA__doyc_DLen2 AFSCD_dmAirPerTime__Carb_mAirTim_DLen2 AFSCD_IAir__t_DLen2 InjCtI_qSet__q_DLen1	Fid_AFSCD_PISetyDrft Fid_AirCtIGvnrDvt Fid_AirCtI	
Dfp_BPACD	fault path for BPA power stage	26	Bit0	Short Circuit Battery	P0048	0	NO	OFF	OFF	BPSCD_pLin__Carb_p1_DLen1 BPACD_rOut__doyc_DLen2 BattCD_u__uBatt_DLen1		
			Bit1	Short Circuit Ground	P0047							
			Bit2	No Load	P0045							
			Bit3	Excess Temperature	P0046							
Dfp_BPSAPsPlausChk	Error path for Plausibility Check	27	Bit3	Not plausible with atmospheric pressure sensor	P0069	0	NO	OFF	OFF	APSCD_pVal__p_DLen1 BPSCD_pOutVal__p_DLen1 AFSCD_dmAirPerTime__mAirTim_DLen1	Fid_APSCD	
Dfp_BPSCD	Error path for Boost pressure sensor	28	Bit0	Voltage above upper limit	P0238	0	NO	OFF	OFF	BPSCD_uRawVal__u_DLen1 BPSCD_pOutVal__p_DLen1 APSCD_pLinVal__Carb_p_DLen1	Fid_AFSCD_AirPerTime Fid_AFSCD_PISetyDrft Fid_AFSCD Fid_AirCtI	Fid_AirCtIBPSCor Fid_CoEng_trqLimErr Fid_PCR
			Bit1	Voltage below lower limit	P0237							
			Bit2	CAN signal defect	P0235							
Dfp_BPSOBD	Error path for Boost pressure sensor SRCPhy range error	29	Bit0	Voltage above upper Physical range	P1408	0	NO	OFF	OFF			
			Bit1	Voltage below lower Physical range	P1409							
Dfp_BattCD	battery voltage fault	30	Bit0	Voltage above upper limit	P0563	13	YES	OFF	OFF	GlvCtI_stActrOut__OneToOne_DLen1 EngM_stSync__OneToOne_DLen1 BattCD_u__uBatt_DLen1	Fid_ZFCbActv	
			Bit1	Voltage below lower limit	P0562							
Dfp_BrkCD	Error path for brake signal	31	Bit2	brake signal is defective	P0571	3	YES	ON after 2DC	OFF	BrkCD_stMnSwrRawVal__OneToOne_DLen1 BrkCD_siRedSwrRawVal__OneToOne_DLen1	Fid_AccPed_Brk Fid_CtIShuOIRRev Fid_DRacCDopPrReq Fid_HpTst	Fid_InjCrvShOffTst Fid_LiGwUbr Fid_CompTst Fid_RunUpTst
			Bit3	brake signals not plausible	P0504							
Dfp_CTSCD	error path of coolant temperature sensor	32	Bit0	Voltage above upper limit	P0118	8	YES	OFF	ON	CTSCD_uRaw__u_DLen1 AFSCD_IAir__t_DLen2	Fid_AFSCD_PISetyDrft Fid_ClgDynTst Fid_CmbChb Fid_CoEngShOffTst Fid_DSM_Wuc Fid_EngDlIFTempMon Fid_ExhVivCtI_TempEng Fid_FanCtI_CInt	Fid_FISysCTSSens Fid_CoEng_trqLimErr Fid_HpTst Fid_OTSCD_MAX Fid_OTSCD_MIN Fid_ZFCbActv Fid_AirCtI
			Bit1	Voltage below lower limit	P0117							
			Bit2	Can Msg. value defect	P0115							
			Bit3	plausibility defect between OTS and CTS	P0116							
Dfp_CTSCDOut	error path of coolant temperature output	33	Bit0	Short circuit to battery	P1601	1	YES	OFF	OFF			
			Bit1	Short circuit to ground	P1602							
			Bit2	No load	P1603							
			Bit3	Excess temp.	P1604							
Dfp_CTSOBD	Error path for Coolant Temperature	34	Bit0	Voltage above upper Physical range	P140A	0	NO	OFF	OFF			
Dfp_ClgAbsTst	Coolant temperature sensor absolute test	35	Bit3	Minimum temperature not reached within time limit	P0116	9	YES	OFF	ON after 2DC	CoEng_nNormal__Carb_t_DLen2 InjCtI_qSet__q_DLen1 Clg_dDynTst__Carb_dt_DLen2		
Dfp_ClgDynTst	Coolant temperature sensor dynamic test	36	Bit3	Minimum temperature raise not reached within time limit	P0116	9	YES	OFF	ON after 2DC	CoEng_nNormal__Carb_t_DLen2 Clg_dDynTst__Carb_dt_DLen2 Clg_tDynTst__Carb_t_DLen2 InjCtI_qSet__q_DLen1		
Dfp_CmbChbMisfire1	error path for Misfire cylinder 1	37	Bit0	number of recognized misfire events above limit	P0301	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		
Dfp_CmbChbMisfire2	error path for Misfire cylinder 2	38	Bit0	number of recognized misfire events above limit	P0302	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		
Dfp_CmbChbMisfire3	error path for Misfire cylinder 3	39	Bit0	number of recognized misfire events above limit	P0303	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		
Dfp_CmbChbMisfire4	error path for Misfire cylinder 4	40	Bit0	number of recognized misfire events above limit	P0304	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		
Dfp_CmbChbMisfire5	error path for Misfire cylinder 5	41	Bit0	number of recognized misfire events above limit	P0305	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		
Dfp_CmbChbMisfire6	error path for Misfire cylinder 6	42	Bit0	number of recognized misfire events above limit	P0306	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		
Dfp_CmbChbMisfireAvrg1	error path for Misfire cylinder 1	43	Bit0	Average number of misfire events above limit	P1319	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		
Dfp_CmbChbMisfireAvrg2	error path for Misfire cylinder 2	44	Bit0	Average number of misfire events above limit	P131A	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		
Dfp_CmbChbMisfireAvrg3	error path for Misfire cylinder 3	45	Bit0	Average number of misfire events above limit	P131B	0	NO	OFF	OFF	AFSCD_IAir__t_DLen2 AFSCD_dmAirPerTime__mAirTim_DLen1 InjCtI_qSet__q_DLen1 EGRCd_rOut__Carb_r2_DLen1		

Dfp_CmbChbMisfireAvrg4	error path for Misfire cylinder 4	46	Bit0	Average number of misfire events above limit	P131C	0	NO	OFF	OFF	AFSCD_tAir_t_DLen2 AFSCD_dmAirPerTime_mAirTim_DLen1 InjClt_qSet_q_DLen1 EGRCD_rOut_Carb_r2_DLen1		
Dfp_CmbChbMisfireAvrg5	error path for Misfire cylinder 5	47	Bit0	Average number of misfire events above limit	P131D	0	NO	OFF	OFF	AFSCD_tAir_t_DLen2 AFSCD_dmAirPerTime_mAirTim_DLen1 InjClt_qSet_q_DLen1 EGRCD_rOut_Carb_r2_DLen1		
Dfp_CmbChbMisfireAvrg6	error path for Misfire cylinder 6	48	Bit0	Average number of misfire events above limit	P131E	0	NO	OFF	OFF	AFSCD_tAir_t_DLen2 AFSCD_dmAirPerTime_mAirTim_DLen1 InjClt_qSet_q_DLen1 EGRCD_rOut_Carb_r2_DLen1		
Dfp_CmbChbMisfireMul	error path for misfire in multiple cylinders	49	Bit0	number of recognized misfire events above limit	P0300	0	NO	OFF	OFF	AFSCD_tAir_t_DLen2 AFSCD_dmAirPerTime_mAirTim_DLen1 InjClt_qSet_q_DLen1 EGRCD_rOut_Carb_r2_DLen1		
Dfp_CoVMDCSh	physical plausibility DCS	50	Bit0	physical unplausibility of DCS-demand	P0856	0	NO	OFF	OFF			
Dfp_CoVehPrfIm	Error path/status for Performance limitation logic	51	Bit0	degradation level 0	P1109	0	NO	OFF	OFF			
			Bit1	degradation level 1	P110A							
			Bit2	degradation level 2	P110B							
			Bit3	degradation level 3	P110C							
Dfp_CmprTst	faultpath for compression test	52	Bit0		P161F	0	NO	OFF	OFF			Fid_InjUnStrtPlsBk
Dfp_ConvCD	diagnostic fault path signals errors of main clutch signal	53	Bit2	CAN clutch signal is not defined	P0704	3	YES	ON after 2DC	OFF	InjClt_qSet_q_DLen1 ConvCD_stRawVal_OneToOne_DLen1	Fid_CmbChb Fid_CoDT_GripDeb Fid_CrCtShuOffRev Fid_DRecCDOpReq Fid_HpTst	Fid_InjCrVShOffTst Fid_LIGovUbr Fid_ZFCbActv Fid_CmprTst Fid_RunUpTst
			Bit3	clutch signal is not plausible	P0704							
Dfp_CrCCD	Error path for cruise control plausibility	54	Bit3	cruise control raw key status not plausible	P0575	0	NO	OFF	OFF			
Dfp_CrSCDTach	Error path for the Tachometer signal	55	Bit0	Short Circuit Battery	P1605	1	YES	OFF	OFF			
			Bit1	Short Circuit Ground	P1606							
			Bit2	No Load	P1600							
Dfp_EATSCD	error path of environment air temperature sensor	56	Bit0	Voltage above upper limit	P0073	0	NO	OFF	OFF	EATSCD_tAirLin_Carb_t_DLen1 AFSCD_tAir_t_DLen2	Fid_IATSCD	
			Bit1	Voltage below lower limit	P0072							
			Bit2	Signal error, only in case of CAN	P0071							
			Bit0	Voltage above upper Physical range	P140C							
Dfp_EATSOBD	Error path for Intake Air sensor SRCPHY range error	57	Bit1	Voltage below lower Physical range	P140D	0	NO	OFF	OFF			
Dfp_ECBICD	fault path 1 for Engine Compartment Stop Button	58	Bit2	Button is Stucked	P2536	0	NO	OFF	OFF			
Dfp_EEPCD_VehConf	error path for incompatible data value in EEPROM	59	Bit0	Error in any element	P062F	1	NO	OFF	OFF	EEPCD_stErrVehConf_OneToOne_DLen2		
Dfp_EGRCD	fault path for EGR power stage	60	Bit0	Short Circuit Battery	P0490	10	YES	OFF	ON	AFSCD_tAir_t_DLen2	Fid_AirCtl Fid_AFSCD_PISetyDrft Fid_ZFCbActv Fid_CoEng_trqLimErr	Fid_PCR
			Bit1	Short Circuit Ground	P0489							
			Bit2	No Load	P0404							
			Bit3	Excess Temperature	P0409							
Dfp_EGRCD_CBV	fault path of EGRCD-cooling bypass valve	61	Bit0	Short Circuit Battery	P245D	0	NO	OFF	OFF			
			Bit1	Short Circuit Ground	P245C							
			Bit2	No Load	P245A							
			Bit3	Excess Temperature	P245B							
Dfp_EGRSCD	error path of exhaust gas recirculator valve position sensor	62	Bit0	Voltage above upper limit	P0406	0	NO	OFF	OFF			
Bit1	Voltage below lower limit	P0405										
Dfp_ETCibETfInj1	Errorpath for filtered energizing time of Cylinder 1	63	Bit0	above upper limit of filtered energizing time	P1200	1	YES	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
Bit1	below lower limit of filtered energizing time		P1201									
Dfp_ETCibETfInj2	Errorpath for filtered energizing time of Cylinder 2	64	Bit0	above upper limit of filtered energizing time	P1202	1	YES	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of filtered energizing time	P1203							
Dfp_ETCibETfInj3	Errorpath for filtered energizing time of Cylinder 3	65	Bit0	above upper limit of filtered energizing time	P1204	1	YES	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of filtered energizing time	P1205							
Dfp_ETCibETfInj4	Errorpath for filtered energizing time of Cylinder 4	66	Bit0	above upper limit of filtered energizing time	P1206	1	YES	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of filtered energizing time	P1207							
Dfp_ETCibETfInj5	Errorpath for filtered energizing time of Cylinder 5	67	Bit0	above upper limit of filtered energizing time	P1208	0	NO	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of filtered energizing time	P1209							
Dfp_ETCibETfInj6	Errorpath for filtered energizing time of Cylinder 6	68	Bit0	above upper limit of filtered energizing time	P120A	0	NO	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of filtered energizing time	P120B							
Dfp_ETCibInj1	Errorpath for energizing time calibration injection of Cylinder 1	69	Bit0	above upper limit of energizing time	P120C	1	YES	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of energizing time	P120D							
Dfp_ETCibInj2	Errorpath for energizing time calibration injection of Cylinder 2	70	Bit0	above upper limit of energizing time	P120E	1	YES	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of energizing time	P120F							
Dfp_ETCibInj3	Errorpath for energizing time calibration injection of Cylinder 3	71	Bit0	above upper limit of energizing time	P1210	1	YES	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of energizing time	P1211							
Dfp_ETCibInj4	Errorpath for energizing time calibration injection of Cylinder 4	72	Bit0	above upper limit of energizing time	P1212	1	YES	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of energizing time	P1213							
Dfp_ETCibInj5	Errorpath for energizing time calibration injection of Cylinder 5	73	Bit0	above upper limit of energizing time	P1214	0	NO	OFF	OFF	AFSCD_tAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal_p_DLen1		
			Bit1	below lower limit of energizing time	P1215							

Dfp_ETCbln6	Errorpath for energizing time calibration injection of Cylinder 6	74	Bit0	above upper limit of energizing time	P1112	0	NO	OFF	OFF	AFSCD_IAir_t_DLen2 VSSCD_v_v_DLen1 APSCD_pVal__p_DLen1		
Dfp_EVCD	fault path for EVCD power stage	75	Bit0	Short Circuit Battery	P0478	0	NO	OFF	OFF			
			Bit1	Short Circuit Ground	P0477							
			Bit2	No Load	P0475							
			Bit3	Excess Temperature	P0476							
Dfp_EngCDFIConsumOut	fault path for Eng power stage	76	Bit0	Short Circuit Battery	P163B	0	NO	OFF	OFF			
			Bit1	Short Circuit Ground	P163C							
			Bit2	No Load	P163D							
			Bit3	Excess Temperature	P163E							
Dfp_EngDiffTempMon	Fault path for non plausibility between coolant and second temperature at engine start, after a min. cool down time	77	Bit3	difference between coolant and second temperatures exceeds a max. value	P1112	0	NO	OFF	OFF			
Dfp_EngMCaS1	error path of camshaft failure	78	Bit0	no camshaft signal	P0340	8	YES	OFF	ON	InjClt_qSet__q_DLen1 EngM_stSync__OneToOne_DLen1	Fid_DIUMPRDenom Fid_DIUMPRIgn Fid_EngMCaSBackUp	Fid_EngM_ChkStrtSpd Fid_InjUnStrtPlsBlk Fid_SignalsTstNLim
			Bit1	wrong camshaft signal	P0341							
Dfp_EngMCS1	error path of crankshaft failure	79	Bit0	no crankshaft signal	P0335	8	YES	OFF	ON	InjClt_qSet__q_DLen1 EngM_stSync__OneToOne_DLen1	Fid_ASDDc Fid_CmbChb Fid_CoEng_Nml2Strt Fid_CrCtShutOfflr Fid_DIUMPRDenom	Fid_DIUMPRIgn Fid_EngMCRSBackUp Fid_FBC Fid_InjUnStrtPlsBlk Fid_SignalsTstNLim
			Bit1	wrong crankshaft signal	P0336							
Dfp_EngMOfsCaSCrS	error path of offset between camshaft and crankshaft	80	Bit0	offset between camshaft and crankshaft	P0016	1	YES	OFF	OFF	InjClt_qSet__q_DLen1 EngM_stSync__OneToOne_DLen1	Fid_DIUMPRDenom Fid_DIUMPRIgn Fid_EngM_ChkStrtSpd	Fid_FBC
Dfp_ExhLpCD	Error Path for Exhaust barke Lamp powerstage	81	Bit0	Short Circuit Battery	P1500	0	NO	OFF	OFF			
			Bit1	Short Circuit Ground	P1501							
			Bit2	No Load	P1502							
			Bit3	Excess Temperature	P1503							
Dfp_ExhVivCil	Error Path for Exhaust brake monitor	82	Bit0	Short Circuit Battery	P0000	0	NO	OFF	OFF			
Dfp_FMTC_NonMonotonMap	fault FMTC trq2qBas MAP contains non strictly monotonus q curves	83	Bit3	Not plausible fault	P1007	0	NO	OFF	OFF			
Dfp_FTSCD	Fuel Temperature sensor	84	Bit0	Voltage above upper limit	P0183	0	NO	OFF	OFF		Fid_FiSysFTSSens Fid_InjVwVwCorOff Fid_ZFCCbActv	
			Bit1	Voltage below lower limit	P0182							
Dfp_FTSOBD	Error path for Fuel temp sensor SRCPY range error	85	Bit0	Voltage above upper Physical range	P140E	0	NO	OFF	OFF			
			Bit1	Voltage below lower Physical range	P140F							
Dfp_FanCD	fault path of fan control for PWM type relay	86	Bit0	Short Circuit Battery	P0692	3	YES	ON after 2DC	OFF			Fid_FanCD1
			Bit1	Short Circuit Ground	P0691							
			Bit2	No Load	P0480							
			Bit3	Excess Temperature	P0483							
Dfp_FanCDPwrStg2	fault path of fan control for digital power stage 2	87	Bit0	Short circuit to battery	P0694	3	YES	ON after 2DC	OFF			Fid_FanCD2
			Bit1	Short circuit to ground	P0693							
			Bit2	No load	P0481							
			Bit3	Excess temperature	P0484							
Dfp_FIFCD_Htg	fault path for fuel filter heating output	88	Bit0	Short circuit to battery	P1008	0	NO	OFF	OFF			
			Bit1	Short circuit to ground	P1009							
			Bit2	No load	P100A							
			Bit3	Excess temperature	P100B							
Dfp_FIFCD_WLvl	water level in fuel sensor	89	Bit0	max error incase of water	P2267	2	YES	ON	OFF	InjClt_qSet__q_DLen1	Fid_CoVeh_Prflm3_MAX Fid_ZFCCbActv_MAX	
			Bit2	sensor not working normally	P2264							
Dfp_GearbxInrMax	physical plausibility TSC	90	Bit0	physical unplausibility of TSC-demand	U0404	0	NO	OFF	OFF			
Dfp_GlwCD_Actr	Error path for the glow control relay actuator	91	Bit0	Short Circuit Battery	P0384	8	YES	OFF	ON	BattCD_u__uBatt_DLen1 GwClt_stActrOut__OneToOne_DLen1		
			Bit1	Short Circuit Ground	P0383							
			Bit2	No Load	P0670							
			Bit3	Excess Temperature	P0670							
Dfp_GlwCD_Lamp	Error path for the glow display lamp	92	Bit0	Short Circuit Battery	P1610	1	YES	OFF	OFF	BattCD_u__uBatt_DLen1 GwClt_slLampOut__OneToOne_DLen1		
			Bit1	Short Circuit Ground	P1609							
			Bit2	No Load	P160A							
			Bit3	Excess Temperature	P160B							
Dfp_GlwClt	Errors of Glow control unit	93	Bit0	failure of a glow plug, Relay failure, Short circuit in glow plug, over-current	P0380	8	YES	OFF	ON	BattCD_u__uBatt_DLen1 GwClt_stActrOut__OneToOne_DLen1 GwCD_slRawVal__OneToOne_DLen1		
			Bit1	Short circuit in glow plug, over-current, Relay got stuck	P0382							
Dfp_HWEMonCom	error state communication - SPI	94	Bit0	communication error of CJ940	P060A	3	YES	ON after 2DC	OFF	BattCD_u__uBatt_DLen1 HWEMon_numRecovery__stLow_DLen1		
Dfp_HWEMonEEPROM	error state of EEPROM	95	Bit1	error during last read operation	P062F	3	YES	ON after 2DC	OFF	BattCD_u__uBatt_DLen1 HWEMon_numRecovery__stLow_DLen1		
			Bit2	error during last write operation	P062F							
			Bit3	default value used	P062F							
Dfp_HWEMonRcyLocked	error path for Recovery which is locked	96	Bit3	a recovery has occurred	P0607	1	YES	OFF	OFF	BattCD_u__uBatt_DLen1 HWEMon_numRecovery__stLow_DLen1		
Dfp_HWEMonRcySuppressed	error path for Recovery which is suppressed	97	Bit3	a recovery has occurred	P0607	0	NO	OFF	OFF	BattCD_u__uBatt_DLen1 HWEMon_numRecovery__stLow_DLen1		
Dfp_HWEMonRcyVisible	error path for Recovery which is visible	98	Bit3	a recovery has occurred	P0607	2	YES	ON	OFF	BattCD_u__uBatt_DLen1 HWEMon_numRecovery__stLow_DLen1		
Dfp_HWEMonUMaxSupply	error state supply voltage CJ940 upper limit	99	Bit0	internal supply voltage upper limit	P1607	2	YES	ON	OFF	BattCD_u__uBatt_DLen1 HWEMon_numRecovery__stLow_DLen1		
Dfp_HWEMonUMinSupply	error state supply voltage CJ940 lower limit	100	Bit1	internal supply voltage lower limit	P1608	2	YES	ON	OFF	BattCD_u__uBatt_DLen1 HWEMon_numRecovery__stLow_DLen1		
Dfp_HpTst	HpTst	101	Bit0	HpTst deactivates rail pressure monitoring	P160C	0	NO	OFF	OFF		Fid_RailMeUn0Blk Fid_RailMeUn1Blk Fid_RailMeUn2Blk Fid_CoordEGT	Fid_RailMeUn3Blk Fid_RailMeUn7Blk Fid_ZFCCbActv
Dfp_IATSCD	error path of air temperature sensor	102	Bit0	Voltage above upper limit	P0098	0	NO	OFF	OFF	AFSCD_IAir_t_DLen2 IATSCD_uRaw__u_DLen1	Fid_AFSCD_AirPerTime Fid_AFSCD_PiSetyDrft	Fid_ZFCCbActv
			Bit1	Voltage below lower limit	P0097							
Dfp_IATSOBD	Error path for Intake Air sensor SRCPY range error	103	Bit0	Voltage above upper Physical range	P1410	0	NO	OFF	OFF			
			Bit1	Voltage below lower Physical range	P1411							
Dfp_ImmClt	Used to indicate when security function is not through	104	Bit3	indicates that the received pattern and the transmitted pattern is not correct	P0513	2	YES	ON	OFF			
Dfp_InjCrV_InjLim	Fault path of injection limitation	105	Bit0	Number of injections limited by charge balance	P131F	0	NO	OFF	OFF	BattCD_u__uBatt_DLen1 InjCrV_stInjCharActVal__OneToOne_DLen1 InjVCD_slMI1ET__mp__i_DLen2		
			Bit1	Number of injections limited by quantity balance	P1320							
			Bit2	Number of injections limited by software	P1321							
			Bit0	short circuit	P1223							
Dfp_InjCrV_Bk1A	fault path bank specific error in stop engine	106	Bit0	short circuit	P1223	6	YES	OFF	ON	BattCD_u__uBatt_DLen1 InjCrV_stInjCharActVal__OneToOne_DLen1	Fid_CoEngDpwrStg1	
			Bit1	short circuit on Low Side to ground	P1224							

Dfp_InjVvBank1A	faultpath bank1-specific errors -> stop engine	100	Bit2 Bit3 Bit0 Bit1 Bit2 Bit3	depending on application not-classifiable error depending on application depending on application open load depending on application	P1226 P1218 P1219 P121A P121B	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1 Fid_InjVvTstBnk1_Off Fid_InjVvTstBnk1_On
Dfp_InjVvBnk1B	faultpath bank1-specific warnings -> stop engine	107	Bit0 Bit1 Bit2 Bit3	short circuit short circuit on Low Side to ground depending on application not-classifiable error	P121C P121D P121E P121F	0	YES	OFF	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	
Dfp_InjVvBnk2A	faultpath bank2-specific errors -> stop engine	108	Bit0 Bit1 Bit2 Bit3	short circuit short circuit on Low Side to ground depending on application not-classifiable error	P1220 P1221 P1222 P1223	0	YES	OFF	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	
Dfp_InjVvBnk2B	faultpath bank2-specific warnings -> stop engine	109	Bit0 Bit1 Bit2 Bit3	short circuit short circuit on Low Side to ground depending on application not-classifiable error	P062B P062B P062B P062B	2	YES	ON	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1
Dfp_InjVvChipA	faultpath Chip-specific errors -> stop engine	110	Bit0 Bit1 Bit2 Bit3	CY33X internal reset / clockloss / undervoltage CY33X is unlocked / CY33X init error CY33X is in Testmode CY33X SPI communication error /checksum/readback	P0611 P0611 P0611 P0611	2	YES	ON	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1
Dfp_InjVvChipB	faultpath Chip-specific errors -> stop engine	111	Bit0 Bit1 Bit2 Bit3	CY33X internal parity error CY33X internal program flow error CY33X check of inv. YSEL during ON failed CY33X ON timeout for at least 1 cylinder	P0262 P0262 P0262 P0262	2	YES	ON	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1
Dfp_InjVvCyl1A	faultpath cylinder1-specific errors -> stop engine	112	Bit0 Bit1 Bit2 Bit3	short circuit on Low Side to battery depending on application short circuit Low Side to High Side not-classifiable error	P0263 P0263 P0261 P1300	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1
Dfp_InjVvCyl1B	faultpath cylinder1-specific warnings	113	Bit0 Bit1 Bit2 Bit3	depending on application depending on application open load depending on application	P1301 P1302 P0201 P1303	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_ZFCbActv Fid_CoEng_trqLimErr Fid_FBC
Dfp_InjVvCyl2A	faultpath cylinder2-specific errors -> stop engine	114	Bit0 Bit1 Bit2 Bit3	short circuit on Low Side to battery depending on application short circuit Low Side to High Side not-classifiable error	P0266 P0266 P0264 P1304	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1
Dfp_InjVvCyl2B	faultpath cylinder2-specific warnings	115	Bit0 Bit1 Bit2 Bit3	depending on application depending on application open load depending on application	P1305 P1306 P0202 P1307	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_ZFCbActv Fid_CoEng_trqLimErr Fid_FBC
Dfp_InjVvCyl3A	faultpath cylinder3-specific errors -> stop engine	116	Bit0 Bit1 Bit2 Bit3	short circuit on Low Side to battery depending on application short circuit Low Side to High Side not-classifiable error	P0268 P0267 P1308 P1308	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1
Dfp_InjVvCyl3B	faultpath cylinder3-specific warnings	117	Bit0 Bit1 Bit2 Bit3	depending on application depending on application open load depending on application	P1309 P130A P0203 P130B	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_ZFCbActv Fid_CoEng_trqLimErr Fid_FBC
Dfp_InjVvCyl4A	faultpath cylinder4-specific errors -> stop engine	118	Bit0 Bit1 Bit2 Bit3	short circuit on Low Side to battery depending on application short circuit Low Side to High Side not-classifiable error	P0271 P0272 P0270 P130C	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1
Dfp_InjVvCyl4B	faultpath cylinder4-specific warnings	119	Bit0 Bit1 Bit2 Bit3	depending on application depending on application open load depending on application	P130D P130E P0204 P130F	5	YES	OFF	ON	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_ZFCbActv Fid_CoEng_trqLimErr Fid_FBC
Dfp_InjVvCyl5A	faultpath cylinder5-specific errors -> stop engine	120	Bit0 Bit1 Bit2 Bit3	depending on application depending on application short circuit Low Side to High Side not-classifiable error	P130D P0275 P0273 P1310	0	NO	OFF	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1 Fid_InjVvTstBnk1_Off Fid_InjVvTstBnk1_On Fid_InjVvTstBnk2_Off Fid_InjVvTstBnk2_On
Dfp_InjVvCyl5B	faultpath cylinder5-specific warnings	121	Bit0 Bit1 Bit2 Bit3	depending on application depending on application open load depending on application	P1311 P1312 P0205 P1313	0	NO	OFF	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_ZFCbActv Fid_CoEng_trqLimErr Fid_FBC
Dfp_InjVvCyl6A	faultpath cylinder6-specific errors -> stop engine	122	Bit0 Bit1 Bit2 Bit3	short circuit on Low Side to battery depending on application short circuit Low Side to High Side not-classifiable error	P0277 P0278 P0276 P1314	0	NO	OFF	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_CoEngRevSys1 Fid_InjVvTstBnk1_Off Fid_InjVvTstBnk1_On Fid_InjVvTstBnk2_Off Fid_InjVvTstBnk2_On
Dfp_InjVvCyl6B	faultpath cylinder6-specific warnings	123	Bit0 Bit1 Bit2 Bit3	depending on application depending on application open load depending on application	P1315 P1316 P0206 P1317	0	NO	OFF	OFF	BattCD_u_uBatt_DLen1 InjCrv_stInjCharActVal__OneToOne_DLen1 InjVCD_uM11ET_mp__i_DLen2	Fid_ZFCbActv Fid_CoEng_trqLimErr Fid_FBC
Dfp_MIL	Power Stage fault status for MIL	124	Bit0 Bit1 Bit2 Bit3	Short Circuit Battery Short Circuit Ground No Load Excess Temperature	P0650 P0650 P0650 P0650	13	YES	OFF	OFF		
Dfp_MRlyCD	error path for main relay	125	Bit0 Bit1	main relay does not open in time main relay opens too early	P0687 P0686	3	YES	ON after 2DC	OFF	T15CD_stRawVal__OneToOne_DLen1 HWEMon_numRecovery__stLow_DLen1	
Dfp_MeUnCDNoLoad	error path of metering unit PWM-powerstage	126	Bit2 Bit3	open load of metering unit output excess temperature of metering unit powerstage	P0251 P0252	5	YES	OFF	ON	MeUnCD_iActFrl_mp__curr_DLen2 MeUnCD_uRawVal_mp__u_DLen2	Fid_CoEngRevSys2 Fid_InjCl_qLimErr Fid_MeUnCDCalcI Fid_MeUnCDRot
Dfp_MeUnCDSCBat	error path of metering unit PWM-powerstage	127	Bit0	short circuit to battery of metering unit output	P0254	5	YES	OFF	ON	MeUnCD_iActFrl_mp__curr_DLen2 MeUnCD_uRawVal_mp__u_DLen2	Fid_CoEngRevSys2 Fid_InjCl_qLimErr Fid_MeUnCDCalcI Fid_MeUnCDRot
Dfp_MeUnCDSCGnd	error path of metering unit PWM-powerstage	128	Bit1	short circuit to ground of metering unit output	P0253	5	YES	OFF	ON	MeUnCD_iActFrl_mp__curr_DLen2 MeUnCD_uRawVal_mp__u_DLen2	Fid_CoEngRevSys2 Fid_MeUnCDCalcI Fid_MeUnCDRot
Dfp_MeUnCD_ADC	error path of metering unit AD-channel	129	Bit0 Bit1	signal range check high error of metering unit AD-channel signal range check low error of metering unit AD-channel	P025D P025C	0	NO	OFF	OFF	MeUnCD_iActFrl_mp__curr_DLen2 MeUnCD_uRawVal_mp__u_DLen2	Fid_MeUnCDCalcI Fid_MeUnCDRot
Dfp_Montr	the fault path contains the supervision of the communication between Watchdog of CY310 and the controller. The path is used to handle the reversible Shut-down of the system using the engine coordinator	130	Bit3	Set, if error-counter of Watchdog or controller are not plausible or the system must shut down	P060C	2	YES	ON	OFF	HWEMon_numRecovery__stLow_DLen1	Fid_CoEngRevSys1

Dfp_OPSCD	error path of oil pressure sensor	131	Bit0	Voltage above upper limit	P0523	0	NO	OFF	OFF	OPSCD_uRaw_u_DLen1 CTSCD_iCint_t_DLen1	Fid_OPSCD_MAX Fid_OPSCD_MIN Fid_OPSCD_SIG		
			Bit1	Voltage below lower limit	P0522								
			Bit2	Hardware signal error	P0520								
			Bit3	Plausibility check - oil pressure too high	P0521								
Dfp_OPSCD1	error path for oil pressure too low error	132	Bit3	Plausibility check - oil pressure too low	P0524	0	NO	OFF	OFF	OPSCD_uRaw_u_DLen1 CTSCD_iCint_t_DLen1	Fid_CoEng_IrqLimErr		
Dfp_OTSCD	error path of oil temperature sensor	133	Bit0	Voltage above upper limit	P0198	0	NO	OFF	OFF	OTSCD_uRaw_u_DLen2 CTSCD_iCint_t_DLen1	Fid_CTSCD_Plus_NPL Fid_OPSCD_MAX Fid_OPSCD_MIN Fid_OPSCD_SIG		
			Bit1	Voltage below lower limit	P0197								
			Bit2	signal error for CAN	P0195								
			Bit3	Plausibility error between OTS and CTS	P100D								
Dfp_OvrMon	Fault path for overrun monitoring	134	Bit0	Energising time exceeds limit of overrun monitoring	P1613	3	YES	ON after 2DC	OFF	HWEMon_numRecovery__stLow_DLen1			
Dfp_OvrMonSigA	Fault path for redundand engine speed calculation in overrun monitoring	135	Bit0	Plausibility error in engine speed check	P1614	3	YES	ON after 2DC	OFF	HWEMon_numRecovery__stLow_DLen1			
Dfp_PCRGvnrDvtMax	Permanent governor deviation in PCR	136	Bit0	positive governor deviation above limit	P2263	0	NO	OFF	OFF	AFSCD_iAir_t_DLen2 APSCD_pVal_p_DLen1 InjCtI_qSet_q_DLen1	Fid_AirCtI Fid_PCRGvnrDvt Fid_AFSCD_PISetyDrft		
Dfp_PCRGvnrDvtMin	Permanent governor deviation in PCR	137	Bit1	negative governor deviation below limit	P2263	0	NO	OFF	OFF	AFSCD_iAir_t_DLen2 APSCD_pVal_p_DLen1 InjCtI_qSet_q_DLen1	Fid_AirCtI Fid_PCRGvnrDvt Fid_CoVeh_Pfrrm1	Fid_AFSCD_PISetyDrft	
Dfp_PSPCD_Actr	error path of power stage pre-supply pump	138	Bit0	Short Circuit Battery	P0629	0	NO	OFF	OFF				
			Bit1	Short Circuit Ground	P0628								
			Bit2	No Load	P0627								
			Bit3	Excess Temperature	P062A								
Dfp_RailCD	error path of rail pressure	139	Bit0	Voltage above upper limit	P0193	5	YES	OFF	OFF	ON	RailCD_uPeakRaw_u_DLen2 BattCD_u_uBatt_DLen1 EngM_stSync_OneToOne_DLen1	Fid_CoEngRevSys2 Fid_CoEngShOftTst Fid_ZFCbActv Fid_ETCibCorActv	Fid_HpTst Fid_InjVvWvCorOff Fid_RailCtIMode Fid_RailSetPointLim
			Bit1	Voltage below lower limit	P0192								
Dfp_RailCDOftst	error path RPS offset monitoring	140	Bit0	RPS raw value is above maximum offset	P0191	7	YES	OFF	ON after 2DC	RailCD_uOfsAtrRunMax_u_DLen2 RailCD_uOfsAtrRunMin_u_DLen2 RailCD_uOfsSrtMax_u_DLen2 RailCD_uOfsSrtMin_u_DLen2 RailCD_uPeakRaw_u_DLen2	Fid_CoEngShOftTst Fid_CoEng_IrqLimErr Fid_ETCibCorActv	Fid_InjVvWvCorOff Fid_RailSetPointLim Fid_ZFCbActv	
			Bit1	RPS raw value is below minimum offset	P0191								
Dfp_RailMeUn0	faults for checks in MeUn controlled mode	141	Bit0	maximum positive deviation of rail pressure exceeded	P1011	5	YES	OFF	ON	Rail_dvoIMeUnSet_dvoI_DLen2 MeUnCD_iActFit_mp_curr_DLen2 InjCtI_qSet_q_DLen1 Rail_pSetPoint__RailPres_DLen2 RailCD_pPeak__RailPres_DLen2	Fid_RailMeUn1RIs Fid_RailSetPointRed Fid_InjCtI_qLimErr	Fid_ZFCbActv	
Dfp_RailMeUn1	faults for checks in MeUn controlled mode	142	Bit0	maximum positive deviation of rail pressure exceeded concerning set flow of fuel	P1012	6	YES	OFF	ON	Rail_dvoIMeUnSet_dvoI_DLen2 MeUnCD_iActFit_mp_curr_DLen2 InjCtI_qSet_q_DLen1 Rail_pSetPoint__RailPres_DLen2 RailCD_pPeak__RailPres_DLen2	Fid_RailMeUn2BkI Fid_RailMeUn3BkI Fid_RailMeUn4BkI	Fid_CoEngRevSys2 Fid_ZFCbActv	
Dfp_RailMeUn2	faults for checks in MeUn controlled mode	143	Bit0	maximum negative rail pressure deviation with metering unit on lower limit is exceeded	P1013	5	YES	OFF	ON	Rail_dvoIMeUnSet_dvoI_DLen2 MeUnCD_iActFit_mp_curr_DLen2 InjCtI_qSet_q_DLen1 Rail_pSetPoint__RailPres_DLen2 RailCD_pPeak__RailPres_DLen2	Fid_RailMeUn0BkI Fid_RailMeUn1RIs Fid_InjCtI_qLimErr	Fid_ZFCbActv	
Dfp_RailMeUn3	faults for checks in MeUn controlled mode	144	Bit0	minimum rail pressure exceeded	P0087	5	YES	OFF	ON	Rail_dvoIMeUnSet_dvoI_DLen2 MeUnCD_iActFit_mp_curr_DLen2 InjCtI_qSet_q_DLen1 Rail_pSetPoint__RailPres_DLen2 RailCD_pPeak__RailPres_DLen2	Fid_RailMeUn0BkI Fid_RailMeUn1BkI Fid_RailMeUn2BkI	Fid_RailMeUn4BkI Fid_CoEngRevSys2 Fid_ZFCbActv	
Dfp_RailMeUn4	faults for checks in MeUn controlled mode	145	Bit0	maximum rail pressure exceeded	P0088	5	YES	OFF	ON	Rail_dvoIMeUnSet_dvoI_DLen2 MeUnCD_iActFit_mp_curr_DLen2 InjCtI_qSet_q_DLen1 Rail_pSetPoint__RailPres_DLen2 RailCD_pPeak__RailPres_DLen2	Fid_RailMeUn0BkI Fid_RailMeUn1BkI Fid_RailMeUn2BkI	Fid_RailMeUn3BkI Fid_CoEngRevSys2 Fid_ZFCbActv	
Dfp_RailMeUn7	faults for checks in MeUn controlled mode	146	Bit0	setpoint of metering unit in overrun mode not plausible	P1014	0	NO	OFF	OFF	Rail_dvoIMeUnSet_dvoI_DLen2 MeUnCD_iActFit_mp_curr_DLen2 InjCtI_qSet_q_DLen1 Rail_pSetPoint__RailPres_DLen2 RailCD_pPeak__RailPres_DLen2			
Dfp_RunUpTst	faultpath for runup test	147	Bit3	is set to deactivate misfire detection during runup test	P1615	0	NO	OFF	OFF		Fid_AirCtI Fid_CmbChb Fid_FBC	Fid_ZFCbActv Fid_PCR	
Dfp_SOPTst	Fault path for test of redundand shut off paths during initialization	148	Bit1	Watch dog switch off path defect	P1616	1	YES	OFF	OFF	HWEMon_numRecovery__stLow_DLen1	Fid_EcuBoot Fid_CoEngRevSys2		
			Bit2	Voltage monitoring upper limit shut off path defect	P1617								
			Bit3	Voltage monitoring lower limit shut off path defect	P1618								
Dfp_SSpMon1	sensor supply voltage 1	149	Bit0	Voltage above upper limit	P0643	12	YES	OFF	ON	BattCD_u_uBatt_DLen1	Fid_ACCtI Fid_AFSCD_PISetyDrft Fid_APP1 Fid_AccPed	Fid_CoEng_IrqLimErr Fid_CtCtShuOffRev Fid_EngMCAst1	
			Bit1	Voltage below lower limit	P0642								
Dfp_SSpMon2	sensor supply voltage 2	150	Bit0	Voltage above upper limit	P0653	12	YES	OFF	ON	BattCD_u_uBatt_DLen1	Fid_AFSCD Fid_AFSCD_AirPerTime Fid_AFSCD_PIOfsDrft Fid_AFSCD_PISetyDrft Fid_CoEng_IrqLimErr Fid_AFSCD Fid_AirCtI Fid_BPSCDMon	Fid_CoEngRevSys2 Fid_CoEngShOftTst Fid_PCR Fid_RailSetPointLim Fid_RailCDPRSEChk Fid_RailCtIMode Fid_APP2 Fid_AccPed	
			Bit1	Voltage below lower limit	P0652								
Dfp_SSpMon3	sensor supply voltage 3	151	Bit0	Voltage above upper limit	P0699	12	YES	OFF	ON	BattCD_u_uBatt_DLen1	Fid_ACCtI Fid_AFSCD_PISetyDrft Fid_APP2 Fid_AccPed	Fid_CoVehtrqLimErr Fid_CtCtShuOffRev Fid_EGRSCDMon	
			Bit1	Voltage below lower limit	P0698								

Dfp_ShOffTst	faultpath for shut off test	152	Bit0	Short Circuit Battery	P0617	0	NO	OFF	OFF		Fid_CmbChb Fid_ZFCIbActv	
Dfp_StrCD	Error path starter power stage	153	Bit1	Short Circuit Ground	P0616	0	NO	OFF	OFF	BattCD_u_uBatt_DLen1 T15CD_stRawVal_OneToOne_DLen1 ConvCD_stRawVal_OneToOne_DLen1	Fid_GhwCl3	
			Bit2	No Load	P0615							
			Bit3	Excess Temperature	P0615							
			Bit0	Short Circuit Battery	P1619							
Dfp_SysLamp	Power Stage fault status for System lamp	154	Bit1	Short Circuit Ground	P161A	1	YES	OFF	OFF			
			Bit2	No Load	P161B							
			Bit3	Excess Temperature	P161C							
			Bit0	Short Circuit Battery	P161A							
Dfp_T15CD	error path for terminal 15 - contains plausibility error (Sig) of T15	155	Bit2	No Terminal 15 signals detected	P2533	1	YES	OFF	OFF	T15CD_stRawVal_OneToOne_DLen1	Fid_CoEngShOffTst Fid_GhwCl2	
Dfp_TPUMon	TPU monitoring	156	Bit3	Deviation between TPU and system time	P0607	2	YES	ON	OFF	HWEMon_numRecovery__stLow_DLen1		
Dfp_TVACD	fault path for TVA power stage	157	Bit0	Short Circuit Battery	P2142	0	NO	OFF	OFF		Fid_AirCil Fid_ZFCIbActv Fid_PCR Fid_AFSCD_PiSetyDrft Fid_CoEng_trqLimErr	
			Bit1	Short Circuit Ground	P2141							
			Bit2	No Load	P0487							
			Bit3	Excess Temperature	P0488							
Dfp_ThrVivRglfMode	error path of ThrViv regular mode	158	Bit0	maximum failures	P0638	0	NO	OFF	OFF			
Dfp_ThrVivSLine	error path of ThrViv stateline	159	Bit0	maximum failures	P1412	0	NO	OFF	OFF			
Dfp_VSACD	fault path for VSA power stage	160	Bit0	Short circuit to battery	P0662	0	NO	OFF	OFF			
			Bit1	Short circuit to ground	P0661							
			Bit2	No load	P0660							
			Bit3	Power stage excess temperature	P1620							
Dfp_VSSCD1	fault path 1 for vehicle speed sensing	161	Bit0	exceeding of the maximum vehicle speed	P0501	13	YES	OFF	OFF	VSSCD_v_v_DLen1 InjCil_qSet__q_DLen1	Fid_ACCtl Fid_CmbChb Fid_CoDT_GripDeb Fid_CoEngShOffTst Fid_CoEngStop Fid_CrCtShutOffRev Fid_DIUMPRDenom Fid_DRreqCDOptReq Fid_EcuBoot	Fid_FIMngGearDet Fid_FIMngVehSpdOK Fid_Gearbx_GearDet Fid_HpTst Fid_InjCrvShOffTst Fid_LiGovSetpDrvAway Fid_LiGovUbr Fid_RunUpTst Fid_VehDaDist Fid_ZFCIbActv
			Bit2	HW signal for vehicle speed not valid	P0500							
			Bit3	vehicle speed not plausible with injection mass and engine speed	P0501							
Dfp_VSSCD2	fault path 2 for vehicle speed sensing	162	Bit2	CAN signal for vehicle speed not valid	P2157	0	NO	OFF	OFF		Fid_ACCtl Fid_CmbChb Fid_CoDT_GripDeb Fid_CoEngShOffTst Fid_CoEngStop Fid_CrCtShutOffRev Fid_DIUMPRDenom Fid_EcuBoot Fid_FIMngGearDet	Fid_FIMngVehSpdOK Fid_Gearbx_GearDet Fid_HpTst Fid_InjCrvShOffTst Fid_LiGovSetpDrvAway Fid_LiGovUbr Fid_RunUpTst Fid_VehDaDist Fid_ZFCIbActv
Dfp_VarMngCodDs	Errorpath for dataset variant coding. Npl=Requested variant could not be set. Sig=variant dataset defect	163	Bit2	Signal fault	P161D	1	YES	OFF	OFF	HWEMon_numRecovery__stLow_DLen1		
			Bit3	Not plausible fault	P161E							
Dfp_WdCom	the fault path contains the supervision of the SPI-Handler	164	Bit3	Set, if SPI-communication failed	U0073	2	YES	ON	OFF	HWEMon_numRecovery__stLow_DLen1		