est plan for BMW Service (develo	opment status)																		
ED17.2																			
BMW Fault BMW Fault ECU type Code (hex) Code (dez) Fault mode	BMW Fault Code Description VS-Text	DTC (Diagnostic Trouble Code	) DTC Description	Component	Subcomponent	Monitoring criteria	Fault debouncing	Terminal conditions	Voltage conditions	Temperature conditions	Time conditions	System test	Signal information	Calculated value Y/N	Possible Fault Causes	Repair procedures (plant/service)	MIL illumination/CC message/emergency program	Remarks	Customer perception comments
MED17.2 0x2710 10000 <b>MAX</b>	Tank cap	P0455	Evaporative Emission System Leak Detected (large leak)	EVAP System	Leak Detection	5 sec. after engine start, v>10 km/h	none	none	none	4 °C< ambient temperature <35 °	C 10 min. after parking vehicle	DMTL system test	none	Y	Fuel filler cap missing or not on correctly	Check fuel cap Conduct DMTL system test	CGC (Check Gas Cap)		
MED17.2 0x2711 10001 <b>MIN</b>	Tank cap	P0455	Evaporative Emission System Leak Detected (large leak)	EVAP System	Leak Detection	5 sec. after engine start, v>10 km/h	none	none	none	4 °C< ambient temperature <35 °	C 10 min. after parking vehicle	DMTL system test	none	Υ	Fuel filler cap missing or not on correctly	Check fuel cap Conduct DMTL system test	CGC (Check Gas Cap)		
MED17.2 0x2718 10008 <b>MAX</b>	DMTL heater, activation	P240C	Evaporative Emission System Leak Detection Pump Heater Control Circuit High	EVAP System	DMTL Heater	nono	0.5.000	Terminal 15	9 V < Battery voltage < 16 V	none	2020	STEUERN_DMTLH	200	N	Short circuit to positive Heater element	Check wires S_DMTLH replace DMTL, replace DME	Million		
MED17.2 0x2718 10008 MAX	DIVITE neater, activation	P240C	Evaporative Emission System Leak Detection Pump	EVAP System	DMTL Heater	none	0.5 sec.	Terminai 15	9 v < Battery voltage < 16 v	none	none	STEUERN_DMILH	none	IN .	DME Short circuit to ground Heater element	Check wires S_DMTLH replace DMTL,	MIL on		
IED17.2 0x2719 10009 <b>MIN</b>	DMTL heater, activation	P240B	Heater Control Circuit Low	EVAP System	DMTL Heater	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_DMTLH	none	N	DME Open wire	replace DME Check wires S_DMTLH and U_HR<5	MIL on		
MED17.2 0x271B 10011 <b>SIG</b>	DMTL heater, activation	P240A	Evaporative Emission System Leak Detection Pump Heater Control Circuit/Open	EVAP System	DMTL Heater	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN DMTLH	none	N	Heater element DME	replace DMTL, replace DME	MIL on		
			Evaporative Emission System Switching Valve Control												Short circuit to positive Solenoid valve	Check wire S_DMTLV Replace DMTL,			
MED17.2 0x2727 10023 <b>MAX</b>	DMTL solenoid valve, activation	P2420	Circuit High	EVAP System	Switching Valve	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_DMTLV	none	N	DME Short circuit to ground	replace DME Check wire S_DMTLV	MIL on		
MED17.2 0x2728 10024 <b>MIN</b>	DMTL solenoid valve, activation	P2419	Evaporative Emission System Switching Valve Control Circuit Low	EVAP System	Switching Valve	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_DMTLV	none	N	Solenoid valve DME	Replace DMTL, replace DME	MIL on		
			Evaporative Emission System Switching Valve Control												Open wire Solenoid valve	Check wires S_DMTLV and U_HR<5 replace DMTL,			
MED17.2 0x272A 10026 SIG	DMTL solenoid valve, activation	P2418	Circuit/Open	EVAP System	Switching Valve	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_DMTLV	none	N	DME Short circuit to positive	replace DME Check wire S_DMTLP	MIL on		
MED17.2 0x272B 10027 <b>MAX</b>	DMTL pump motor, activation	P2402	Evaporative Emission System Leak Detection Pump Control Circuit High	EVAP System	Pump	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_DMTLP	none	N	Leak diagnosis pump  DME	Replace DMTL, replace DME	MIL on		
MED17.2 0x272C 10028 <b>MIN</b>	DMTL pump motor, activation	P2401	Evaporative Emission System Leak Detection Pump Control Circuit Low	EVAP System	Pump	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN DMTLP	none	N	Short circuit to ground Leak diagnosis pump DME	Check wire S_DMTLP Replace DMTL, replace DME	MIL on		
WIED IT IE GAZI ZO 100ZO IMIN	Diff E painp motor, activation	1 2 701	Evaporative Emission System Leak Detection Pump	Evvii Oyolom	i unip	none	0.0 300.	Terriminal 10	o v < Buttery voltage < 10 v	IIIII	none	OTECETIN_SWITE			Open wire Leak diagnosis pump	Check wires S_DMTLP and U_HR<5 replace DMTL,	MILOT		
MED17.2 0x272E 10030 <b>SIG</b>	DMTL pump motor, activation	P2400	Control Circuit/Open	EVAP System	Pump	none < 2400 m above sea level;	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_DMTLP	none	N	DME	replace DME	MIL on		
MED17.2 0x272F 10031 <b>MAX</b>	DMTL, superfine leak	P0456	Evaporative Emission System Leak Detected (very small leak)	EVAP System	Leak Detection	idle time > 30 s. vehicle speed above 40 km/h > 10 min engine start temp. 6.6 °C < as ambient temperature	none	none	none	2 °C< ambient temperature <37 °	C 10 min, after TR 15 off	DMTL system test	none	N	Fuel filler cap not on correctly or leakage (>0.5 mm) in tank system	Check fuel cap Check tank/hoses for leaks Conduct DMTL system test	MIL ON in 4th DC		
			Diagnostic Module Tank Leakage (DM-TL) Pump Current			< 2400 m above sea level; idle time > 30 s. vehicle speed above 40 km/h > 10 min engine start temp. 6.6 °C < as													
MED17.2 0x2733 10035 <b>MAX</b>	DMTL, module fault	P1449	Too High	EVAP System	Pump Current	ambient temperature < 2400 m above sea level;	none	none	none	2 °C< ambient temperature <37 °	C 10 min, after TR 15 off	DMTL system test	none	N	Internal fault, DMTL	Replace DMTL	MIL ON		
			Diagnostic Module Tank Leakage (DM-TL) Pump Current			idle time > 30 s. vehicle speed above 40 km/h > 10 min engine start temp. 6.6 °C < as													
ED17.2 0x2734 10036 <b>MIN</b>	DMTL, module fault	P1448	Too Low	EVAP System	Pump Current	ambient temperature	none	none	none	2 °C< ambient temperature <37 °	C 10 min, after TR 15 off	DMTL system test	none	N	Internal fault, DMTL	Replace DMTL	MIL ON		
						< 2400 m above sea level; idle time > 30 s. vehicle speed above 40 km/h > 10 min													
MED17.2 0x2735 10037 <b>PLAUS</b>	DMTL, module fault	P1447	Diagnostic Module Tank Leakage (DM-TL) Pump Current Too High during Switching Solenoid Test	EVAP System	Pump Current	engine start temp. 6.6 °C < as ambient temperature	none	none	none	2 °C< ambient temperature <37 °	C 10 min. after TR 15 off	DMTL system test	none	N	Internal fault, DMTL	Replace DMTL	MIL ON		



					we consider the constant of th	< 2400 m above sea level;												
						idle time > 30 s.												
						vehicle speed above 40 km/h > 10	0											
						min												
MED17.2 0x2736 10038 <b>SIG</b>	DMTL, module fault	P1434	Diagnostic Module Tank Leakage (DM-TL)	EVAP System	Pump Current	engine start temp. 6.6 °C < as ambient temperature	none	none	none	2 °C< ambient temperature <37	°C 10 min, after TP 15 off	DMTL system test	none	N	Internal fault, DMTL	Replace DMTL	MIL ON	
WED17.2 0X2730 10030 3IG	DIVITE, Module fault	1 1404	Diagnostic Module Tank Leakage (DM-TL)	EVAI System	r ump current	ambient temperature	none	none	none	2 GC ambient temperature CS7	C 10 min, aiter 110 13 on	Divire system test	none	IN	internal fault, Divite	Replace DIVITE	WILL OIV	
															Voltage supply and ground connection for ignition system	Check wiring harness		
																Check for damage: Spark plugs, ignition coils, ignition		
						Engine running (not in limp-home									Ignition coil	harness		
MED17.2 0x273D 10045 <b>PLAUS</b>	Ignition coil, cylinder 1, ignition-circuit monitoring	P0351	Ignition Coil 'A' Primary/Secondary Circuit	Ignition Coil	A Primary / Secondary Circuit	mode)	5 sec.	none	Battery voltage > 11 V	none	none	none	none	Υ	Fuses	Replace DME	none	Engine bucking
															Voltage supply and ground connection for ignition system	Check wiring harness		
																Check for damage: Spark plugs, ignition coils, ignition		
MEDAZ 2 00272E 4004C BLAUC	lemition coil ordinator 2 ignition sirevit monitoring	Dogga	Invition Cail ICI Primary/Casandary Circuit	Impition Call	C Drimon, / Cocondon, Circuit	Engine running (not in limp-home			Dottom (voltogo v 44 V					V	Ignition coil	harness		Facina hualdaa
MED17.2 0x273E 10046 <b>PLAUS</b>	Ignition coil, cylinder 3, ignition-circuit monitoring	P0353	Ignition Coil 'C' Primary/Secondary Circuit	Ignition Coil	C Primary / Secondary Circuit	mode)	5 sec.	none	Battery voltage > 11 V	none	none	none	none	Y	Fuses	Replace DME	none	Engine bucking
															Voltage supply and ground connection for ignition system	Check wiring harness		
																Check for damage: Spark plugs, ignition coils, ignition		
						Engine running (not in limp-home	•								Ignition coil	harness		
MED17.2 0x273F 10047 <b>PLAUS</b>	Ignition coil, cylinder 4, ignition-circuit monitoring	P0354	Ignition Coil 'D' Primary/Secondary Circuit	Ignition Coil	D Primary / Secondary Circuit	mode)	5 sec.	none	Battery voltage > 11 V	none	none	none	none	Υ	Fuses	Replace DME	none	Engine bucking
															Voltage supply and ground connection for ignition system	Check wiring harness		
															Spark plug	Check for damage: Spark plugs, ignition coils, ignition		
						Engine running (not in limp-home									Ignition coil	harness		
MED17.2 0x2740 10048 <b>PLAUS</b>	Ignition coil, cylinder 2, ignition-circuit monitoring	P0352	Ignition Coil 'B' Primary/Secondary Circuit	Ignition Coil	B Primary / Secondary Circuit	mode)	5 sec.	none	Battery voltage > 11 V	none	none	none	none	Υ	Fuses	Replace DME	none	Engine bucking
															Fault registered owing to defective: oxygen sensor (before			
															catalytic converter), HFM (USA only), injector nozzle, leak			
															in induction tract (crankcase ventilation, oil cap, dipstick, EVAP line, brake booster), leak in exhaust system			
															(cylinder head exhaust side as far as 2nd oxygen sensor).			
															intake manifold pressure sensor, fuel primer pump, rail-			
						Air mass > 20 kg/h						START_SYSTEMCHECK_GRU	JND		pressure sensor, camshaft sensor, intake air temperature, Be	ecause the action measures are quite extensive, they are		
MED17.2 0x2745 10053 <b>MAX</b>	multiplicative mixture adaptation	P2177	System Too Lean Off Idle (Bank 1)	Fuel System	Off Idle	Engine speed > 1600 rpm	none	none	none	Engine temperature > 60 °C	approximately 300 sec.	ADAPT	none	N	low-quality fuel.	only portrayed in the test module	MIL ON	
															Fault registered owing to defective: oxygen sensor (before			
															catalytic converter), HFM (USA only), injector nozzle,			
															intake manifold pressure sensor, fuel primer pump, rail-			
					<b></b>	Air mass > 20 kg/h						START_SYSTEMCHECK_GRU			pressure sensor, camshaft sensor, intake air temperature. Be			
MED17.2 0x2746 10054 MIN	multiplicative mixture adaptation	P2178	System Too Rich Off Idle (Bank 1)	Fuel System	Off Idle	Engine speed > 1600 rpm	none	none	none	Engine temperature > 60 °C	approximately 300 sec.	ADAPI	none	N	poor-quality gasoline.	only portrayed in the test module	MIL ON	
MED17.2 0x2755 10069 MAX MED17.2 0x2755 10069 MAX	Fuel level sensor	P0460	Fuel Level Sensor 'A' Circuit	Fuel Level Sensor	Electrical	none	25 sec.	Terminal 15	none	none	none	none	none	Y	Short to positive	Continue fault diagnosis in I-cluster and/or SPEG	none	
MED17.2 0x2755 10069 MAX MED17.2 0x2756 10070 MIN	Fuel level sensor	P0463 P0462	Fuel Level Sensor 'A' Circuit High Fuel Level Sensor 'A' Circuit Low	Fuel Level Sensor Fuel Level Sensor	Electrical Electrical	none	25 sec. 25 sec.	Terminal 15	none	none	none	none	none	Y	Short to positive	Continue fault diagnosis in I-cluster and/or SPEC	none	
WED17.2 0x2756 10070 WIIN	Fuel level sensor	P0462	Fuel Level Sensor A Circuit Low	Fuel Level Sensor	Electrical	none	Zo sec.	Terminal 15	none	none	none	none	none	T	Short to ground	Continue fault diagnosis in I-cluster and/or SPEG	none	
					10.00	Engine running At least 6 liters of fuel must be										If the fault is continuously present or has multiple log		
MED17.2 0x2757 10071 <b>PLAUS</b>	Fuel level sensor	P1407	Fuel Level Signal 1	Fuel Level Sensor	Signal	consumed	20 sec.	none	none	none	none	none	none	Y	Seized fuel level sensor	entries respond by replacing the fuel level sensor	none	
MED17.2 0x2758 10072 <b>SIG</b>	Fuel level sensor	P1409	Fuel Level 1 CAN Error	Fuel Level Sensor	Signal Signal	Check CAN message	25 sec.	Terminal 15	none	none	none none	none	none none	Y	Implausible fuel level value received	Continue fault diagnosis in I-cluster and/or SPEG	MIL ON	
					- 3			,a. 10							,			
					a constant	and the second s										Check tank/hoses for leaks		
					10.00	TO THE PROPERTY OF THE PROPERT	Fuel level change exceeds 0.5 l								Fuel line/tank leaking	If the fault is continuously present or has been logged		
MED17.2 0x275D 10077 <b>MAX</b>	Fuel level sensor	P0461	Fuel Level Sensor 'A' Circuit Range/Performance	Fuel Level Sensor	Plausibility	Engine running	from previous figure	none	none	none	none	none	none	Υ		multiple times, respond by replacing the fuel level sensor	none	
																Check wiring harness		
						A CONTRACTOR OF THE CONTRACTOR										If the fault is continuously present or has multiple log		
MED17.2 0x275E 10078 <b>MIN</b>	Fuel level sensor	P144A	Fuel Level / Tank Capacity Correlation	Fuel Level	Correlation	none	none	Terminal 15	none	none	none	none	none	Υ	Tank 1 fuel level exceeds tank volume	entries respond by replacing the fuel level sensor	none	
						Engine running										If the fault is continuously assessed a 1971-19		
MED17.2 0x275F 10079 <b>PLAUS</b>	Fuel level sensor	P144B	Fuel Level / Fuel Consumption Correlation	Fuel Level	Correlation	At least 6 liters of fuel must be consumed	20.000	nono	nono	nono	none	nono	nono	V	Seized fuel level sensor	If the fault is continuously present or has multiple log	none	
WED17.2 0x275F 10079 FLAUS	ruei ievei serisor	r 144B	ruei Levei / ruei Consumption Correlation	Fuel Level	Correlation	<del>-</del>	20 sec.	none	Tione	none	none	none	none	Ī	Seizeu iuei ievei serisor	entries respond by replacing the fuel level sensor	none	
					ver	No fault memory stored; EVAP not active;										If fault is continuous, replace catalytic converter		
MED17.2 0x276A 10090 <b>MIN</b>	Catalytic-converter conversion	P0420	Catalyst System Efficiency Below Threshold (Bank 1)	Catalyst	Efficiency	before cat.lambda control active;	; none	none	none	Engine at operating temperature	none	START_SYSTEMCHECK_KAT	none	Υ	Defective catalyst	If fault is sporadic, start by conducting system test	MIL on	
	Callay no control conversion	. 0 120	zamyst system zmsterioj polovi (mosticia (pariti 1)			dulivo,	,							·	~~~~~	Check wiring harness between DME and fuel pump relay:		
						and the second s									Short circuit to positive			
						Total Control									Fuel pump relay	replace fuel pump relay,		
MED17.2 0x276D 10093 <b>MAX</b>	Fuel pump, activation	P0629	Fuel Pump 'A' Control Circuit High	Fuel Regulators / Valves / Sensors	Fuel Pump	Engine running	0.5 sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN_EKP	none	N	DME	replace DME	CC status report	
					•		<u> </u>		· · ·								·	

Part																		
## 14 PATE OF THE																	Check wiring harness between DME and fuel pump relay:	
The color   The																	, ,	
The control of the																Fuel pump relay		
Company   Comp	MED17.2 0x276E 10094 MIN	Fuel pump, activation	P0628	Fuel Pump 'A' Control Circuit Low	Fuel Regulators / Valves / Sensors	Fuel Pump	Engine running	0.5 sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN_EKP	none	N	DME		
March   Marc																	Check wiring harness between DME and fuel pump relay:	
## 19   19   19   19   19   19   19   19																Open wire	, ,	
									***************************************							Fuel pump relay		
HE DESCRIPTION OF THE PROPERTY	MED17.2 0x2770 10096 <b>SIG</b>	Fuel pump, activation	P0627	Fuel Pump 'A' Control Circuit/Open	Fuel Regulators / Valves / Sensors	Fuel Pump	Engine running	0.5 sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN_EKP	none	N	DME	replace DME	CC status report
HE DESCRIPTION OF THE PROPERTY																		
## 1																	If problem is present with mixture, VANOS, lambda	
Companies   Comp																		
## CALL PROPERTY OF THE PROPER									***************************************									
HOURS ON THE STATE OF THE STATE																		
Harmonia del la companie del l																		
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Auto   Series   Ser																		
HEREY 2079 FAME OF THE PARTY OF	MED47.0 0x2774 40007 MAY	Combustion misfings sulinder 1	D0204	Cidinday 4 Miefire Detected	Miefire	Cul 1	·				Engine temperature . 7.5 °C				V			MILON
Here the second	WED17.2 0x2771 10097 WAX	Combustion misiles, cylinder i	P0301	Cylinder 1 Mishre Detected	MISHIE	Cyr i	aiter engine start	none	none	rione	Engine temperature > -7.5 C	none	none	none	T	VAINOS Iduit	ignition coil as indicated.	NILON
Here the second																		
Maria   Mari																		
Company   Comp																		
Service of the control of the contro																		
Marie   Mari									***************************************									
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The content of the co																	- 1	
Set of the control of									***************************************									
ACTIVITY OF THE CONTROL OF THE CONTR							580 < nmot < 6500											
Fig. 12 Control of Con																		
## Fig. 1   Fig. compared by the compared of t	MED17.2 0x2772 10098 <b>MIN</b>	Combustion misfires, cylinder 1	P0301	Cylinder 1 Misfire Detected	Misfire	Cyl 1	•	none	none	none	Engine temperature > -7.5 °C	none	none	none	Υ			MIL ON
HEROTZ DATES AND PAUS CONSIDERATION CONTRACTOR AND PAUS CONSIDERATION CONTRACTOR AND PAUS CONTRACTOR AND P																		
INTERFORM TO THE PROPERTY OF T																	1 If problem is present with mixture VANOS lambda	
MCD1/2 30/10 1000 PAMS On the street widows and street in Section																		
Result for the control of the contro																		
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heliant or improved particular seasons of the control of the contr																		
defective egraphic description and plagescentistics.  ### Commission or Plants  ### Commission o																Ignition or injection miss,		
defender weintry partners and plugicitation, despectation of the d																- · · · · · · · · · · · · · · · · · · ·		
MEDI7 2 02273 1009 PLAUS Contestant representative 2.7.5 TO note note implementative 2.7.5 TO note note note implementative 2.7.5 TO note note																		
MEDIT 2 DIAZY TO THE PLANS Combustion middles, cylinder 1 P0301 Cylinder 1 Missine Delected Missine one none none Engine temperature > 7.5 °C none none none none Engine temperature > 7.5 °C none none none none Engine temperature > 7.5 °C none none none none Engine temperature > 7.5 °C none none none none Engine temperature > 7.5 °C none none none none none Engine temperature > 7.5 °C none none none none none Engine temperature > 7.5 °C none none none none none none none Engine temperature > 7.5 °C none none none none none none none non																induction mixture problem,	,	
MED17.2 0x2773 10x99 PLAUS Combustion mislines, cylinder 1 Mislifre Desected Mislifre Cyl 1 after engine start none none prone Engine temperature > -7.5 °C none (none)  1. If problem prosess with mislines public problem pr							580 < nmot < 6500								***************************************			
1. If problem is present with mixture. VANOS, tembds controllorgops ansorb, high-pressure is legislation, because of controllorgops ansorb, high-pressure is legislation and legislation and problems. The problems of the pro							barometric pressure > 740 hPa									defective injection valve,	with full acceleration and note if problem migrates, replace	
control (xxyqen enans, high-pressure ystem, boos transcent of pixtem, construction (xydem, construction ystem, boos transcent of pixtem, construction ystem, tools the control of pixtem of the pixtem of t	MED17.2 0x2773 10099 <b>PLAUS</b>	Combustion misfires, cylinder 1	P0301	Cylinder 1 Misfire Detected	Misfire	Cyl 1	after engine start	none	none	none	Engine temperature > -7.5 °C	none	none	none	Υ	VANOS fault	ignition coil as indicated.	MIL ON
control/cycyne means, hitp-ressure who six then control injection valves, then control system, command the control injection valves, then control system, command the control injection valves, then control system, command the control injection valves, then control system, constant of the control system, control system																		
control system, camehalt control, injection valves, then repair these faults first.  2. Spark pulsual inspection (cracked ceramic insulator, testing dialeted dialete																	1. If problem is present with mixture, VANOS, lambda	
repair sete faults first.  2. Spark plug visual instence faults first.  2. Spark plug visual instence faults first.  3. Spark plug visual instence faults first.  4. Spark plug visual instence faults first.  5. Spark plug visual instence faults first.  5. Spark plug visual instence faults first.  6. Spark plug visual instence faults first.  6. Spark plug visual instence faults first.  8. Spark plug visual instence faults first.  8. Spark plug visual instence faults first.  9. Spark plug visual instence faults faults electrodes particular instence faults faults electrodes indicated.  9. Spark plug visual instence faults faults electrodes indicated.  9. Spark plug visual instence faults faults electrodes particular instence faults electrodes indicated.  9. Spark plug visual instence faults faults electrodes indicated.  9. Spark plug visual instence faults faults electrodes indicated.  9. Spark plug visual instence faults electrodes indicated.  9. Spark pl																		
2. Spark plug of (rock, decreation insilator, instance) Ignition or injection miss, defective spark plug, defective spark plug, contacts, induction mixture problem, defective injection oril, with full acceleration and not lef problem or for pressure > 740 hPa															***************************************		control system, camshaft control, injection valves, then	
Ignition or injection are plus, adefective sign rulis, adefective si															***************************************		repair these faults first.	
defective spark plug, defective wiring harness and plugs/contacts, induction mixture prioblem, feeting injection oxid, feeting injection valve, defective injection valve, defective injection and note if problem migrates, replace  3. Wiring harness electrical check, check contacts (corrosion, insulation damage) 4. Check contacts (corrosion, insulation damage) 4. Check contacts (corrosion, insulation damage) 4. Check contacts (corrosion, cracks, interchange 4. Check contacts (corrosion, insulation damage) 4. Check contacts																		
defective wiring harness and plugs/contacts, induction mixture problem, induction mixture problem, induction mixture problem, induction coli,																- · · · · · · · · · · · · · · · · · · ·		
induction mixture problem, 4. Check ignition coil for corrosion, cracks, interchange 580 < nmot < 6500 coils between cylinders as indicated, conduct road test barometric pressure > 740 hPa with full acceleration and note if problem migrates, replace																		
defective ignition coil, coils between cylinders as indicated, conduct road test barometric pressure > 740 hPa																		
defective injection valve, with full acceleration and note if problem migrates, replace															***************************************			
defective injection valve, with full acceleration and note if problem migrates, replace  MED17.2 0x2775 10101 MAX Combustion misfires, cylinder 3 Misfire Detected																defective ignition coil,		
MED17.2 UX27/5 10101 MAX Combustion mistires, cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Significance Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Significance Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5 - 7.5 °C none Cylinder 3 Mistire Detected Figure 5	l MEDITO O OFFI		Bacco			0.1-										defective injection valve,		
	MED17.2 0x2775 10101 <b>MAX</b>	Combustion mistires, cylinder 3	P0303	Cylinder 3 Misfire Detected	Misfire	Cyl 3	atter engine start	none	none	none	Engine temperature > -7.5 °C	none	none	none	Y	VANOS fault	ignition coil as indicated.	MIL UN

MED17.2         0x2776         10102         MIN         Combustion misfires, cylinder 3	P0303 Cylinder 3 Misfire Detected	580 < nmot - barometric pressu  Misfire Cyl 3 after engine	740 hPa	Engine temperature > -7.5 °C none none	Ignition or inje defective sp defective wiring harnes induction mixtu defective ign defective inje none	3. Wiring harness electrical check, check contacts and plugs/contacts, (corrosion, insulation damage) 4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test with full acceleration and note if problem migrates, replace
MED17.2 0x2777 10103 PLAUS Combustion misfires, cylinder 3	P0303 Cylinder 3 Misfire Detected	580 < nmot of barometric pressur Misfire Cyl 3 after engine	740 hPa	Engine temperature > -7.5 °C none none	Ignition or inje defective sp defective wiring harnes induction mixtu defective ign defective inje none	ark plug, and plugs/contacts, re problem, ition coil, tion valve,  3. Wiring harness electrical check, check contacts (corrosion, insulation damage)  4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test with full acceleration and note if problem migrates, replace
MED17.2 0x2779 10105 MAX Combustion misfires, cylinder 4	P0304 Cylinder 4 Misfire Detected	580 < nmot - barometric pressu Misfire Cyl 4 after engine	740 hPa	Engine temperature > -7.5 °C none none	Ignition or inje defective sp defective wiring harnes: induction mixtu defective ign defective inje none	3. Wiring harness electrical check, check contacts and plugs/contacts, (corrosion, insulation damage) 4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test tion valve, with full acceleration and note if problem migrates, replace
MED17.2 0x277A 10106 MIN Combustion misfires, cylinder 4	P0304 Cylinder 4 Misfire Detected	580 < nmot « barometric pressu Misfire Cyl 4 after engine	000 740 hPa	Engine temperature > -7.5 °C none none	Ignition or inje defective sp defective wiring harnes induction mixtu defective ign defective inje none	3. Wiring harness electrical check, check contacts and plugs/contacts, (corrosion, insulation damage) 4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test tion valve, with full acceleration and note if problem migrates, replace
MED17.2 0x277B 10107 PLAUS Combustion misfires, cylinder 4	P0304 Cylinder 4 Misfire Detected	580 < nmot - barometric pressu Misfire Cyl 4 after engine	000 740 hPa	Engine temperature > -7.5 °C none none	Ignition or inje defective sp defective wiring harnes induction mixtu defective igr defective inje none	1. If problem is present with mixture, VANOS, lambda control/oxygen sensor, high-pressure fuel system, boost control system, camshaft control, injection valves, then repair these faults first.  2. Spark plug visual inspection (cracked ceramic insulator, black electrodes, electrode gap, etc.), replace as indicated and plugs/contacts, (corrosion, insulation damage) and plugs/contacts, reproblem, (corrosion, cracks, interchange tition coil, coils between cylinders as indicated, conduct road test with full acceleration and note if problem migrates, replace

MED17.2 0x277D 10109 MAX Combustion misfires, cylinder 2	P0302 Cylinder 2 Misfire Detected	580 < nmot < 65 barometric pressure > Misfire Cyl 2 after engine sta	0 hPa	Engine temperature > -7.5 °C none none	1. If problem is present with mixture, VANOS, lambda control/oxygen sensor, high-pressure fuel system, boost control system, camshaft control, injection valves, then repair these faults first.  2. Spark plug visual inspection (cracked ceramic insulator, black electrodes, electrode gap, etc.), replace as indicated.  3. Wiring harness electrical check, check contacts (corrosion, insulation damage)  4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test with full acceleration and note if problem migrates, replace none  Y VANOS fault ignition coil as indicated.	MIL ON
MED17.2 0x277E 10110 MIN Combustion misfires, cylinder 2	P0302 Cylinder 2 Misfire Detected	580 < nmot < 65 barometric pressure > Misfire Cyl 2 after engine sta	0 hPa	Engine temperature > -7.5 °C none none	1. If problem is present with mixture, VANOS, lambda control/oxygen sensor, high-pressure fuel system, boost control system, camshaft control, injection valves, then repair these faults first.  2. Spark plug visual inspection (cracked ceramic insulator, black electrodes, electrode gap, etc.), replace as indicated 3. Wiring harness electrical check, check contacts (corrosion, insulation damage)  4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test with full acceleration and note if problem migrates, replace ignition coil as indicated.	MIL ON
MED17.2 0x277F 10111 PLAUS Combustion misfires, cylinder 2	P0302 Cylinder 2 Misfire Detected	580 < nmot < 65 barometric pressure > Misfire Cyl 2 after engine sta	0 hPa	Engine temperature > -7.5 °C none none	1. If problem is present with mixture, VANOS, lambda control/oxygen sensor, high-pressure fuel system, boost control system, camshaft control, injection valves, then repair these faults first.  2. Spark plug visual inspection (cracked ceramic insulator, black electrodes, electrode gap, etc.), replace as indicated 3. Wiring harness electrical check, check contacts (corrosion, insulation damage) 4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test defective injection valve, valves ignition coil as indicated.	MIL ON
MED17.2 0x2781 10113 MAX Combustion misfires, several cylinders	P0300 Random/Multiple Cylinder Misfire Detected	580 < nmot < 65 barometric pressure > Misfire Multiple after engine sta	0 hPa	Engine temperature > -7.5 °C none none	1. If problem is present with mixture, VANOS, lambda control/oxygen sensor, high-pressure fuel system, boost control system, camshaft control, injection valves, then repair these faults first.  Multiple ignition or injection miss at one or several cylinders, defective spark plug, defective wiring harness and plugs/contacts, mixture formation problems, defective ignition coil, defective injection valve, vANOS fault  1. If problem is present with mixture, VANOS, lambda control/oxygen sensor, high-pressure fuel system, boost control system, camshaft control, injection valves, then repair these faults first.  2. Spark plug visual inspection (cracked ceramic insulator, black electrodes, electrode gap, etc.), replace as indicated  3. Wiring harness electrical check, check contacts (corrosion, insulation damage)  4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test with full acceleration and note if problem migrates, replace ignition coil as indicated.	MIL ON
MED17.2 0x2782 10114 MIN Combustion misfires, several cylinders	P0300 Random/Multiple Cylinder Misfire Detected	580 < nmot < 65 barometric pressure > Misfire Multiple after engine sta	0 hPa	Engine temperature > -7.5 °C none none	1. If problem is present with mixture, VANOS, lambda control/oxygen sensor, high-pressure fuel system, boost control system, camshaft control, injection valves, then repair these faults first.  Multiple ignition or injection miss at one or several cylinders, defective spark plug, defective wiring harness and plugs/contacts, mixture formation problems, defective ignition coil, defective injection valve, none  Y  1. If problem is present with mixture, VANOS, lambda control/oxygen sensor, high-pressure fuel system, boost control system, camshaft control, injection valves, then repair these faults first.  2. Spark plug visual inspection (cracked ceramic insulator, black electrodes, electrode gap, etc.), replace as indicated and a wiring harness electrical check, check contacts (corrosion, insulation damage)  4. Check ignition coil for corrosion, cracks, interchange coils between cylinders as indicated, conduct road test with full acceleration and note if problem migrates, replace ignition coil as indicated.	MIL ON

0x2785 10117 <b>MAX</b> Add	mbustion misfires, several cylinders  Additional mixture adaptation	P0300 P2187	Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	580 < nmot < 6500 barometric pressure > 740 hPa after engine start	none	none	none	Engine temperature > -7.5°C				Multiple ignition or injection miss at one or cylinders, defective spark plug, defective wiring harness and plugs/cont mixture formation problems,	black electrodes, electrode gap, etc.), replace as indicated 3. Wiring harness electrical check, check contacts acts, (corrosion, insulation damage) 4. Check ignition coil for corrosion, cracks, interchange			
0x2785 10117 <b>MAX</b> Add			Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	barometric pressure > 740 hPa	none	none	none	Engine temperature > -7.5 °C				cylinders, defective spark plug, defective wiring harness and plugs/conf	repair these faults first.  2. Spark plug visual inspection (cracked ceramic insulator, black electrodes, electrode gap, etc.), replace as indicated 3. Wiring harness electrical check, check contacts acts,  (corrosion, insulation damage)  4. Check ignition coil for corrosion, cracks, interchange			
0x2785 10117 <b>MAX</b> Add			Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	barometric pressure > 740 hPa	none	none	none	Engine temperature > -7.5 °C				cylinders, defective spark plug, defective wiring harness and plugs/conf	2. Spark plug visual inspection (cracked ceramic insulator, black electrodes, electrode gap, etc.), replace as indicated 3. Wiring harness electrical check, check contacts (corrosion, insulation damage)  4. Check ignition coil for corrosion, cracks, interchange			
0x2785 10117 <b>MAX</b> Add			Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	barometric pressure > 740 hPa	none	none	none	Engine temperature > -7.5 °C				cylinders, defective spark plug, defective wiring harness and plugs/conf	black electrodes, electrode gap, etc.), replace as indicated 3. Wiring harness electrical check, check contacts acts, (corrosion, insulation damage) 4. Check ignition coil for corrosion, cracks, interchange			
0x2785 10117 <b>MAX</b> Add			Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	barometric pressure > 740 hPa	none	none	none	Engine temperature > -7.5 °C				defective wiring harness and plugs/conf	acts, (corrosion, insulation damage) 4. Check ignition coil for corrosion, cracks, interchange			
0x2785 10117 <b>MAX</b> Add			Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	barometric pressure > 740 hPa	none	none	none	Engine temperature > -7.5 °C					4. Check ignition coil for corrosion, cracks, interchange			
0x2785 10117 <b>MAX</b> Add			Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	barometric pressure > 740 hPa	none	none	none	Engine temperature > .7.5 °C				HIMILIE IOITIALION DIOCIENIS				
0x2785 10117 <b>MAX</b> Add			Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	barometric pressure > 740 hPa	none	none	none	Engine temperature > -7.5 °C				defective ignition coil,	coils between cylinders as indicated, conduct road test			
0x2785 10117 <b>MAX</b> Add			Random/Multiple Cylinder Misfire Detected	Misfire	Multiple	after engine start	none	none	none	Engine temperature > -7.5 °C				defective injection valve,	with full acceleration and note if problem migrates, replace			
	Additional mixture adaptation	P2187								Engine temperature > -7.5 C	none	none	none	Y VANOS fault	ignition coil as indicated.	MIL ON		
	Additional mixture adaptation	P2187												Fault registered owing to defective: oxygen se	nsor (before			
	Additional mixture adaptation	P2187												catalytic converter), HFM (USA only), injector				
	Additional mixture adaptation	P2187							a parameter					in induction tract (crankcase ventilation, oil ca				
	Additional mixture adaptation	P2187												EVAP line, brake booster), leak in exhaust sy cylinder head exhaust side back to 2nd oxyg				
	Additional mixture adaptation	P2187												intake manifold pressure sensor, fuel primer	· · · · · · · · · · · · · · · · · · ·			
	Additional mixture adaptation	P2187				Air mass < 18 kg/h			a parameter						emperature, Because the action measures are quite extensive, they are			
NOTES 40440 MIN Add			System Too Lean at Idle (Bank 1)	Fuel System	Idle	650 rpm < Engine speed < 900 rpm	none	none	none	Engine temperature > 60 °C	approximately 300 sec.	none	none	N low-quality fuel.	only portrayed in the test module	MIL ON		
.0700 40440 MIN														Fault registered owing to defective: oxygen se				
10700 A0440 MIN														catalytic converter), HFM (USA only), injecti intake manifold pressure sensor, fuel primer				
0::0700 40440 MINI A-I						Air mass < 18 kg/h									emperature. Because the action measures are quite extensive, they are			
0x2786 10118 <b>MIN</b> Add	Additional mixture adaptation	P2188	System Too Rich at Idle (Bank 1)	Fuel System	Idle	650 rpm < Engine speed < 900 rpm	none	none	none	Engine temperature > 60 °C	approximately 300 sec.	none	none	N poor-quality gasoline.	only portrayed in the test module	MIL ON		
															Fault is entered as supplementary information for possible			
(27AB 10155 <b>PLAUS</b>	Tank fill level	P116F	Fuel Level Too Low			none	none	Terminal 15	none	none	approximately 10 sec.	none	none	N Tank empty	fault diagnosis	Fuel level display		
						< 2400 m above sea level;												
						idle time > 30 s. vehicle speed above 40 km/h > 10			THE CONTRACTOR OF THE CONTRACT									
						min									Check fuel cap			
						engine start temp. 6.6 °C < as			a parameter					Fuel filler cap not on correctly or leakage (>1 r	nm) in tank Check tank/hoses for leaks			
x27AC 10156 <b>MAX</b>	DMTL, major leak	P0442	Evaporative Emission System Leak Detected (small leak)	EVAP System	Leak Detection	ambient temperature	none	none	none	2 °C< ambient temperature <	37 °C 10 min, after TR 15 off	DMTL system test	none	N system	Conduct DMTL system test	MIL on in 3rd DC.		
															Conduct tank EVAP test Visual inspection, whether EVAP line is compressed			
												START_SYSTEMCHECK_T	VF	1.EVAP valve closed/obstructed	Disconnect both ends of EVAP line and blow through with			
x27B0 10160 <b>MIN</b> Tan	Tank-venting system, function	P0441	Evaporative Emission System Incorrect Purge Flow	EVAP System	Flow Check	Engine running	none	none	none	Engine temperature > 70 °C	none	UNC	none	N 2. EVAP valve plugged or crimped		MIL On		
														Short circuit to positive	Check wiring harness T_TEV		Effects	
			Evaporative Emission System Purge Control Valve Circuit											Tank EVAP valve	Replace tank EVAP valve,		limited to	
27B1 10161 <b>MAX</b> Tan	Tank-venting valve, activation	P0459	High	EVAP System	Valve	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 \	/ none	none	STEUERN_TEV	none	N DME	Replace DME	MIL on	emissions	
			Evaporative Emission System Purge Control Valve Circuit											Short to ground  Tank EVAP valve	Check wiring harness T_TEV  Replace tank EVAP valve,		Effects limited to	
(27B2 10162 <b>MIN</b> Tan	Tank-venting valve, activation	P0458		EVAP System	Valve	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 \	/ none	none	STEUERN_TEV	none	N DME	Replace DME	MIL on	emissions	
												_		Open wire	Check wiring harness T_TEV and 87		Effects	
			Evaporative Emission System Purge Control Valve Circuit											Tank EVAP valve	replace tank EVAP valve,		limited to	
27B4 10164 <b>SIG</b> Tan	Tank-venting valve, activation	P0444	Open Die in	EVAP System	Valve	none	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 \	/ none	none	STEUERN_TEV	none	N DME	replace DME	MIL on	emissions	
27C4 10180 <b>MAX</b> 27C4 10180 <b>MAX</b>	Fuel level sensor Fuel level sensor	P2065 P2068	Fuel Level Sensor 'B' Circuit Fuel Level Sensor 'B' Circuit High	Fuel Level Sensor Fuel Level Sensor	Electrical	none	25 sec.	Terminal 15 Terminal 15	none	none	none none	none	none	Y Short to positive	Continue fault diagnosis in I-cluster and/or SPEG Continue fault diagnosis in I-cluster and/or SPEG	none none		
x27C5 10180 MAX	Fuel level sensor	P2067	Fuel Level Sensor 'B' Circuit Low	Fuel Level Sensor	Electrical Electrical	none none	25 sec. 25 sec.	Terminal 15	none	none	none	none	none none	Y Short to positive Y Short to ground	Continue fault diagnosis in I-cluster and/or SPEG  Continue fault diagnosis in I-cluster and/or SPEG	none		
x27C6 10182 <b>SIG</b>	Fuel level sensor	P1433	Fuel Level 2 CAN Error	Fuel Level Sensor	Signal	none	25 sec.	Terminal 15		none	none	none	none	Y Implausible fuel level value receive	······································	MIL ON		
															g			
														Extreme pressure peaks in high-pressure fu				
x27CE 10190 <b>MAX</b>	Fuel-supply system	P0148	Fuel Delivery Error	Fuel Supply	General									Collateral fault	Delete fault	none		
												and the second s		Fault/failure in signal for intake air temperatur	e ambient			
												Year			cle speed Because the action measures are quite extensive, they are			
0x27CF 10191 <b>MAX</b>	Fuel-supply system	P1216 P213F	Fuel Pump Emergency Operation	Fuel Regulators / Valves / Sensors								To annual to the second		High-pressure pump	only portrayed in the test module			
0x27CF 10191 MAX 0x27D0 10192 MAX	Fuel-supply system	P213F		Fuel Regulators / Valves / Sensors	Fuel Pump													
												And the second s		Short circuit to positive	1. Check wiring harness between DME and rail-pressure			
												and the second s		Open wire between DME and rail-pressure	sensor sensor 2. Replace rail-pressure sensor			C41-
0x2848 10312 <b>MAX</b>	Fuel-pressure sensor	P0190	Fuel Rail Pressure Sensor 'A' Circuit	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	none	0.5 sec.	Terminal 15					Analog; 0-5V	Defective rail-pressure sensor N Defective DME	Z. Replace fall-pressure sensor	CC status report		Swicthes limp-home

						,												
																1. Check wiring harness between DME and rail-pressure		
															Short to ground	sensor A_DSK		
															Defective rail-pressure sensor	Replace rail-pressure sensor		Swicthes to
MED17.2 0x2849 10313 <b>MIN</b>	Fuel-pressure sensor	P0192	Fuel Rail Pressure Sensor 'A' Circuit Low	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure Sensor	none	0.5 sec.	Terminal 15	none	none	none	none	Analog; 0-5V	N	Defective DME	3. Replace DME	CC status report	limp-home mode
																Check wiring harness between DME and VANOS intake		
															Short circuit to positive	solenoid valve: T NWE1		
			'A' Camshaft Position Actuator Control Circuit High (Bank												VANOS intake-side solenoid valve	Replace VANOS intake-side solenoid valve		
MED17.2 0x2877 10359 <b>MAX</b>	VANOS solenoid valve, inlet, activation	P2089	1)	Camshaft Position Actuator	Intake	Engine running	0.5 sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN VANOS EINLAS	s II	N	DME	Replace DME	MIL on	
MED 11.2 OXEO11 TOOO	Village Colonica Valvo, illiot, activation	1 2000	'/	Carrioriant i Contorri	mano		0.0 000.	110110	o v v Daniery venage v 10 v	none	none	01202111_011100_21112101	<u> </u>			Check wiring harness between DME and VANOS intake	MIL OII	
															Short circuit to ground	solenoid valve: T NWE1		
			'A' Camshaft Position Actuator Control Circuit Low (Bank													Replace VANOS intake-side solenoid valve		
MED17.2 0x2878 10360 <b>MIN</b>	VANOS solenoid valve, inlet, activation	P2088	A Camshail Position Actuator Control Circuit Low (Bank	Camshaft Position Actuator	Intoles	Engine gunning	0.5 sec.		O.V. Dottom weltone . 16.V			STEUERN_VANOS_EINLAS	c 11	N.I.	VANOS intake-side solenoid valve DME		MIL on	
WED17.2 0X2076 10300 WIIN	VANOS Solenolo valve, iniet, activation	F2000		Camshart Position Actuator	Intake	Engine running	0.5 Sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN_VANOS_EINLAS	3 0	IN	DIVIE	Replace DME	WIL OII	
																Check wiring harness between DME and VANOS intake		
															Open wire	solenoid valve: T_NWE1		
													_		VANOS intake-side solenoid valve	Replace VANOS intake-side solenoid valve		
MED17.2 0x287A 10362 <b>SIG</b>	VANOS solenoid valve, inlet, activation	P0010	'A' Camshaft Position Actuator Circuit/Open (Bank 1)	Camshaft Position Actuator	Intake	Engine running	0.5 sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN_VANOS_EINLAS	S U	N	DME	Replace DME	MIL on	
												****				If camshaft sensor fault is present, repair this first		
																2. Check the connection (contact resistance, corrosion)		
												****				between camshaft actuator and DME (CME-101).		
										-48 °C < Engine temperatur	ıre <					Determine whether battery voltage is present at actuator		
										143 °C						and use tester for system test		
						Engine rpm between 1000 and				-48 °C < Engine oil tempera	ature <				VANOS valve defective / dirty	Replace camshaft actuator		
MED17.2 0x287D 10365 <b>PLAUS</b>	VANOS, inlet: actuator movement	P000A	'A' Camshaft Position Slow Response (Bank 1)	Camshaft Position Timing	Intake	6000	2 sec.	none	none	180 °C	none	STEUERN_VANOS_EINLAS	S PWM	Υ	Implausible camshaft sensor signal	Check camshaft mechanism for stiction	MIL on	
																1. If a camshaft sensor fault is present repair this first		
																Check camshaft system sprocket alignment (jumped)		
																chain)		
																3. Check connection (contact resistance, corrosion)		
																between camshaft actuator and DME (CME-101).		
										-48 °C < Engine temperatur	ıre <					Determine whether battery voltage is present at actuator		
										143 °C						and use tester to conduct system test		
						Engine rpm between 1000 and				-48 °C < Engine oil tempera	ature <					Replace the camshaft actuator		
MED17.2 0x287E 10366 <b>SIG</b>	VANOS, inlet: actuator movement	P0012	'A' Camshaft Position - Timing Over-Retarded (Bank 1)	Camshaft Position Timing	Intake	6000	2 sec.	none	none	180 °C	none	STEUERN_VANOS_EINLAS	S PWM	Y	Electrical defect in VANOS valve	5. Check camshaft machanism for stiction	MIL on	
			g	9														
															Fault/failure in signal for intake air temperature, ambier	nt .		
			Fuel Rail Pressure Pressure-Rate-Controlled, Maximum										rail-pressure sensor -> A	nalog:		Because the action measures are quite extensive, they are		
MED17.2 0x287F 10367 <b>MAX</b>	High-pressure system	P3007	Pressure Exceeded	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	Engine running	none	none	none	none	none	STEUERN MSV	0.5 - 4.5V	N	High-pressure pump	only portrayed in the test module	CC message / MIL	
MED 17.2 OXZOTI 10307 MIAX	riigir-pressure system	1 3007	T Tessure Exceded	r derregulators/ valves/ derisors	i uci itali i icssuic	Engine ranning	TIONE	Hone	none	none	none	OTEOETHY_WOV	0.0 - 4.00	14	riigir-pressure purip	only portrayed in the test module	OO message / Mile	
															<b>=</b>			
															Fuel tank empty			
												****			Wiring harness for rail-pressure sensor defective	nt .		
			Fuel Rail Pressure Pressure-Rate-Controlled, Minimum										roil proceure concer - A	nalog:	Defect/failure in signal for intake-air temperature, ambie	3		
MED17.2 0x2880 10368 <b>MIN</b>	High proceure evetem	P3091	Pressure Fallen Below	Fuel Regulators / Valves / Sensors	Fuel Rail Pressure	Engine rupping	nono	nono	nono	none	nono	STEUERN MSV	rail-pressure sensor -> A 0.5 - 4.5V	naioy, N		Because the action measures are quite extensive, they are only portrayed in the test module	CC message / MIL	
WIED 17.2 UX268U 1U308 WIIN	High-pressure system	F3091	Flessure Fallett Below	Fuel Regulators / Valves / Sensors	ruei Kaii Messure	Engine running	none	none	none	HOHE	none	STEUEKIN_IVISV	U.3 - 4.3V	IN	High-pressure pump		CC message / Mil	
															01 11 11 11	Check wiring harness between DME and wastegate valve:		
												****			Short circuit to positive	T_WG,		
LIEDUE O COOL LOOS		Bas 45										OTELIEDIA MOV			Wastegate valve	replace wastegate valve,		
MED17.2 0x2881 10369 <b>MAX</b>	Wastegate valve, activation	P0246	Turbocharger/Supercharger Wastegate Solenoid 'A' High			Engine running	0.5 sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN_WGV	U	N	DME	replace DME	CC status report	
															Short to ground	Check wiring harness between DME and wastegate valve.		
															Wastegate valve	replace wastegate valve,		
MED17.2 0x2882 10370 <b>MIN</b>	Wastegate valve, activation	P0245	Turbocharger/Supercharger Wastegate Solenoid 'A' Low			Engine running	0.5 sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN_WGV	U	N	DME	replace DME	CC status report	
															Open wire from wastegate valve	Check wiring harness between DME and wastegate valve.		
															Wastegate valve	replace wastegate valve,		
MED17.2 0x2883 10371 <b>SIG</b>	Wastegate valve, activation	P0243	Turbocharger/Supercharger Wastegate Solenoid 'A'			Engine running	0.5 sec.	none	9 V < Battery voltage < 16 V	none	none	STEUERN_WGV	U	N	DME	replace DME	CC status report	
	*		<u> </u>	•		· · · · · · · · · · · · · · · · ·	•		· -			<del></del>		•		·	·	·

	Running engine in charge-air			1. Check operation of pulse valve (activate with tester) 2. Inspect operation/motion of wastegate (use manual vacuum to operate WG directly). 3. Check whether vacuum is controlled during vehicle operation (install vacuum converter in vacuum line directly before wastegate). If it remains at, for instance, 700 mbai it is possible that the DME pulse-duty factor output was incorrect)  Wastegate fails to open or close.  DME pulse-duty factor output is incorrect.  1. Check operation of pulse valve (activate with tester) 2. Inspect operation/motion of wastegate (use manual vacuum to operate WG directly). 3. Check whether vacuum is controlled during vehicle operation (install vacuum converter in vacuum line directly before wastegate). If it remains at, for instance, 700 mbai it is possible that the DME pulse-duty factor output was incorrect.	
	pressure range (high part load/full			Throttle valve defect (remains closed). 5. Check DME for dump valve fault.	
MED17.2 0x2884 10372 MAX Charge-air pressure control deviation, plausibility P1296 Boost Pressure Control Boost Pressure Too High	load)	none none none	none none STEUERN_WGV	none Y Recirculated-air valve fails to open. 6. Replace DME	CC status report
	Running engine in charge-air			Leak in vacuum system (wastegate control). Leak/obstruction in intake system pressure side (between turbocharger and throttle valve).  Open line (electropneumatic vacuum converter). Vacuum pump not OK Dump valve remains open. Wastegate fails to close or remains open. Turbocharger sticks/rubs. (How to check? Rotate turbine, noise? Yes, and inspect to determine if turbocharger shaft is loose) Incorrect pulse-duty factor output from DME. (How to check? Tester job?) (Determine whether vacuum is regulated during vehicle operation (install vacuum converter in vacuum line directly in front of wastegate). If it turbocharger makes noise when turned by hand.	
	pressure range (high part load/full			remains, e.g., at 0 mbar then an incorrect pulse-duty  Otherwise replace turbocharger.	
MED17.2 0x2885 10373 MIN Charge-air pressure control deviation, plausibility P1297 Boost Pressure Control Boost Pressure Too Low	load)	none none none	none none STEUERN_WGV	none Y factor may have been generated) 8. Replace DME	CC status report
MED17.2 0x289D 10397 MAX Boost-pressure sensor, electric P0238 Turbocharger/Supercharger Boost Sensor 'A' Circuit High (Bank 1)	Supercharger Boost Sensor Electrical none	0.2 sec. Terminal 15 none	none none none	Short to positive or open wire Sensor and DME R_DSB, A_DSB Charge-air pressure sensor 2. Replace charge-air pressure sensor B6123 Analog; 0-5V N DME 3. Replace DME	CC status report none
MEDIT.2 0x269D 10397 WAX BOOSt-pressure seriou, electric F0236 (Balik I)	Supercriarger Boost Serisor Electrical Hone	0.2 sec. reminal 19 none			Co status report
MED17.2 0x289E 10398 MIN Boost-pressure sensor, electric P0237 Turbocharger/Supercharger Boost Sensor 'A' Circuit Low	Supercharger Boost Sensor Electrical none	0.2 sec. Terminal 15 none	none none none	1. Check wiring harness between charge-air pressure Short to ground or open wire sensor and DME U_DSB, A_DSB Charge-air pressure sensor 2. Replace charge-air pressure sensor B6123 Analog; 0-5V N DME 3. Replace DME	CC status report none
				integration of the state of the	Co states topon.
MED17.2 0x28A2 10402 MAX Boost-pressure sensor, plausibility P12A0 Front Of Throttle Valve Too High	Supercharger Boost Pressure Pressure Front of Throttle none	2 sec. Terminal 15 none	none none none	1. If a malfunction in the charge-air pressure control is present, repair this first a. Check operation of wastegate frequency valve (EPDW wastegate) b. Check operation of wastegate c. Determine whether an accelerator pedal module fault is present d. Determine whether a dump valve fault is present d. Determine whether a dump valve fault is present 2. Check wiring harness for intake air temperature sensor 3. Check wiring harness between DME and charge-air pressure sensor pressure sensor 4. Replace charge-air pressure sensor	
MED17.2 0x28A3 10403 MIN Boost-pressure sensor, plausibility P12A1 Turbocharger/Supercharger Boost Pressure Front Of Throttle Valve Too Low	Supercharger Boost Pressure Pressure Front of Throttle none	2 sec. Terminal 15 none	none none none	Collateral faults stemming from defective charge-air pressure system Collateral fault from defective intake air temperature sensor Sensor Defective wiring harness N Defective intake temperature-charge-air pressure sensor Replace intake temperature-charge-air pressure sensor	MIL ON

A filter of the control of the contr	
MEDIT 2 DORAS 15415 SIG Boots/cressure service (Australian) A Supercharger Superch (Pressure Manager Supercharger Superch Pressure Supercharger Supe	
a. Cheater of faul seages requestly yable (PDW) vastages from of vastages	
Localizated fault caused by charge-air pressure system of Colorate	
Colleteral fault causand by change air pressure systems p	
Collaterial fault stemming from delectory prossures personer by pressure pr	
PERSONAL PLANS BOOST Pressure sensor Collateral fault from defective barrowning from defective b	
Collateral fault trom defective harness MED17.2 0x28A4 10404 PLAUS Boost-pressure sensor, plausibility PLAUS Boost-pressure sensor, plausibility PLAUS Boost-pressure sensor, plausibility PLAUS Boost-pressure sensor, plausibility Pressure Front of Throttle Valve Implausible  Collateral fault trom defective harness between DMC and harge-air perssure sensor in persure sens	
MEDIT 2, 07.28A 1 0404 VALUE A 10404 VALUE A	
MED17.2 Dz28A4 10404 PLAUS Boost-pressure sensor, plausibility P12A2 Pressure Front of Throttle Valve Implausible Supercharger Boost Pressure ensor. In one	
MED17.2 0x28A5 10405 SIG Boost-pressure sensor, plausibility Pressure Front Of Throttle Valve Implausible  Collateral fault stemming from defective barrometric pressure sensor is present, repair this first. Check present, repair this first. Check pressure sensor is pressure sensor is pressure sensor is pressure sensor pedictive wining harmenss  Befective wining harmenss  Pressure Front Of Throttle Valve Implausible  Supercharger Boost Pressure  Pressure Front of Throttle  Engine running  2 sec. none none  1. Activate the dump valve and determine whether it	
MED17.2 0x28A5 10405 SIG Boost-pressure sensor, plausibility remaining from defective barometric present, repair this first. Cheek winning from defective barometric pressure, sensor plausibility remaining from defective barometric pressure, repair this first. Cheek winning from defective barometric pressure, sensor, plausibility remaining from defective barometric pressure, repair this first. Cheek winning from defective barometric pressure, sensor list. Cheek winning from defective barometric pressure sensor list. Cheek winning many deferming pressure sensor list. Cheek winning from defective barometric	
perssure sensor Defective wiring harmess between DME and intake temperature-charge-air pressure sensor, Defective intake temperature-charge-air pressure sensor, plausibility  NED17.2 0x28A5 10405 SIG Boost-pressure sensor, plausibility  Pressure Front Of Throttle Valve Implausible  Pressure Front Of Throttle Valve Implausible  Pressure Front Of Throttle Valve Implausible  Name of the dump valve and determine whether it	
MED17.2 0x28A5 10405 SIG	
MED17.2 0x28A5 10405 SIG Boost-pressure sensor, plausibility P12A3 Pressure Front Of Throttle Valve Implausible Supercharger Boost Pressure Front of Throttle Valve Implausible Supercharger Boost Pressure Sensor MIL ON 1. Activate the dump valve and determine whether it	
1. Activate the dump valve and determine whether it	
Open wire 2. Check wiring harness between dump valve and DME	
Turbocharger/Supercharger Bypass Valve Control Circuit  Engine running  Engine running	
MED17.2 0x28AA 10410 PLAUS Bypass blow-off valve, plausibility Dump valve active none none none none none none none no	
Check wiring between DME and flow-control valve:	
Short circuit to positive T_MSV,	
Flow-control valve replace high-pressure pump,	
MED17.2 0x28AC 10412 MAX Fuel-quantity control valve, activation P0004 Fuel Volume Regulator Control Circuit High Fuel Regulators / Valves / Sensors Fuel Volume Regulator Control Circuit High Fuel Regulators / Valves / Sensors Fuel Volume Regulator Control Circuit High Fuel Regulators / Valves / Sensors Fuel Volume Regulator Control Circuit High Fuel Regulators / Valves / Sensors Fuel Volume Regulator Control Circuit High Fuel Regulators / Valves / Sensors Fuel Volume Regulator Control Circuit High Fuel Regulator Control Circuit	
Check wiring between DME and flow-control valve:	
Short to ground T_MSV, Flow-control valve replace high-pressure pump,	
Flow-control valve replace high-pressure pump, MED17.2 0x28AD 10413 MIN Fuel-quantity control valve, activation DME steller voltage < 16 V none STEUERN_MSV non	
Check wiring between DME and flow-control valve:	
Open wire T_MSV,	
Flow-control valve replace high-pressure pump,	
MED17.2 0x28AE 10414 SIG Fuel-quantity control valve, activation P0001 Fuel Volume Regulator Control Circuit/Open Fuel Regulator Control Circuit/Open Fuel Regulator Control Circuit/Open Fuel Volume Regulator Control Circuit/Open Fuel Regulator Control Circuit/Open Fuel Volume Regula	
Check wiring harness between DME and dump valve:	
Short circuit to positive S_DUMP	
Dump valve Replace dump valve,	
MED17.2 0x28AF 10415 MAX Bypass blow-off valve, activation P0035 High Supercharger Bypass Valve Electrical Engine running 0.5 sec. none 9 V < Battery voltage < 16 V none STEUERN_ULV U 90035 None STEUERN_ULV U 90035 None STEUERN_ULV U 90035 None STEUERN_ULV NONE	
Check wiring harness between DME and dump valve:	
Short to ground S_DUMP Turbocharger/Supercharger Bypass Valve Control Circuit  Replace dump valve,	
MED17.2 0x28B0 10416 MIN Bypass blow-off valve, activation Once STEUERN_ULV U status report Once STEUERN_ULV U Supercharger Bypass Valve Control Circuit Nephace dump valve, activation Circuit Supercharger Bypass Valve Control Circuit Supercharger Bypass Valve Supercharger Bypass Valve Control Circuit Supercharger Bypass Valve Control Circuit Supercharger Bypass Valve Supercharger Bypass Valv	
Check wiring harness between DME and dump valve:	
Open line from dump valve  S_DUMP	
Dump valve Replace dump valve,	
MED17.2 0x28B1 10417 SIG Bypass blow-off valve, activation P0033 Turbocharger/Supercharger Bypass Valve Control Circuit Supercharger Bypass Valve Control Circuit Supercharger Bypass Valve CC status report U STEUERN_ULV U SIG Bypass blow-off valve, activation P0033 Turbocharger/Supercharger Bypass Valve Control Circuit Supercharger Bypass Valve Control Circuit Supe	
Collateral fault caused by rail-pressure sensor fault	
Collateral fault with 0x2880	
Rail-pressure sensor	
Wiring harness Because the action measures are quite extensive, they are MED17.2 0x28BE 10430 MAX Fuel pressure, plausibility P0088 Fuel Rail/System Pressure - Too High Fuel Regulators / Valves / Sensors Fuel Rail Pressure Fuel Regulators / Valves / Sensors Fuel Rail Pressure Fuel Regulators / Valves / Sensors Fuel Rail Pressure	
MED17.2 0x28BE 10430 MAX Fuel pressure, plausibility P0088 Fuel Rail/System Pressure - Too High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Regulators / Valves / Sensors Fuel Rail Pressure on High Fuel Rail Pressure on Hi	
Camshaft signal not compatible with defined signal Defective camshaft sensor	
Defective carristratic serisor  Defect in wiring harness  1. Check signal wire for short to positive, ground, open	
Camshaft sensor and camshaft reluctor not correctly wire. (ignition off)	
aligned 2. Check sensor voltage supply (4.5 to 5.5 V) (ignition on)	
Defective camshaft reluctor 3. Check plug-in contacts (intermittent open)	
Incorrect timing, correlation between camshaft and MED17.2 0x2968 10600 SIG Inlet camshaft sensor P0341 Camshaft Sensor Installation (gap to reluctor is too (Bank 1 or Single Sensor) Intake Electrical Engine running none Terminal 15 none MIL on MI	
MED17.2 0x2968 10600 SIG Inlet camshaft sensor P0341 (Bank 1 or Single Sensor) Camshaft Position Sensor Intake Electrical Engine running none Terminal 15 none Indicate the Computation of the Computation Sensor Interval Indicate the Computation Sensor Indicate the Computation Sensor Interval Indicate the Computation Sensor Indicate the C	Long starting periods, loss of power

									:				:			<u> </u>		
															1. Check signal wire for all	short to positive, ground, open		
												NAME OF THE PARTY				gnition off)		
												www.			No signal from camshaft sensor 2. Check sensor voltage su	upply (4.5 to 5.5 V) (ignition on)		
			Camshaft Position Sensor 'A' Circuit (Bank 1 or Single									mental supplies and supplies an				ntacts (intermittent open) lation (gap to reluctor is too		
MED17.2 0x2969 10601 <b>SIG</b>	Inlet camshaft sensor	P0340	Sensor)	Camshaft Position Sensor	Intake Electrical	Engine running	none	Terminal 15	none	none	none	none	none	Υ		small, S	MIL on	Long starting periods, loss of power
			Camshaft Position Sensor 'A' Faulty Phase Position (Bank	·											g			
MED17.2 0x296A 10602 <b>MAX</b>	Inlet camshaft sensor	P1338	1)	Camshaft Position Sensor	Intake Phase													
												www.				short to positive, ground, open		
												The state of the s			Signal present, but implausible: No tooth gap detected in (60-2) reluctor, or more than one gap, tooth intervals too 2. Check sensor voltaage	gnition off)		
												en e				on)		
														urren e		ntacts (intermittent open)		
												THE CONTRACT OF THE CONTRACT O				ation (gap to reluctor is too e/small)		
MED17.2 0x296E 10606 <b>SIG</b>	Crankshaft sensor	P0336	Crankshaft Position Sensor 'A' Circuit Range/Performance	Crankshaft Position Sensor	Plausibility	Engine running	none	Terminal 15	none	none	none	none	none	Υ	Installed alignment of camshaft sensor relative to	5	MIL on	Engine stalls, breakdown vehicle
												and the second s				short to positive, ground, open		
												Year				gnition off) upply (4.5 to 5.5 V) (ignition on)		
															Defective camshaft sensor 3. Check plug-in con	ntacts (intermittent open)		
												www.			The state of the s	ation (gap to reluctor is too		
MED17.2 0x296F 10607 <b>SIG</b>	Crankshaft sensor	P0335	Crankshaft Position Sensor 'A' Circuit	Crankshaft Position Sensor	Electrical	Engine running	none	Terminal 15	none	none	none	none	none	Y		re present, repair these first	MIL on	Engine stalls, breakdown vehicle
						WIND AND AND AND AND AND AND AND AND AND A						vine a second			Induction vacuum leak (between throttle valve and engine) Check induction tract between			
MED17.2 0x2970 10608 <b>MAX</b>	Idle-speed control in homogeneous mode	P0507	Idle Air Control System RPM Higher Than Expected	Idle Speed Control	RPM	Engine running	5 sec.	none	none	Engine temperature >-8 °C	3 seconds after start	none	none	N	· · · · · · · · · · · · · · · · · · ·	eaks	MIL on	
																is present, repair this first,		
														or a management	Increased power draw at idle stemming from mechanical Inspect for contamination defect in engine or in ancillary equipment thrott	n in the area adjacent to the ttle valve		
												THE CONTRACT OF THE CONTRACT O			Extreme contamination in induction tract between throttle  Check engine and ancilla			
MED17.2 0x2971 10609 <b>MIN</b>	Idle-speed control in homogeneous mode	P0506	Idle Air Control System RPM Lower Than Expected	Idle Speed Control	RPM	Engine running	5 sec.	none	none	Engine temperature >-8 °C	3 seconds after start	none	none	N		efects	MIL on	
												to a constant				re present, repair these first		
MED17.2 0x2972 10610 <b>MAX</b>	Idle-speed control, catalytic-converter heating	P1562	Cold Start Idle Air Control System RPM Higher Than Expected (Bank 1)	Idle Speed Control	Cold Start RPM	Engine running	5 sec.	none	none	40>Engine temperature >-8°C	none	none	none	N	Induction vacuum leak (between throttle valve and engine) Check induction tract betwe  Collateral fault	een throttie valve and engine follows	MIL on	
MEDITAL GAZOTE 18818	ide opeda control, datalytic controller heating	1 1002	Exposed (Sail (1)	idio opeda comino.				none	10110		110110	110110				is present, repair this first,		
												en e			Increased power draw at idle stemming from mechanical Inspect for contamination			
			Cold Start Idle Air Control System RPM Lower Than									to a constraint			J , 1 1	itle valve		
MED17.2 0x2973 10611 <b>MIN</b>	Idle-speed control, catalytic-converter heating	P1561	Expected (Bank 1)	Idle Speed Control	Cold Start RPM	Engine running	5 sec.	none	none	40>Engine temperature >-8°C	none	none	none	N	Extreme contamination in induction tract between throttle Check engine and ancilla valve and engine de	ary equipment for mechanical efects	MIL on	
MED17.2 0x297C 10620 <b>MAX</b>	Inlet camshaft, mechanism									rorgo topor.uturo r					Taile and original			
															1. Check signal wire for	short to positive/open wire.		
												THE CONTRACT OF THE CONTRACT O				ition off)		
												and the second s				supply (4.5 to 5.5 V) (ignition on)		
												van				ntacts (intermittent open)		
MED47.0 0.0000 40000 WAY	l-1-4	D0040	Camshaft Position Sensor 'A' Circuit (Bank 1 or Single	Complete Desition Company	lotalia Electrical	Faring maring		Tamain al 45				www.		V		ation (gap to reluctor is too	MIL	
MED17.2 0x2982 10626 MAX	Inlet camshaft sensor	P0340	Sensor)	Camshaft Position Sensor	Intake Electrical	Engine running	none	Terminal 15	none	none	none	none	none	Υ	Camshaft sensor and reluctor installed out of alignment large/small	ll, specification	MIL on	Long starting periods, loss of power
															1. Check signal wire for s	short to ground. (ignition off)		
												and the second s			No signal from camshaft sensor 2. Check sensor voltage su	upply (4.5 to 5.5 V) (ignition on)		
			Complete Desition Conservat Circuit Law / David													ntacts (intermittent open)		
MED17.2 0x2983 10627 <b>MIN</b>	Inlet camshaft sensor	P0342	Camshaft Position Sensor 'A' Circuit Low (Bank 1 or Single Sensor)	Camshaft Position Sensor	Intake Electrical	Engine running	none	Terminal 15	none	none	none	none	none	Υ	Defect in wiring harness, short circuit to ground 4. Check sensor installated Camshaft sensor and reluctor installed out of alignment large/small, specifications.	ation (gap to reluctor is too fication 0.1 to 2.0 mm	MIL on	Long starting periods, loss of power
						Engine speed between 1400 and												
MED17.2 0x2A35 10805 <b>MIN</b>	Oxygen sensor before catalytic converter, dynamics	P0133	O2 Sensor Circuit Slow Response (Bank 1 Sensor 1)	Oxygen Sensor, Front	Slow Response	3240 rpm	none	none	none	none	none	none	none	Y		tic converter oxygen sensor	MIL ON	
	Oxygen sensor heating behind catalytic converter,											The second secon			Check with Peoples of the Check with	iring harness oxygen sensor		
MED17.2 0x2A50 10832 <b>MAX</b>	activation	P0038	HO2S Heater Control Circuit High (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Heater Electrical	Engine running	0.5 sec.	none	none	none	10 sec.	STEUERN_LSHHK	none	N	Short to positive Replace of Replace of Short to positive	ace DME	MIL ON	
				-											Check wi	iring harness		
MED17.2 0x2A51 10833 <b>MIN</b>	Oxygen sensor heating behind catalytic converter,	D0027	HO2S Hoster Control Circuit Law (Bank 4 Con 0)	Owigen Serses Bees	Hootor Floatrical	Engine running	0.5.000		nono	2020	10.000	STEUERN LSHHK	none	NI.	Replace o	oxygen sensor	MIL ON	
MED17.2 0x2A51 10833 <b>MIN</b>	activation	P0037	HO2S Heater Control Circuit Low (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Heater Electrical	Engine running	0.5 sec.	none	none	none	10 sec.	O I EUEKN_LOHHK	none	N		ace DME iring harness	MIL ON	
	Oxygen sensor heating behind catalytic converter,														Replace o	oxygen sensor		
MED17.2 0x2A53 10835 <b>SIG</b>	activation	P0036	HO2S Heater Control Circuit (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Heater Electrical	Engine running	0.5 sec.	none	none	none	10 sec.	STEUERN_LSHHK	none	N	Open circuit Repla	ace DME	MIL ON	

			1		1	1						1		-			
													Check oxygen sensor heater: Contact resistance at plugs (CMI-218 CMI-217/229) and in wire too high (DME -				
													wiring harness - sensor),				
MED17.2 0x2A56 10838 PLAUS Oxygen-sensor heater behind catalytic converter, function P0141	O2 Sensor Heater Circuit (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Heater	Engine turning over	none	none	none	Engine start temperature > -9.8 degrees	Time parked > 300 sec. betwee engine starts	n STEUERN LSHHK none	v	High oxygen sensor heater resistance or corroded contacts on plug-in connections	replace oxygen sensor behind catalytic converter as indicated	MIL ON			
WED 17.2 0x2A30 10030 FEAGS Oxygen-sensor neater bening catalytic converter, function	Oz Sensoi Fleater Circuit (Barik i Sensoi 2)	Oxygen Sensor, Real	Heater	Lingine turning over	none	lione	none	uegrees	engine starts	STEDERIN_ESTITIK Holle		contacts on plug-in connections	indicated	WIL ON			***************************************
												Short circuit to positive	Check wiring harness between oxygen sensor and DME				
Oxygen-sensor heater before catalytic converter,  MED17.2 0x2A60 10848 MAX activation P0032	HO2S Heater Control Circuit High (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater Electrical	Engine running	0.5 sec.	none	none	none	10 sec.	none	N	Oxygen sensor before catalytic converter  DMF	Replace oxygen sensor Replace DME	MIL ON			
MED 17.2 0.27.00 100-10 MIAN doubtdoin 100-2	11020 Floater Control Circuit Flight (Burit F Cerisor F)	Oxygen Ochoor, From	Trouter Electrical	Linging running	0.0 300.	none		Tione	10 300.	none none		J.M.E.	Topiado DML	IIIL OIV			
												Short to ground	Check wiring harness between oxygen sensor and DME				
Oxygen-sensor heater before catalytic converter,  MED17.2 0x2A61 10849 MIN activation P0031	HO2S Heater Control Circuit Low (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater Electrical	Engine running	0.5 sec.	none	none	none	10 sec.	none none	N	Oxygen sensor before catalytic converter  DMF	Replace oxygen sensor Replace DME	MIL ON			
	7.020 7.0000 00 7.000 20 11 (20.110 · 30.1100 · 3)	2yga 2232., 1	1 10000 200000		0.0 000.								портаже для	0			
												Open wire	Check wiring harness between oxygen sensor and DME				
Oxygen-sensor heater before catalytic converter,  MED17.2 0x2A63 10851 SIG activation P0030	HO2S Heater Control Circuit (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater Electrical	Engine running	0.5 sec.	none	none	none	10 sec.	none none	N	Oxygen sensor before catalytic converter DME	Replace oxygen sensor Replace DME	MIL ON			
		-,,,											Check oxygen sensor heater: Contact resistance at plugs				
	OO Comment of Towns and Door had (Dool 4)							F	Ti			High control backs and detailed	(CMI-230 CMI-217/229) and in wire too high (DME -				
MED17.2 0x2A64 10852 MAX Oxygen-sensor heater before catalytic converter, function P3026	O2 Sensor Operating Temperature not Reached (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater	Engine turning over	none	none	none	degrees	Time parked > 300 sec. betwee engine starts	STEUERN LSHVK none	Υ	High oxygen sensor heater resistance or corroded contacts on plug-in connections	wiring harness - sensor), replace oxygen sensor before cat. as indicated	MIL ON			
												Increased resistance in sensor heater or corroded	Check oxygen sensor heater: Contact resistance at plugs				
								Engine start temperature > 0.9	Time parked > 300 sec. betwee			contacts in plug connections	(CMI-230 CMI-217/229) and in wire too high (DME -				
MED17.2 0x2A66 10854 <b>PLAUS</b> Oxygen-sensor heater before catalytic converter, function P0135	O2 Sensor Heater Circuit (Bank 1 Sensor 1)	Oxygen Sensor, Front	Heater	Engine turning over	none	none	none	degrees	engine starts	STEUERN_LSHVK none	Υ	Fault entered if correct ceramic temperature is not reached within a specified period	wiring harness - sensor), replace oxygen sensor before cat. as indicated	MIL ON			
	O2 Sensor Calibration Resistance at WRAF-IC Plausibility																
MED17.2 0x2A67 10855 SIG Oxygen-sensor heater before catalytic converter, function P3016	(Bank 1 Sensor 1)  O2 Sensor Signal Circuit Adaptation Value Too High	Oxygen Sensor, Front	ECM Self-Test	Engine running	none	none	none	Engine start temperature > -9.8 °	C Time parked > 300 sec.	none none	Y	Calibration resistance in control module outside tolerance	e Replace DME	MIL ON			
MED17.2 0x2A6C 10860 <b>MAX</b> DME, internal fault P3012	(Bank 1 Sensor 1)	Oxygen Sensor, Front	ECM Self-Test	Engine running	10 sec.	none	none	none	none	none none	N	Defective DME	Replace DME	MIL ON			
	O2 Sensor WRAF-IC Supply Voltage Too Low (Bank 1											2 ( 1 2 2 2	0 1 015				
MED17.2 0x2A6D 10861 <b>MIN</b> DME, internal fault P3014	Sensor 1)	Oxygen Sensor, Front	ECM Self-Test	Engine running	10 sec.	none	none	none	none	none none	N	Defective DME	Replace DME	MIL ON			
MED17.2 0x2A6E 10862 <b>PLAUS</b> DME, internal fault P3024	O2 Sensor Initialization Error WRAF-IC (Bank 1 Sensor 1)	Oxygen Sensor, Front	ECM Self-Test	Engine running	none	none	none	none	none	none none	N	Defective DME	Replace DME	MIL ON			
MED17.2 0x2A6F 10863 <b>SIG</b> DME, internal fault P3022	O2 Sensor Disturbed SPI Communication to WRAF-IC	Owegon Consor Front	FCM Calf Tage								N	Defective DME	Donloro DMF	MIL ON			
MED17.2 0x2A6F 10863 <b>SIG</b> DME, internal fault P3022	(Bank 1 Sensor 1)	Oxygen Sensor, Front	ECM Self-Test	Engine running	none	none	none	none	none	none none	IN.	Delective Divie	Replace DME	MIL ON			
MED17.2 0x2A74 10868 MAX Oxygen sensor behind catalytic converter, ageing P2270	O2 Sensor Signal Biased/Stuck Lean (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Signal Check	Engine turning over	0.1 sec.	none	none	none	none	none none	Υ	oxygen sensor output voltage sticks above specified valu	Replace oxygen sensor behind catalytic converter	MIL ON			
MED17.2 0x2A75 10869 <b>MIN</b> Oxygen sensor behind catalytic converter, ageing P2271	O2 Sensor Signal Biased/Stuck Rich (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Signal Check	Engine turning over	0.1 sec.	none	none	none	none	none none	v	oxygen sensor output voltage sticks below specified valu	Replace oxygen sensor behind catalytic converter	MIL ON			
WED 17.2 0x2A70 10000 WINV Coxygen sensor bening catalytic convener, agoing 1 2271	OZ OCHSON OIGHAI BIASCA/ORACK FROM (BANK F OCHSON Z)	Oxygen densor, real	Oignal Officer	Lingine turning over	0.1360.	110116	Tione	none	HOHE	none		oxygen sensor output voltage sticks below specified valu	Replace oxygen sensor bening catalytic convener	INIL OIV			
MEDITO 0.0000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 100000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 100000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 100000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 100000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 100000											.,	oxygen sensor voltage does not fall below MIN threshold					
MED17.2 0x2A77 10871 SIG Oxygen sensor behind catalytic converter, ageing P0139	O2 Sensor Circuit Slow Response (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Slow Response	Engine on overrun	none	none	none	none	none	none none	Y	on trailing throttle (overrun fuel-supply cut-off Short circuit to battery voltage	Replace oxygen sensor behind catalytic converter  Check wiring harness	MIL ON			
MED17.2 0x2A7C 10876 MAX Oxygen sensor behind catalytic converter, electric P0138	O2 Sensor Circuit High Voltage (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Electrical	Engine running	none	none	Battery voltage > 11 V	none	90 sec. after engine start	none Analog; 0.06-1.080V	N	Oxygen sensor	Replace oxygen sensor	MIL on	none	none	
							B I		00 6		N	Short circuit to battery voltage	Check wiring harness	MI			
MED17.2 0x2A7D 10877 MIN Oxygen sensor behind catalytic converter, electric P0137	O2 Sensor Circuit Low Voltage (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Electrical	Engine running	none	none	Battery voltage > 11 V	none	90 sec. after engine start	none Analog; 0.06-1.080V	N	Oxygen sensor Wiring harness	Replace oxygen sensor Check wiring harness	MIL on	none	none	
MED17.2 0x2A7E 10878 PLAUS Oxygen sensor behind catalytic converter, electric P0140	O2 Sensor Circuit No Activity Detected (Bank 1 Sensor 2)	Oxygen Sensor, Rear	Electrical	Engine running	none	none	none	none	90 sec. after engine start	START_SYSTEMCHECK_LSHK Analog; 0.06 - 1.080V	N	Oxygen sensor	Replace oxygen sensor	MIL ON			
MED17.2 0x2A7F 10879 <b>SIG</b> Oxygen sensor behind catalytic converter, electric P0136	O2 Sensor Circuit (Bank 1 Sensor 2)	Owner Canada Bada	Floatrical	Facing supplies					00 and offer angine start	START SYSTEMCHECK LSHK Analog; 0.06 - 1.080V	N.I	Open wire	Check wiring harness	MIL ON			
MED17.2 0x2A7F 10879 SIG Oxygen sensor behind catalytic converter, electric P0136	Oz Sensor Circuit (Bank i Sensor 2)	Oxygen Sensor, Rear	Electrical	Engine running	none	none	none	none	90 sec. after engine start	START_SYSTEMCHECK_LSHK Analog; 0.06 - 1.080V	N	Oxygen sensor	Replace oxygen sensor Check wiring harness between DME and oxygen sensor ir	MIL ON			
	O2 Sensor Pumping Current Trim Circuit/Open (Bank 1											Open wire	front of catalyst; A_LSVP1				
MED17.2 0x2A8B 10891 SIG Oxygen sensor before catalytic converter, calibration cable P2626	Sensor 1)	Oxygen Sensor, Front	Pumping Current	Engine running	1 sec.	none	none	none	none	START_SYSTEMCHECK_LSVK none	Υ	Oxygen sensor before catalytic converter	Replace oxygen sensor in front of catalyst  Check wiring harness between DME and oxygen sensor ir	MIL ON			
Oxygen sensor before catalytic converter, pump current	O2 Sensor Lambda Controller Value Above Threshold due											Open wire	front of catalyst; I_LSVP1				
MED17.2 0x2A90 10896 <b>MAX</b> cable P3018	to Open Pumping Current Circuit (Bank 1 Sensor 1)	Oxygen Sensor, Front	Positive Current	Engine running	1.5 sec.	none	none	none	none	START_SYSTEMCHECK_LSVK none	Υ	Oxygen sensor before catalytic converter	Replace oxygen sensor in front of catalyst	MIL ON			
Oxygen sensor before catalytic converter, pump current	O2 Sensor Signal Voltage Too Low during Coast Down Fuel Cut-Off due to Open Pumping Current Circuit (Bank											Wiring harness (contact resistance)	Check wiring harness between DME and pre-catalyst oxygen sensor; I_LSVP1 and M_LSV1				
MED17.2 0x2A92 10898 PLAUS cable P3020	1 Sensor 1)	Oxygen Sensor, Front	Positive Current	Engine on overrun	5 sec.	none	none	none	none	none none	Υ	Pre-catalyst oxygen sensor	Replace pre-catalyst oxygen sensor	MIL ON			
	00.0											Military Control of the Control of t	Check wiring harness between DME and pre-catalyst				
MED17.2 0x2A93 10899 SIG Oxygen sensor before catalytic converter, pump current cable P2237	O2 Sensor Positive Current Control Circuit/Open (Bank 1 Sensor 1)	Oxygen Sensor, Front	Positive Current	Engine running	none	none	none	none	none	START SYSTEMCHECK LSVK none	Υ	Wiring harness (contact resistance)  Pre-catalyst oxygen sensor	oxygen sensor; I_LSVP1 and M_LSV1 Replace pre-catalyst oxygen sensor	MIL ON			
												Short circuit to positive	Check wiring harness				
MED17.2 0x2A98 10904 MAX Oxygen sensor before catalytic converter, sensor wires P0132	O2 Sensor Circuit High Voltage (Bank 1 Sensor 1)	Oxygen Sensor, Front	Electrical	Engine running	1 sec.	none	none	none	none	START_SYSTEMCHECK_LSVK none	N	Oxygen sensor in front of catalyst	Replace oxygen sensor in front of catalyst	MIL ON			
MED17.2 0x2A99 10905 <b>MIN</b> Oxygen sensor before catalytic converter, sensor wires P0131	O2 Sensor Circuit Low Voltage (Bank 1 Sensor 1)	Oxygen Sensor, Front	Electrical	Engine running	1 sec.	none	none	none	none	START_SYSTEMCHECK_LSVK none	N	Short to ground Oxygen sensor in front of catalyst	Check wiring harness Replace oxygen sensor in front of catalyst	MIL ON			
, , , , , , , , , , , , , , , , , , , ,		,,,		, 3			i	i		, – , – ,	<u> </u>	, , , , , , , , , , , , , , , , , , , ,	1 70	<del>-</del>			

																	Check wiring harness between DME and oxygen sensor in			
MEDATO	5 010		D0040	O2 Sensor Reference Voltage Circuit/Open (Bank 1	0 0 5 1	D ( ) / (							OTART OVOTEMOUTOR L	1.00.44		Open wire	front of catalyst; I_LSVR1	MII ON		
MED17.2 0x2AA3 1091	5 SIG	Oxygen sensor before catalytic converter, Nernst cable	P2243	Sensor 1)	Oxygen Sensor, Front	Reference Voltage	Engine running	none	none	none	none	none	START_SYSTEMCHECK_LS	LSVK none	N	Oxygen sensor before catalytic converter	Replace oxygen sensor in front of catalyst	MIL ON		
				O2 Sensor Negative Current Control Circuit/Open (Bank 1											***************************************	Open wire	Check wiring harness between DME and oxygen sensor in front of catalyst; M LSV1			
MED17.2 0x2AAB 1092	3 SIG	Oxygen sensor before catalytic converter, virtual ground	P2251	Sensor 1)	Oxygen Sensor, Front	Negative Current	Engine running	none	none	none	none	none	START SYSTEMCHECK L	LSVK none	N	Oxygen sensor before catalytic converter	Replace oxygen sensor in front of catalyst	MIL ON		
																			Fault is always entered together with a wiring routing or	
																			heater fault indicated by a second fault memory entry in	
MED17.2 0x2AB4 1093	MAX	Oxygen sensor before catalytic converter, electric	P0130	O2 Sensor Circuit (Bank 1 Sensor 1)	Oxygen Sensor, Front	Electrical	Engine running	none	none	none	none	none	none	none	N	Sum fault	Repair other oxygen sensor fault		the control module.	
																Mr. C. II	1. Check wiring harness plug connections CMI-216, CMI-			
MED17.2 0v2AC1 109/	5 MAY	Oxygen sensor before catalytic converter, plausibility	P2097	Post Catalyst Fuel Trim System Too Rich (Bank 1)	Fuel System	Post Catalyst	Engine running	none	none	none	none	none	START_SYSTEMCHECK_L	I SV/K none	N	Wiring fault Oxygen sensor before catalytic converter defective	215, CMI-228, CMI-227, CMI-230 2. Replace oxygen sensor	MIL ON		
WED17.2 0X2AC1 1092	5 WAX	Oxygen sensor before catalytic converter, plausibility	F2091	Fost Catalyst Fuel Hilli System 100 Nich (Bank 1)	ruei System	FOSI Calalysi	Engine running	none	Tione	none	none	none	START_STSTEMCHECK_L	LOVK Hone	IN	Oxygen sensor before catalytic convener defective	Check wiring harness plug connections CMI-216, CMI-	WIL ON		
																Wiring fault	215, CMI-228, CMI-227, CMI-230			
MED17.2 0x2AC2 1094	6 <b>MIN</b>	Oxygen sensor before catalytic converter, plausibility	P2096	Post Catalyst Fuel Trim System Too Lean (Bank 1)	Fuel System	Post Catalyst	Engine running	none	none	none	none	none	START_SYSTEMCHECK_L	LSVK none	N	Oxygen sensor before catalytic converter defective	2. Replace oxygen sensor	MIL ON		
MED17.2 0x2AC3 1094	7 PLAUS	Oxygen sensor before catalytic converter, plausibility	P2195	O2 Sensor Signal Biased/Stuck Lean (Bank 1 Sensor 1)	Oxygen Sensor, Front	Signal Check														
MED17.2 0x2AC4 1094	8 SIG	Oxygen sensor before catalytic converter, plausibility	P2196	O2 Sensor Signal Biased/Stuck Rich (Bank 1 Sensor 1)	Oxygen Sensor, Front	Signal Check														
																	Check to ensure that oxygen sensor is installed correctly			
MED17.2 0x2ACB 1095	5 PI ALIS	Oxygen sensor before catalytic converter, connection	P2414	O2 Sensor Exhaust Sample Error (Bank 1 Sensor 1)	Oxygen Sensor, Front	Exhaust Sample Error	Engine running	none	none	none	none	none	none	none	N	oxygen sensor not installed	Replace oxygen sensor	MIL ON		
WIEDTY.2 GAZAGE TOOK	I LAGO	exygen sensor before catalytic conventer, connection	1 2 7 1 7	OZ OCIOCI EXITAGO GAINPIO ETIOI (BAINET OCIOCITY)	Oxygen denser, i fort	Exhaust Gample Error	LSU universal oxygen sensor and	110110	none	none	110110	none	none	none		oxygen sonsor not instance	replace oxygen sensor	WIL OIL		
							behind catalytic converter sensor						***************************************				Check plug connection on oxygen sensor behind catalytic			
		Oxygen sensor behind catalytic converter, dynamic		O2 Sensor Slow Response - Rich to Lean (Bank 1 Sensor			ready for operation, IC diagnosis			Battery voltage between 10.7V a	and					Dynamic response too slow in oxygen sensor behind				
MED17.2 0x2ACD 1095	7 SIG	response in overrun	P013A	2)	Oxygen Sensor, Rear	Slow Response	terminated		Terminal 15, engine	on 16V	none	none	none	none	N	catalytic converter	replace oxygen sensor behind catalytic converter.	MIL ON		
							LSU universal oxygen sensor and													
							behind catalytic converter sensor										Check plug connection on oxygen sensor behind catalytic			
MED17.2 0x2ACD 1095	7 SIC	Oxygen sensor behind catalytic converter, dynamic	P013E	O2 Sensor Delayed Response - Rich to Lean (Bank 1	Oxygen Sensor, Rear	Delayed Response	ready for operation, IC diagnosis terminated		Terminal 15, engine	Battery voltage between 10.7V a	and	none	nono	none	N	Dynamic response too slow in oxygen sensor behind	converter ( CMI-224, CMI-225, CMI-218), otherwise replace oxygen sensor behind catalytic converter.	MIL ON		
MED17.2 UXZACD 1095	310	response in overrun Oxygen sensor behind cat(alytic converter), dynamic	PUISE	Sensor 2) O2 Sensor Slow Response - Rich to Lean (Bank 1 Sensor	Oxygen Sensor, Rear	Delayed Response	terminated		reminar 15, engine	OII 10V	none	none	none	none	IN.	catalytic converter	replace oxygen sensor bening catalytic convener.	WIL ON		
MED17.2 0x2AD2 1096	MAX	response in overrun	P013A	2)	Oxygen Sensor, Rear	Slow Response									0000					
M.2511.2		Oxygen sensor behind cat(alytic converter), dynamic	1 0 107 (	O2 Sensor Delayed Response - Rich to Lean (Bank 1	CAYGOTI COLLOCI, TAGA	Olow Response														
MED17.2 0x2AD2 1096	2 MAX	response in overrun	P013E	Sensor 2)	Oxygen Sensor, Rear	Delayed Response														
MED17.2 0x2AD8 1096	8 MAX	DME, internal fault																		
															***************************************	- Short circuit to positive	- Check wiring harness between DME and throttle valve			
MED17.2 0x2B01 1100	9 MAX	Throttle-valve potentiometer 1	P0123	Throttle/Pedal Position Sensor/Switch 'A' Circuit High	Throttle Position Sensor	1	Engine rupping	nono	nono	none	2000	nono	nana	2020	N	<ul> <li>Defective throttle valve sensor</li> <li>Defective DME</li> </ul>	- Replace throttle valve - Replace DME	MIL on		
MEDIT.2 0X2B01 1100	IVIAA	Throttie-valve potentiorneter 1	PUIZS	Throttle/Fedal Position Sensor/Switch A Circuit High	Tillottie Position Sensor		Engine running	none	none	none	none	none	lione	none	IN.	- Delective Divie	- Replace DIVIE	MIL on		
																- Short to ground	- Check wiring harness between DME and throttle valve			
																- Defective throttle valve sensor	- Replace throttle valve			
MED17.2 0x2B02 1101	0 <b>MIN</b>	Throttle-valve potentiometer 1	P0122	Throttle/Pedal Position Sensor/Switch 'A' Circuit Low	Throttle Position Sensor	1	Engine running	none	none	none	none	none	none	none	Ν	- Defective DME	- Replace DME	MIL on		
															***************************************		- Check voltages of both throttle valve sensors (sum of			
																	both voltages = 5 V)			
MED17.2 0x2B03 1101	4 DI ALIC	Throttle valve notentiameter 1	D0404	Throttle/Pedal Position Sensor/Switch 'A' Circuit	Throttle Decition Conser	4			Torrein al 45 ON							Defective threattle value concer	- Check wiring harness between DME and throttle valve			
WED17.2 UX2BU3 1101	1 PLAUS	Throttle-valve potentiometer 1	P0121	Range/Performance	Throttle Position Sensor	l			Terminal 15 ON							- Defective throttle valve sensor	- Replace throttle valve			
																- Short circuit to positive	- Check wiring harness between DME and throttle valve			
						**************************************										- Defective throttle valve sensor	- Replace throttle valve			
MED17.2 0x2B05 1101	3 <b>MAX</b>	Throttle-valve potentiometer 2	P0223	Throttle/Pedal Position Sensor/Switch 'B' Circuit High	Throttle Position Sensor	2	Engine running	none	none	none	none	none	none	none	N	- Defective DME	- Replace DME	MIL on		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,																			
																- Short to ground	- Check wiring harness between DME and throttle valve			
MEDATO		TI	Docco	TI ## /D     D   W   O     (2   W   D   O   W	T # D ** 0										l <sub>N</sub>	- Defective throttle valve sensor	- Replace throttle valve	NAU.		
MED17.2 0x2B06 1101	4 MIN	Throttle-valve potentiometer 2	P0222	Throttle/Pedal Position Sensor/Switch 'B' Circuit Low	Throttle Position Sensor	2	Engine running	none	none	none	none	none	none	none	N	- Defective DME	- Replace DME	MIL on		
																	Charle voltages of both throttle value concern (aver-			
						ze war											Check voltages of both throttle valve sensors (sum of both voltages = 5 V)			
				Throttle/Pedal Position Sensor/Switch 'B' Circuit		***************************************											- Check wiring harness between DME and throttle valve			
				Infolle/Pedal Position Sensor/Switch B Circuit																
MED17.2 0x2B07 1101	5 <b>PLAUS</b>	Throttle-valve potentiometer 2	P0221		Throttle Position Sensor	2			Terminal 15 ON							Defective throttle valve sensor	- Replace throttle valve			
MED17.2 0x2B07 1101 MED17.2 0x2B0B 1101	5 <b>PLAUS</b>	Throttle-valve potentiometer 2	P0221	Range/Performance  Throttle/Pedal Position Sensor/Switch 'A' Circuit	Throttle Position Sensor  Throttle Position Sensor	2			Terminal 15 ON Terminal 15 ON							Defective throttle valve sensor Fault is logged together with fault 0x2B03 and/or fault 0x2B07				

									- Control wires for throttle valve actuator motor are		
									mutually shorted and/or shorted to positive or ground - Check wiring harness be	ween DME and throttle valve	
										hrottle valve	
MED17.2 0x2B1D 11037 MAX Throttle-valve actuator, activation P2103 Throttle Actuator 'A' Control Motor Circuit High	Throttle Actuator	Control Motor	Engine running	none	none none	Ambient temperature > 7 °C none	none	none Y	- Defective DME - Repl	ce DME	
<u></u>									~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	hrottle valve	
MED17.2 0x2B1E 11038 MIN Throttle-valve actuator, activation P2102 Throttle Actuator 'A' Control Motor Circuit Low	Throttle Actuator	Control Motor	Engine running	none	none none	Ambient temperature > 7 °C none	none	none Y		ce DME	
MED 17.2 0.25 TE 1700 MIN THIOTIC-VAIVE actuator, activation 12.702 Thiotic Actuator A control Motor Great Edw	Tillottie Actuator	CONTO MOTO	Engine running	Tione	none none	Ambient temperature > 7 0 none	Tione	Tione		ult memory	
										pletely enter sleep mode	
Internal Control Module Throttle Actuator Controller	T A	0 ( 114 (				7.00		V	3. Switch		
MED17.2 0x2B1F 11039 PLAUS Throttle-valve actuator, activation P061F Performance	Throttle Actuator	Control Motor	Engine running	none	none none	Ambient temperature > 7 °C none	none	none Y	Internal communications error 4. If fault is still p	esent, replace DME	
									<ul> <li>Open control wire(s) to throttle valve actuator motor</li> <li>Check wiring harness be</li> </ul>	ween DME and throttle valve	
										hrottle valve	
MED17.2 0x2B20 11040 SIG Throttle-valve actuator, activation P2100 Throttle Actuator 'A' Control Motor Circuit/Open	Throttle Actuator	Control Motor	Engine running	none	none none	Ambient temperature > 7 °C none	none	none Y	- Defective DME - Repl	ce DME	
									- Visual inspection to deter	nine whether contamination is	
									· · · · · · · · · · · · · · · · · · ·	e valve position	
										and check for stiction as well	
										nt resistance	
										ose and observe whether it	
						Engine temperature and intake air				and consistently	
MED17.2 0x2B21 11041 MAX Throttle-valve actuator, closing spring test P1634 Throttle Valve Adaptation Spring Test Failed (Bank 1)	Throttle Actuator	Adaptation	Engine off	none	Terminal 15 none	temperature > 7 °C none	STEUERN_DK	none	- Defective return spring	Ü none	none
WEDTY.2 0x2b21 11041 WAX 11110ttle-valve actuator, closing spring test	THIOthe Actuator	Adaptation	Lingine on	Tione	Terrilliai 13	temperature > 1 C none	GIEGERIN_DR	TIONE I	- Delective return spring	O Hone	Tible
									· · · · · · · · · · · · · · · · · · ·	nine whether contamination is	
										positional adjustments	
									- Open throttle valve by har	and check for stiction as well	
									- Throttle valve opens too rapidly, too slowly, or not at all as consiste	nt resistance	
									from emergency air position - Allow throttle valve to d	ose and observe whether it	
						Engine temperature and intake air			- Stiction in throttle-valve mechanism closes smooth	and consistently	
MED17.2 0x2B22 11042 MIN Throttle-valve actuator, closing spring test P1631 Throttle Valve Actuator Spring Test (Bank 1)	Throttle Actuator	Spring Test	Engine off	none	Terminal 15 none	temperature > 7 °C none	STEUERN_DK	none Y	- Defective return spring	D none	none
									·		
									Visual inspection to determ	ine whether contaminants are	
										alve from moving optimally	
										le valve by hand, checking for	
										e and signs of stiction	
Throttle Valve Actuator Spring Test Stop, Spring does not						Engine temperature and intake air				sed' position to emergency ail	
MED17.2 0x2B25 11045 MAX Throttle-valve actuator, opening spring test P1629 Open (Bank 1)	Throttle Actuator	Spring Test	Engine off	none	Terminal 15 none	temperature > 7 °C none	STEUERN_DK	none Y	- Defective return spring po	ition	
									- Visual inspection to determ	ine whether contaminants are	
									preventing the throttle v	alve from moving optimally	
									- Throttle valve opens too rapidly, too slowly, or not at all - Completely close the thro		
					-					e and signs of stiction	
Throttle Valve Actuator Spring Test Malfunction during						Engine temperature and intake air				sed' position to emergency ail	
MED17.2 0x2B26 11046 MIN Throttle-valve actuator, opening spring test P1628 Opening (Bank 1)	Throttle Actuator	Spring Test	Engine off	none	Terminal 15 none	temperature > 7 °C none	STEUERN DK	none Y		ition	
	Tinotae / Otaatoi	Opining Tool	Engine on	1010	Tommar To	ionipolation 2 7 0 India	OTECENIEDI		Dolosino rotani opinig po		
									No. 11. Contraction of the contr		
										ine whether contaminants are	
					-				preventing the throttle v	alve from moving optimally	
										le valve by hand, checking for	
									throttle valve position at wrong value consistent resistant	e and signs of stiction	
MED17.2 0x2B2B 11051 PLAUS Throttle-valve actuator, position monitoring P1637 Throttle Valve Position Control, Control Deviation (Bank 1)		Position Control	none	none	Terminal 15 none	none none	STEUERN_DK	none Y	- Stiction in throttle valve mechanism - Replace	hrottle valve	
Throttle Valve Adaptation Limp-Home Position Unknown					Voltage in onb						
MED17.2 0x2B2F 11055 PLAUS Throttle-valve actuator, emergency air point P1633 (Bank 1)	Throttle Actuator	Adaptation	none	none	Terminal 15 system >= 10	none none	STEUERN_DK	none Y	Emergency air position is outside tolerance range Replace	rottle valve	
										CC status report: WAL_1, reduce	d
										engine power!,	~
					***************************************				- Visual inequation to determ	ine whether contaminants are MILNone activation control via	
						· · · · · · · · · · · · · · · · · · ·			preventing the throttle valve	from executing ideal positiona lv_err_tps_obd,	
	Washington and the state of the										
									adju	ments operation in emergency default	
									adju: - Completely close the thro	tments operation in emergency defaultle valve by hand, checking for mode if trigger point reached	
Throttle Valve Position Control Throttle Stuck Permanently		<b>-</b>		_	Voltage in onb				adju: - Completely close the thro consistent resistance	tments operation in emergency default le valve by hand, checking for earnd signs of stiction operation in emergency default mode if trigger point reached otherwise EMB + engine speed	
MED17.2 0x2B31 11057 MAX Throttle-valve actuator, control range P1639  Throttle Valve Position Control Throttle Stuck Permanently (Bank 1)	Throttle Actuator	Throttle Stuck	none	5 sec.	Voltage in onb Terminal 15 system >= 8.5		STEUERN_DK	none Y	adju: - Completely close the thro consistent resistance	tments operation in emergency defaultle valve by hand, checking for mode if trigger point reached	

			Throttle Valve Position Control Throttle Stuck Temporarily						Voltage in onboard ele	ctrical						Visual inspection to determine whether contaminants at preventing the throttle valve from executing ideal position adjustments     Completely close the throttle valve by hand, checking for consistent resistance and signs of stiction	a		
MED17.2 0x2B32 11058 <b>MIN</b>	Throttle-valve actuator, control range	P1638	(Bank 1)	Throttle Actuator	Throttle Stuck	none	0.6 sec.	Terminal 15	system >= 8.5 V	none	none	STEUERN_DK	none	Υ	- Throttle valve machanism seizes briefly	- Replace throttle valve			
																- Determine whether conditions for throttle valve adaptation are present:  Terminal 15 on, engine off,  - Ambient temperature and engine temperature between °C and 105 °C; no other throttle valve faults logged in ECU;			
MED17.2 0x2B39 11065 <b>MAX</b>	Throttle-valve actuator, cancel adaptation due to environmental conditions	P1641	Throttle Valve Adaptation Stop due to Environmental Conditions			Engine off	nono	Terminal 15	nono	Engine temperature and int temperature > 7 °C		STEUERN DK	nono	V	No throttle valve adaptation is possible owing to failure to	Visual inspection to determine whether contamination affects throttle valve			
MED17.2 0x2B39 11065 MAX		P1041				Engine off	none	Terminal 15	none		none	SIEUERN_DK	none	Y	satisfy required environmental conditions	Determine whether conditions for throttle valve adaptation are present:  Terminal 15 on, engine off, battery voltage > 10 V, ambient temperature and engine temperature between °C and 105 °C; no other throttle valve faults logged in	7		
MED17.2 0x2B3A 11066 <b>MIN</b>	Throttle-valve actuator, cancel adaptation due to	P1642	Throttle Valve Adaptation Stop due to Environmental Values			Engine off	nono	Torminal 15	nono	Engine temperature and int temperature > 7 °C		STEUERN DK	none	V	No throttle valve adaptation possible owing to low battery				
MED17.2 0x2B3A 11066 MIN	environmental conditions	P1642	Values			Engine off	none	Terminal 15	none	temperature > 7 °C	none	SIEUERN_DK	none	Y	voltage  - Fault during first throttle valve adaptation procedure with a new DME  - Lower mechanical travel stop outside specified range,	Visual inspection, whether      Determine whether conditions for throttle valve adaptation are present:      Terminal 15 on, engine off, battery voltage > 10 V, ambient temperature and engine temperature between °C and 105 °C; no other throttle valve faults logged in			
			Throttle Valve Adaptation Lower Mechanical Stop not							Engine temperature and int	ıtake air				- Stiction in throttle valve mechanism	ECU:			
MED17.2 0x2B3F 11071 <b>PLAUS</b>	JS Throttle actuator	P1635	Adapted (Bank 1)	Throttle Actuator	Adaptation	Engine off	none	Terminal 15	none	temperature > 7 °C	none	STEUERN_DK	none	Υ	- Defective throttle valve	- Visual inspection, whether			
MED17.2 0x2B43 11075 <b>PLAU</b> \$		DAGAA	Throttle Valve Adaptation Stop Relearning Lower	The sale Assessed	Adaptation			Tombolds		Engine temperature and int		STEUERN DK		V	- Fault during repeated throttle valve adaptation procedures - Lower mechanical travel stop outside specified range, - Stiction in throttle valve mechanism	ECU;	performance!, MIL ON		
MED17.2 0x2B43 11075 PLAUS	JS Throttle actuator	P1644	Mechanical Stop (Bank 1)	Throttle Actuator	Adaptation	Engine off	none	Terminal 15	none	temperature > 7 °C	none	STEUERN_DK	none	Y	- Defective throttle valve	- Visual inspection, whether	EMB + rpm limit 1300 rpm	Lower mechanical travel stop monitor	
MED17.2 0x2B47 11079 <b>PLAUS</b>	JS Throttle-valve actuator, amplifier calibration	P1643	Throttle Valve Actuator Start Test Amplifier Balancing Plausibility			Engine off	none	Terminal 15	none	Engine temperature and int temperature > 7 °C	ntake air none	STEUERN_DK	none	Υ	- Defective throttle valve (sensor)  - Defective DME (amplifier)	- Clear fault memory - Check voltages of throttle valve sensors (sum of both voltages = 5 V) - Replace throttle valve - Replace DME			
								***************************************								Check wiring harness between DME and accelerator peo	a		
MED17.2 0x2B49 11081 <b>MAX</b>	X Accelerator pedal module, pedal-position sensor, signal 1	P2123	Throttle/Pedal Position Sensor/Switch 'D' Circuit High	Pedal Position Sensor	D Electrical	Engine running	none	none	none	none	none	none	none	Υ	Short circuit to positive Accelerator pedal module DME	module Replace accelerator pedal module Replace DME	none	none	none
MED17.2 0x2B4A 11082 <b>MIN</b>	Accelerator pedal module, pedal-position sensor, signal 1	P2122	Throttle/Pedal Position Sensor/Switch 'D' Circuit Low	Pedal Position Sensor	D Electrical	Engine running	none	none	none	none	none	none	none	Υ	Short to ground Accelerator pedal module DME	Check wiring harness between DME and accelerator peomodule Replace accelerator pedal module Replace DME	none	none	none
MED17.2 0x2B4B 11083 <b>PLAUS</b>	JS Accelerator pedal module, pedal-position sensor, signal 1	P2138	Throttle/Pedal Position Sensor/Switch 'D' / 'E' Voltage Correlation	Pedal Position Sensor	D/E Correlation	none	none	Terminal 15	none	none	none	none	none	Y	Defect in wiring harness Defective accelerator pedal module Defective DME	Check wiring harness between accelerator pedal modul and DME  Replace accelerator pedal module  Replace DME	none	none	none
MED17.2 0x2B4C 11084 <b>MAX</b>	X Accelerator pedal module, pedal-position sensor, signal 2	P2128	Throttle/Pedal Position Sensor/Switch 'E' Circuit High	Pedal Position Sensor	E Electrical	Engine running	none	none	none	none	none	none	none	Υ	Short circuit to positive Accelerator pedal module DME	Check wiring harness between DME and accelerator ped module Replace accelerator pedal module Replace DME Check wiring harness between DME and accelerator ped	none	none	none
MED17.2 0x2B4D 11085 <b>MIN</b>	Accelerator pedal module, pedal-position sensor, signal 2	P2127	Throttle/Pedal Position Sensor/Switch 'E' Circuit Low	Pedal Position Sensor	E Electrical	Engine running	none	none	none	none	none	none	none	Y	Short to ground Accelerator pedal module DME	neck wiring namess between DME and accelerator ped module Replace accelerator pedal module Replace DME	none	none	none  Condition for FGR (vehicle speed controller) deactivation
MED17.2 0x2B4E 11086 <b>PLAUS</b>	JS Accelerator pedal module, pedal-position sensor	P2120	Throttle/Pedal Position Sensor/Switch 'D' Circuit	Pedal Position Sensor	D Electrical	none	none	Terminal 15	none	none	none	none	none	Υ	Collateral faults with 0x2B49, 0x2B4A, 0x2B4C or 0x2B4E	Repair the initial faults			is irreversible in current cycle. Means no vehicle speed controller functionality

																Check wiring harness between DME and mass airflow			
												***			Short circuit to positive or open wire	sensor			
													Analog:		Mass airflow sensor	Replace mass airflow sensor			
MED17.2 0x2B4F 11087 <b>MAX</b>	Air-mass sensor, signal	P0103	Mass or Volume Air Flow 'A' Circuit High	Mass Air Flow Sensor	Electrical	none	1 sec.	Terminal 15	none	none	none	none	1.2 -14 kHz	N	DME	3. Replace DME	MIL on	none	none
												ma occordant				Check wiring harness between DME and mass airflow			
												***			Short circuit to positive or open wire	sensor			
MED17.2 0x2B50 11088 <b>MIN</b>	Air mace concor cignal	P0102	Mass or Volume Air Flow 'A' Circuit Low	Mass Air Flow Sensor	Floatrical	nono	1 500	Torminal 15	nono	nono	nono	nono	Analog: 1.2 -14 kHz	N	Mass airflow sensor DME	Replace mass airflow sensor     Replace DME	MIL on	nono	none
WED17.2 UX2B30 11000 WIIN	Air-mass sensor, signal	P0102	Mass of Volume All Flow A Circuit Low	Mass All Flow Sellsol	Electrical	none	1 sec.	Terminal 15	none	none	none	none	1.2 - 14 KHZ	IN	DIVIE		IVIIL OII	none	rione
												***			Short circuit or open wire A_HFM	Check wiring harness between DME and mass airflow sensor A HFM			
												***			Mass airflow sensor	2. Replace mass airflow sensor			
MED17.2 0x2B51 11089 <b>SIG</b>	Air-mass sensor, signal	P0100	Mass or Volume Air Flow 'A' Circuit	Mass Air Flow Sensor	Electrical	Engine running	none	none	none	none	none	none	none	Υ	DME	3. Replace DME	MIL on		
																Check wiring harness between DME and mass airflow			
												***			Short circuit to positive or open wire	sensor			
												***			Mass airflow sensor	2. Replace mass airflow sensor			
MED17.2 0x2B59 11097 <b>MAX</b>	Air-mass sensor, plausibility	P115A	Mass or Volume Air Flow 'A' Maximum Exceeded	Mass Air Flow	Too High	Engine running	2 sec.	none	none	none	none	none	none	Υ	DME	3. Replace DME	MIL on		
																1. Check wiring harness between DME and mass airflow			
												***			Short to ground	sensor			
MED47.0 0::0D5A 44000 MIN	A:	D445D	Mana an Valura a Air Flaur IAI Minimum Fallan Dalaur	Mana Air Flanc	T1	For size a suspection	0								Mass airflow sensor	2. Replace mass airflow sensor	MIL		
MED17.2 0x2B5A 11098 <b>MIN</b>	Air-mass sensor, plausibility	P115B	Mass or Volume Air Flow 'A' Minimum Fallen Below	Mass Air Flow	Too Low	Engine running	2 sec.	none	none	none	none	none	none	Υ	DME	3. Replace DME	MIL on		
						The second secon										Determine whether airflow to engine greater/less than			
																requirement (vacuum leak, crankcase!)			
															HFM signal not as expected,	Check connections/plugs (corrosion, water, etc.) between			
			Mass or Volume Air Flow 'A' Air Mass Too High Compared	oc										***************************************	defective HFM, throttle plate problem or mass airflow no	ot HFM and DME (CMI-240, CMI-209 and CME-114)			
MED17.2 0x2B5B 11099 <b>PLAUS</b>	Air-mass sensor, plausibility	P115D	to Model	Mass Air Flow	Comparison to Model	Engine running	2 sec.	none	Battery voltage >11 V	none	>0.3 seconds after start			Υ	as expected (vacuum leak)	Replace sensor as indicated	MIL ON		
																Plug in HFM			
																Check connections/plugs (corrosion, water, etc.) between			
			Mass or Volume Air Flow 'A' Air Mass Too Low Compared													HFM and DME (CMI-240, CMI-209 and CME-114)			
MED17.2 0x2B5C 11100 <b>SIG</b>	Air-mass sensor, plausibility	P115C	to Model	Mass Air Flow	Comparison to Model	Engine running	none	none	Battery voltage >11 V	none	>0.3 seconds after start			Υ	HFM not plugged in or defective	Replace sensor as indicated	MIL ON		
			Manager Values and Eleve 4 Company of the Clause I Plans it life.										A I		Ob ant singuit an angular	Check wiring harness between DME and mass airflow			
MED17.2 0x2B5E 11102 <b>MAX</b>	Air mass sensor, correction signal	P113A	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Long	Mass Air Flow	Correction Signal	none	1 sec.	Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz	N	Short circuit or open wire  Mass airflow sensor	sensor 2. Replace mass airflow sensor		none	none
WED17.2 OXZEGE TITOZ																			
			T Office Too Long	Wado / III 1 low			1 300.	Tommar 10	1.0	110110	none	TIOTIC	1.2 - 14 KHZ	17	wass amow sensor			Hone	Hone
		1110,1			on our organi		1 300.	101111111111111111111111111111111111111			none	ilone		IV		Check wiring harness between DME and mass airflow		HOTE	noie
MED17.2 0x2B5F 11103 <b>MIN</b>			Mass or Volume Air Flow 1 Correction Signal Plausibility	,					none	none	none	none	Analog:	N	Short circuit or open wire	1. Check wiring harness between DME and mass airflow sensor			
MED17.2 0x2B5F 11103 MIN MED17.2 0x2B64 11108 PLAUS	Air mass sensor, correction signal	P113B	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short		Correction Signal	none	1 sec.	Terminal 15		none		none		N		Check wiring harness between DME and mass airflow		none	none
			Mass or Volume Air Flow 1 Correction Signal Plausibility	, Mass Air Flow						none		none	Analog:	N	Short circuit or open wire	Check wiring harness between DME and mass airflow sensor     Replace mass airflow sensor			
MED17.2 0x2B5F 11103 MIN MED17.2 0x2B64 11108 PLAUS	Air mass sensor, correction signal	P113B	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short	, Mass Air Flow	Correction Signal					none		none	Analog:	N	Short circuit or open wire	1. Check wiring harness between DME and mass airflow sensor			
MED17.2 0x2B64 11108 <b>PLAUS</b>	Air mass sensor, correction signal Intake manifold, unmetered air	P113B P1497	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak	Correction Signal General		1 sec.	Terminal 15		none		none	Analog: 1.2 -14 kHz	N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor     2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239			
MED17.2         0x2B5F         11103         MIN           MED17.2         0x2B64         11108         PLAUS    MED17.2  0x2B6C  11116  MAX	Air mass sensor, correction signal	P113B	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak	Mass Air Flow Air Leak	Correction Signal					none		none	Analog:	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire	1. Check wiring harness between DME and mass airflow sensor     2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME	CC status report		
MED17.2 0x2B64 11108 <b>PLAUS</b>	Air mass sensor, correction signal Intake manifold, unmetered air	P113B P1497	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak	Correction Signal General	none	1 sec.	Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME	1. Check wiring harness between DME and mass airflow sensor     2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME  1. Check wiring harness between intake manifold pressure	CC status report		
MED17.2 0x2B64 11108 <b>PLAUS</b>	Air mass sensor, correction signal Intake manifold, unmetered air	P113B P1497	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General	none	1 sec.	Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire	1. Check wiring harness between DME and mass airflow sensor     2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF	CC status report		
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor     2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239			
MED17.2 0x2B64 11108 <b>PLAUS</b>	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General	none	1 sec.	Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire	1. Check wiring harness between DME and mass airflow sensor     2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME	CC status report  CC status report		
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor     2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME  1. If 0x28A2 has also been logged, consider the following			
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor     2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF     2. Replace intake manifold pressure sensor B6239     3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:			
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW)			
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)			
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW)			
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present			
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present			
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake			
MED17.2 0x2B6C 11116 MAX  MED17.2 0x2B6D 11117 MIN	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure	Correction Signal General  General  General	none	1 sec.  1 sec.	Terminal 15  Terminal 15  Terminal 15	none	none	none	none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  DME	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor	CC status report		
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 111116 MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit	Mass Air Flow Air Leak  Manifold Absolute Pressure	Correction Signal General General	none	1 sec.	Terminal 15  Terminal 15	none	none	none	none  none  none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  3. Replace intake manifold pressure sensor			
MED17.2 0x2B6C 11116 MAX  MED17.2 0x2B6D 11117 MIN	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure	Correction Signal General  General  General	none	1 sec.  1 sec.	Terminal 15  Terminal 15  Terminal 15	none	none	none	none  none  none	Analog: 1.2 -14 kHz Analog; 0-5V	N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  DME	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  3. Replace intake manifold pressure sensor  Check wiring harness between DME and intake manifold	CC status report		
MED17.2         0x2B64         11108         PLAUS           MED17.2         0x2B6C         11116         MAX           MED17.2         0x2B6D         11117         MIN           MED17.2         0x2B71         11121         MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric	P113B P1497 P0108 P0107	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low  Manifold Absolute Pressure Too High	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure  Manifold Absolute Pressure	Correction Signal General  General  General	none  none  none	1 sec.  1 sec.  2 sec.	Terminal 15  Terminal 15  Terminal 15	none	none	none	none  none  none  none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  Defect in wiring harness Defective intake manifold pressure sensor Defect in wiring harness	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor	CC status report  MIL ON		
MED17.2 0x2B64 11108 PLAUS  MED17.2 0x2B6C 11116 MAX  MED17.2 0x2B6D 11117 MIN	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric	P113B P1497 P0108	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure	Correction Signal General  General  General	none	1 sec.  1 sec.	Terminal 15  Terminal 15  Terminal 15	none  none  none	none	none	none none none none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  DME	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  3. Replace intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor	CC status report		
MED17.2         0x2B64         11108         PLAUS           MED17.2         0x2B6C         11116         MAX           MED17.2         0x2B6D         11117         MIN           MED17.2         0x2B71         11121         MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric	P113B P1497 P0108 P0107	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low  Manifold Absolute Pressure Too High  Manifold Absolute Pressure Too Low	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure  Manifold Absolute Pressure	Correction Signal General  General  General	none  none  none	1 sec.  1 sec.  2 sec.	Terminal 15  Terminal 15  Terminal 15	none  none  none	none	none	none  none  none  none  none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  Defect in wiring harness Defective intake manifold pressure sensor  Defect in wiring harness Defective intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor	CC status report  MIL ON		
MED17.2         0x2B64         11108         PLAUS           MED17.2         0x2B6C         11116         MAX           MED17.2         0x2B6D         11117         MIN           MED17.2         0x2B71         11121         MAX	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, plausibility  Intake-manifold pressure sensor, plausibility	P113B P1497 P0108 P0107	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low  Manifold Absolute Pressure Too High	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure  Manifold Absolute Pressure	Correction Signal General  General  General	none  none  none  none	1 sec.  1 sec.  2 sec.	Terminal 15  Terminal 15  Terminal 15	none  none  none	none	none	none  none  none  none  none  none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  Defect in wiring harness Defective intake manifold pressure sensor Defect in wiring harness	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor  Replace intake manifold pressure sensor  Check wiring harness between DME and intake manifold	CC status report  MIL ON		
MED17.2         0x2B64         11108         PLAUS           MED17.2         0x2B6C         11116         MAX           MED17.2         0x2B6D         11117         MIN           MED17.2         0x2B71         11121         MAX           MED17.2         0x2B72         11122         MIN	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, plausibility  Intake-manifold pressure sensor, plausibility	P113B P1497  P0108  P0107  P1250	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low  Manifold Absolute Pressure Too High  Manifold Absolute Pressure Too Low  Manifold Absolute Pressure Maximum Pressure	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure  Manifold Absolute Pressure Sensor  Manifold Absolute Pressure Sensor	Correction Signal General  General  General  Pressure  Pressure	none  none  none	1 sec.  1 sec.  2 sec.	Terminal 15  Terminal 15  Terminal 15  Terminal 15	none none none none	none  none  none  none	none  none  none  none	none  none  none  none  none  none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  Defect in wiring harness Defective intake manifold pressure sensor  Defect in wiring harness Defective intake manifold pressure sensor  Defect in wiring harness Defective intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  3. Replace intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor	CC status report  MIL ON  MIL ON		
MED17.2         0x2B64         11108         PLAUS           MED17.2         0x2B6C         11116         MAX           MED17.2         0x2B6D         11117         MIN           MED17.2         0x2B71         11121         MAX           MED17.2         0x2B72         11122         MIN           MED17.2         0x2B73         11123         PLAUS	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, plausibility  Intake-manifold pressure sensor, plausibility  Intake-manifold pressure sensor, plausibility	P113B P1497  P0108  P0107  P1250  P1255  P129D	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low  Manifold Absolute Pressure Too High  Manifold Absolute Pressure Maximum Pressure Implausible  Manifold Absolute Pressure Minimum Pressure	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure  Manifold Absolute Pressure Sensor  Manifold Absolute Pressure Sensor  Manifold Absolute Pressure Pressure	Correction Signal General  General  General  Pressure  Pressure  Plausibility	none  none  none  none  Engine running	1 sec.  1 sec.  2 sec.  2 sec.  2 sec.	Terminal 15  Terminal 15  Terminal 15  Terminal 15  Terminal 15  none	none none none none	none  none  none  none	none  none  none  none	none  none  none  none  none  none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N N N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  Defect in wiring harness Defective intake manifold pressure sensor  Defect in wiring harness Defective intake manifold pressure sensor  Defect in wiring harness Defective intake manifold pressure sensor  Defect in wiring harness Defective intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  3. Replace intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor  Replace intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor	CC status report  MIL ON  MIL ON  MIL ON		
MED17.2         0x2B64         11108         PLAUS           MED17.2         0x2B6C         11116         MAX           MED17.2         0x2B6D         11117         MIN           MED17.2         0x2B71         11121         MAX           MED17.2         0x2B72         11122         MIN	Air mass sensor, correction signal Intake manifold, unmetered air  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, electric  Intake-manifold pressure sensor, plausibility  Intake-manifold pressure sensor, plausibility  Intake-manifold pressure sensor, plausibility	P113B P1497  P0108  P0107  P1250	Mass or Volume Air Flow 1 Correction Signal Plausibility Period Too Short Downstream Throttle Air Leak  Manifold Absolute Pressure/Barometric Pressure Circuit High  Manifold Absolute Pressure/Barometric Pressure Circuit Low  Manifold Absolute Pressure Too High  Manifold Absolute Pressure Too Low  Manifold Absolute Pressure Maximum Pressure Implausible	Mass Air Flow Air Leak  Manifold Absolute Pressure  Manifold Absolute Pressure  Manifold Absolute Pressure Sensor  Manifold Absolute Pressure Sensor	Correction Signal General  General  General  Pressure  Pressure	none  none  none  none	1 sec.  1 sec.  2 sec.	Terminal 15  Terminal 15  Terminal 15  Terminal 15	none none none none	none  none  none  none	none  none  none  none	none  none  none  none  none  none  none	Analog: 1.2 -14 kHz Analog; 0-5V	N N N N N N N	Short circuit or open wire Mass airflow sensor  Short circuit to positive or open wire Intake manifold pressure sensor DME  Short to ground or open wire Intake manifold pressure sensor DME  Defect in wiring harness Defective intake manifold pressure sensor  Defect in wiring harness Defective intake manifold pressure sensor  Defect in wiring harness Defective intake manifold pressure sensor	1. Check wiring harness between DME and mass airflow sensor  2. Replace mass airflow sensor  1. Check wiring harness between intake manifold pressure sensor and DME M_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. Check wiring harness between intake manifold pressure sensor and DME U_SDF, A_SDF  2. Replace intake manifold pressure sensor B6239  3. Replace DME  1. If 0x28A2 has also been logged, consider the following action:  a. Check operation of wastegate frequency valve (EPDW wastegate)  b. Check operation of wastegate  c. Determine whether accelerator pedal module fault is present  d. Determine whether dump valve fault is present  2. Check wiring harness between DME and intake manifold pressure sensor  3. Replace intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor  Replace intake manifold pressure sensor  Check wiring harness between DME and intake manifold pressure sensor	CC status report  MIL ON  MIL ON		

MED17.2	0x2BC0 1	200 MAY	DME, internal fault	P060B	Internal Control Module A/D Processing Performance	ECM/TCM	A/D				1						1			
WED17.2	UXZBCU I	ZUU WAX	DIME, Internal laut	F000B	Internal Control Module A/D Flocessing Fellormance	ECIM/TCIM	AVD										Clear fault memory			
														water			Allow vehicle to completely enter sleep mode			
MED 47.0	0.0004	004	DME : 4 - 14 - 14	DoooD		FONTON	A/D			T				oo		DATE OF THE PROPERTY OF THE PR	3. Ignition on		Under worst case conditions correct conversion of	
MED17.2	0x2BC1 1	201 MAX	DME, internal fault	P060B	Internal Control Module A/D Processing Performance	ECM/TCM	A/D	none	none	Terminal 15	none	none	none	none	none	N DME	If fault is still present, replace DME     Clear fault memory	none	sensors' AD values ceases - engine fails to sta	art none
														www.			2. Allow vehicle to completely enter sleep mode			
														***************************************			3. Ignition on		Under worst case conditions correct conversion of	
MED17.2	0x2BC2 1	202 <b>MAX</b>	DME, internal fault	P060B	Internal Control Module A/D Processing Performance	ECM/TCM	A/D	none	none	Terminal 15	none	none	none	none	none	N DME	4. If fault is still present, replace DME	none	sensors' AD values ceases - engine fails to sta	art none
														and the second s			Clear fault memory     Allow vehicle to completely enter sleep mode			
																	3. Ignition on		Under worst case conditions correct conversion of	of the
MED17.2	0x2BC3 1	203 <b>MAX</b>	DME, internal fault	P060B	Internal Control Module A/D Processing Performance	ECM/TCM	A/D	none	none	Terminal 15	none	none	none	none	none	N DME	4. If fault is still present, replace DME	none	sensors' AD values ceases - engine fails to sta	
									•					www			1. Clear fault memory			
														***************************************			Allow vehicle to completely enter sleep mode     3. Ignition on			
MED17.2	0x2BC4 1	204 <b>MAX</b>	DME, internal fault: driver CJ945	P163E	Voltage Monitoring Control Module Communication Error	or Communication	Voltage Monitoring Control Module	none	none	Terminal 15	none	none	none	none	none	N DME	4. If fault is still present, replace DME	none	none	none
																	Clear fault memory			
														Annual Control of the			Allow vehicle to completely enter sleep mode			
MED17.2	0x2BC5 1	205 MAX	DME, internal fault: driver CY320	P163E	Voltage Monitoring Control Module Communication Error	Communication	Voltage Monitoring Control Module	none	none	Terminal 15	none	none	none	none	none	N DME	3. Ignition on 4. If fault is still present, replace DME	none	none	none
							g common g										1. Clear fault memory			
									•					www			2. Allow vehicle to completely enter sleep mode			
MED17.2	0x2BC6 1	206 <b>MAX</b>	DME, internal fault					nono	none	Terminal 15	none	nono	none	nono	nono	V DME programming error	3. Ignition on 4. If fault is still present, replace DME			Vehicle fails to start because no immobilizer data can le read
MED17.2	UXZBC0 I	ZUO IVIAX	DME, internal rault					none	none	reminar 13	none	none	Tione	none	none	Y DME programming error	1. Clear fault memory			leau
									•					www			2. Allow vehicle to completely enter sleep mode			
145545.0	0.000-		DUE :											No.			3. Ignition on			Vehicle fails to start because no immobilizer data can l
MED17.2	0x2BC7 1	207 MAX	DME, internal fault					none	none	Terminal 15	none	none	none	none	none	Y Not possible to read DME's internal memory	4. If fault is still present, replace DME			read
														and the second s			Clear fault memory     Allow vehicle to completely enter sleep mode			
														Name of the Contract of the Co			3. Ignition on			Vehicle fails to start because no immobilizer data can
MED17.2	0x2BC8 1	208 MAX	DME, internal fault					none	none	Terminal 15	none	none	none	none	none	Y Not possible to write onto DME's internal memory	4. If fault is still present, replace DME			written
														www.			If other faults are present, check these first Replace the DME only if this fault has been logged			
MED17.2	0x2BCB 1	211 <b>MAX</b>	Monitoring engine torque limiting	P1605	Safety Concept Torque Limitation Level 1			Engine running	600 sec.	none	none	none	none	none	none	Y Collateral fault from DME defect	multiple times or is constantly present			
																	Clear fault memory			
														vices and the second se			Allow vehicle to completely enter sleep mode			
MED17.2	0x2BCC 1	212 MAX	DME, internal fault	P163E	Voltage Monitoring Control Module Communication Error	Communication	Voltage Monitoring Control Module	none	none	Terminal 15	none	none	none	none	none	Y Internal communications error	3. Ignition on 4. If fault is still present, replace DME	MIL and EML lamp		
																	1. Clear fault memory			
														water			2. Allow vehicle to completely enter sleep mode			
MED17.2	0x2BCD 1	213 MAY	DME, internal fault: driver CJ945	P167E	Internal Control Module Error, 5 Volt Supply Voltage High	h ECM	Voltage	none	none	Terminal 15	none	none	none	none	none	Y Internal overvoltage	3. Ignition on 4. If fault is still present, replace DME	MIL and EML lamp		
WED17.2	UAZBOD I	ZIJ WAX	DIVIE, IIITETTIAI TAUR. UTVET 03943	T TOTE	internal Control Module Error, 3 volt Supply voltage ringi	LOW	voltage	none	none	Terrimar 13	none	none	none	none	none	internal overvoltage	1. Clear fault memory	WIL and LIVE lamp		
																	<ol><li>Allow vehicle to completely enter sleep mode</li></ol>			
145047.0	0.0005		DUE :	D.10=5			.,,,							ware and the same			3. Ignition on			
MED17.2	0x2BCE 1	214 MAX	DME, internal fault: driver CJ945	P167F	Internal Control Module Error, 5 Volt Supply Voltage Low	N ECM	Voltage	none	none	Terminal 15	none	none	none	none	none	Y Internal undervoltage Collateral fault	4. If fault is still present, replace DME  If other faults are present, repair these first	MIL and EML lamp		
MED17.2	0x2BCF 1	215 <b>MAX</b>	DME, internal fault: watchdog output	P163D	Voltage Monitoring Control Module Cut-off Detected	Voltage Monitoring Control Module	Voltage	none	none	Terminal 15	none	none	none	none	none	Y Software error	Program DME	MIL and EML lamp		
													······································				Clear fault memory			
																	Allow vehicle to completely enter sleep mode			
MFD17.2	0x2BD0 1	216 <b>MAX</b>	DME, internal fault: watchdog output	P163E	Voltage Monitoring Control Module Communication Error	Communication	Voltage Monitoring Control Module	none	none	Terminal 15	none	none	none	none	none	Y Internal communications error	3. Ignition on 4. If fault is still present, replace DME	MIL and EML lamp		
					g zg zg		9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										1. Clear fault memory			
																	2. Allow vehicle to completely enter sleep mode			
MED17.2	0v2BD1 1	217 <b>MAX</b>	DME, internal fault: watchdog output	P163C	Voltage Monitoring Control Module Overvoltage	Voltage Monitoring Control Module	Voltage	none	none	Terminal 15	none	none	none	none	none	Y Internal overvoltage	3. Ignition on 4. If fault is still present, replace DME	MIL and EML lamp		
IVIED I 1.Z	0x2BD1 1	ZII WAA	Divie, internal fault. watchdog output	F 103C	voltage Monitoring Control Module Overvoltage	voltage Monitoring Control Module	Voltage	HOHE	HOHE	Terrilliai 13	HOUR	none	HOHE	HOHE	HOHE	i internal overvoltage	4. II lault is suii present, replace Divie	IVIIL AITU EIVIL IAITIP		

																Connect adapter between wiring harness and DME to			
																allow measurement at Pin 21 (DME refrigerant pressure			
																sensor)			
															1. Wiring harness between DME and following concer	2. Measure voltage on Pin 21, s: if > 5 V -> Short to positive -> Check wiring harness			
															Refrigerant pressure sensor	if < 5 V -> Unplug following sensors (see cause) one after			
															- Crankshaft sensor	the other and measure, if the voltage at Pin 21 goes to 5			
															- Accelerator pedal module - Intake camshaft sensor	V, then replace the corresponding sensor, otherwise: - Check wiring harness			
															2. One of the sensors named in Pos. 1 is defective	- Check willing harness - Replace DME			
MED17.2 0x2BD2 11218 <b>MAX</b>	Monitoring, power supply 1, driver CY320	P0641	Sensor Reference Voltage 'A' Circuit/Open	System Voltage	1 Electrical	none	none	Terminal 15	none	none	none	none	none	Υ	3. DME	if = 5 V and is logged continuously, then replace DME			
																Connect adapter between wiring harness and DME to			
																allow measurement at Pin 37 (DME - intake manifold			
																pressure sensor)			
															1 Wiring harness between DME and following concer	2. Measure voltage on Pin 37, s: if > 5 V -> Short to positive -> Check wiring harness			
															- Intake manifold pressure sensor	if < 5 V -> Unplug the following sensors (see causes) one			
															<ul> <li>Accelerator pedal module</li> </ul>	after the other and measure, if the voltage at Pin 37 goes			
															- Throttle valve - Charge-air pressure sensor	to 5 V, then replace the corresponding sensor, otherwise: - Check wiring harness			
															2. One of the sensors named in Pos. 1 is defective	- Replace DME			
MED17.2 0x2BD3 11219 MAX	Monitoring, power supply 2, driver CY320	P0651	Sensor Reference Voltage 'B' Circuit/Open	System Voltage	2 Electrical	none	none	Terminal 15	none	none	none	none	none	Υ	3. DME	if = 5 V and is logged continuously, then replace DME			
																Connect adapter between wiring harness and DME to			
																allow measurement at Pin 22 (DME - rail-pressure sensor)			
																Measure voltage on Pin 22,     if > 5 V -> Short circuit to positive -> Check wiring			
																harness			
																if < 5 V -> Disconnect the following sensors (see causes)			
															Wiring harness between DMF and following sensor	one after the other and measure, if the voltage at Pin 22 goes to 5 V, replace the corresponding sensor, otherwise:			
															- Rail-pressure sensor	- Check wiring harness			
MEDITO O ODDI	N :: :	D0007	0 0 0 1 10 10 0 10	0	0.51			T							2. One of the sensors named at Pos. 1 is defective	- Replace DME			
MED17.2 0x2BD4 11220 <b>MAX</b>	Monitoring, power supply 3, driver CY320	P0697	Sensor Reference Voltage 'C' Circuit/Open	System Voltage	3 Electrical	none	none	Terminal 15	none	none	none	none	none	Y	3. DME	if = 5 V and is logged continuously, then replace DME  If this fault has been logged multiple times or is present			
MED17.2 0x2BD5 11221 <b>MAX</b>	DME, internal fault					none	15 sec.	Terminal 15	none	none	none	none	none	Υ	DME	constantly: Replace DME.	none		
																If this fault has been logged multiple times or is present			
MED17.2 0x2BD6 11222 <b>MAX</b>	DME, internal fault					none	15 sec.	Terminal 15	none	none	none	none	none	Y	DME	constantly: Replace DME.  If this fault has been logged multiple times or is present	none		
MED17.2 0x2BD7 11223 <b>MAX</b>	DME, internal fault					none	15 sec.	Terminal 15	none	none	none	none	none	Y	DME	constantly: Replace DME.	none		
									10 < UB < 16V; voltage	e must exist						of Check charge sensor, engine temperature sensor and			
MED17.2 0x2BD9 11225 <b>PLAUS</b>	DME, internal fault	P1603	Control Module Self-Test, Torque Monitoring	ECM Self-Test	Torque Monitoring			TR 15/TR 50	behind main relay						torque comparison process	wiring, replace control module as indicated			
															Crankshaft sensor	Check wiring harness between DME and crankshaft sensor			
			Electronic Throttle Control Monitor Level 2/3 Engine												Wiring harness DME	Replace crankshaft sensor			
MED17.2 0x2BDA 11226 <b>PLAUS</b>	DME, internal fault	P1681	Speed Calculation Error	Throttle Control Monitor Level 2/3	RPM	Engine running	none	none	none	none	none	none	none	Y	DME	Replace DME			
															Rail-pressure sensor	Check wiring harness between DME and rail-pressure sensor			
															Wiring harness	Replace rail-pressure sensor			
MED17.2 0x2BDB 11227 <b>PLAUS</b>	DME, internal fault	P323E	Control Module Monitoring Fuel Pressure Sensor	ECM Monitoring	Fuel Pressure Sensor	Engine running	none	none	none	none	none	none	none	Υ	DME	Replace DME			
MED17.2 0x2BDC 11228 <b>PLAUS</b>	DME, internal fault	P3337	Function Monitoring Lambda Plausibility	ECM Monitoring	Lambda Plausibility			TR 15/TR 50	10 < UB < 16V; voltage behind main relay	e must exist					Fuel signal monitor fault (lambda plausibility check wi LSU)	th Check oxygen sensor and wire, replace control module as indicated			
IVILDIT.2 UAZDDO 11220 FLAUS	Divic, iliterilariaut	FJJJI	i unonon monitoring Lambua Flausibility	LOW MOUNTAINS	Lambua Flausibility			UC 711/C1 711	Deninu mam relay						LSU )	Illulcateu		Detected faults are defined as irreversible in current	
																		driving cycle. For this reason they cannot be resolved	
																		when the fault source is removed, but instead only	
MED17.2 0x2BDD 11229 <b>MAX</b>	DME, internal fault	P3233	Control Module Monitoring Relative Charge Plausibility	ECM Monitoring	Relative Charge	none	none	Terminal 15	none	none	none	none	none	Υ	Defective DME	Replace DME		through TR 15 = OFF and ON to initiate new driving cycle.	Automatic fuel supply deactivation
MED17.2 0x2BDE 11230 <b>MIN</b>	DME, internal fault	P3232	Control Module Monitoring Ignition Timing Plausibility	ECM Monitoring	Ignition Timing	none	none	Terminal 15	none	none	none	none	none	Y	Defective DME	Replace DME			Automatic fuel supply deactivation
	DME :		Electronic Throttle Control Monitor Level 2/3 ADC	The series of th				÷ · · · -						V	5.4.5.5				A.44-6-1
MED17.2 0x2BDF 11231 <b>SIG</b>	DME, internal fault	P1680	Processor Fault	Throttle Control Monitor Level 2/3	AD Converter	none	none	Terminal 15	none	none	none	none	none	Υ	Defective DME	Replace DME			Automatic fuel supply deactivation

N/10 / 11 / / 11 / / 11 / /	/2RE0 1123	32 <b>MAX</b>	DME, internal fault	P3237	Control Module Monitoring Fuel Correction Error	ECM Monitoring	Fuel Correction	Engine running	none	none	none	none	none	none	none	V	Defective DME	Replace DME			
MED17.2 0x2	(ZDLO 11Z	JZ WAX	DME, internal radit	1 3237	Control Module Monitoring Injection Time Relative Fuel	LOW Worldowing	i dei Correction	Engine running	none	none	none	none	HOHE	lione	none	I	Delective DWL	Replace DML			
MED17.2 0x2	k2BE1 1123	33 MIN	DME, internal fault	P3236	Quantity Plausibility	ECM Monitoring	Injection Time	Engine rupping	nono	nono	nono	none	nono	nono	nono	V	Defective DME	Replace DME			
MED17.2 0x2 MED17.2 0x2	(2BE2 112)			P3235	Control Module Monitoring Version Coding Plausibility	ECM Monitoring  ECM Monitoring	Coding	Engine running	none	none	none	none	none none	none	none	<u>'</u>	Defective DME	Replace DME			
				P3235			Coding TPU Chip	Engine running	none	none	none	none		none	none	Ţ	Defective DIVIE	Replace DIVIE			
	(2BE3 1123		DME, internal fault	P3238	Control Module Monitoring TPU Chip Defective	ECM Monitoring	I PU Chip	Engine running	none	none	none	none	none	none	none	Y	Defective DME	Replace DME			
MED17.2 0x2	k2BE4 1123	36 MIN	DME, internal fault					Engine running	none	none	none	none	none	none	none	Y	Defective DME	Replace DME			
																		If further faults are present, repair these first			
																		Replace DME only if this is not a collateral fault, and the			
																		fault is either currently present or has been logged at least			
MED17.2 0x2	<2BE5 1123	37 PLAUS	DME, internal fault					Engine running	none	none	none	none	none	none	none	Υ	Collateral fault from DME defect	3 times			
																		If further faults are present, repair these first			
																		Replace DME only if this is not a collateral fault, and the			
																		fault is either currently present or has been logged at least			
MED17.2 0x2	k2BE6 1123	38 <b>MAX</b>	DME, internal fault					Engine running	none	none	none	none	none	none	none	Y	Collateral fault from DME defect	3 times			
																		Check wiring harness between DME and accelerator peda			
																	Accelerator pedal module	module			
					Electronic Throttle Control Monitor Level 2/3 Pedal												· · · · · · · · · · · · · · · · · · ·	Replace accelerator pedal module			
MED17.2 0x2	κ2BE8 1124	40 PLAUS	DME, internal fault	P1686		Throttle Control Monitor Level 2/3	Pedal Position Sensor	Engine rupping	nono	nono	nono	none	nono	none	nono	v	Wiring harness	Replace DME			
MEDIT.2 UX2	KZDEO 11Z	40 PLAUS	DIVIE, IIILEITIAI IAUIL	F1000	Position Sensor Diagnostic Error	Throttle Control Monitor Level 2/3	Pedai Position Sensor	Engine running	none	none	none	none	none	none	none		DIVIE	Replace DIVIE			
											D "						Voltage has been below 9V for 1 min., in contrast with		N : 1 00 11		
MEDATO	(2C8D 114(	05 MINI	5	D4004	B (51 ( 5) 1		EL		40	T : 100	Battery voltage measured by					V	undervoltage fault this fault is also detected with vehicle i		No warning lamp or CC status		
				P160A P160B	Powermanagement Exhaustive Discharge	Powermanagement	Electrical	none	10 sec.	Terminal 30	intelligent battery sensor < 9.5 V	none	none	none	none	Υ	sleep mode	Check battery	report		
MED17.2 0x2	(2C8E 114(	06 PLAUS	Power management, battery	P160B	Powermanagement Defective	Powermanagement	Electrical														
																	Alternator voltage too high	Ask customer if vehicle has been jump-started			
											Battery voltage measured by						External voltage source too high	Check alternator			
MED17.2 0x2	k2C90 1140	08 <b>MAX</b>	Power management, vehicle electrical system	P160C	Powermanagement Overvoltage	Powermanagement	Electrical	Engine running	10 sec.	none	intelligent battery sensor > 16 V	none	none	none	none	Υ	Defective intelligent battery sensor	Check intelligent battery sensor	none		
											Battery voltage measured by						Alternator voltage too low	Check alternator, check threaded connections	No warning lamp or CC status		A defective alternator produces a discharged battery
MED17.2 0x2	k2C91 1140	09 <b>MIN</b>	Power management, vehicle electrical system	P160D	Powermanagement Undervoltage	Powermanagement	Electrical	Engine running	10 sec.	none	intelligent battery sensor < 9 V	none	none	none	none	Υ	Defective intelligent battery sensor	Check intelligent battery sensor	report		leads to vehicle breakdown in some cases
											Battery voltage measured by										Disconnected battery terminals can provoke extrer
											intelligent battery sensor < 8.5 V	or							CC message "Check battery		fluctuations in electrical system voltage and lead to el
MED17.2 0x2	k2C93 114 <sup>2</sup>	11 <b>SIG</b>	Power management, vehicle electrical system	P160E	Powermanagement Operation Without Charging of Battery	Powermanagement	Electrical	Engine running	none	none	> 18 V	none	none	none	none	Υ	Battery not correctly connected.	Check threaded connections on battery terminals	terminals"		failure owing to undervoltage in severe cases
						-															Under the worst-case scenario, high standby current
***************************************								IBS detects higher standby current											CC message 'High battery		can discharge the battery to below the startability
MED17.2 0x2	k2C96 114 <sup>2</sup>	14 PLAUS	Power management, closed-circuit current violation	P160F	Powermanagement No-Load Current Error	Powermanagement	Electrical	draw in parked phase	none	Terminal R	none	none	none	none	none	Υ	Standby current too high	Conduct energy diagnosis	discharge when parked'	High energy draw when parked	threshold, resulting in a breakdown vehicle
	k2C98 114°		System voltage	P0563	System Voltage High	System Voltage	Electrical										,	9,9		gg,	, <u> </u>
	k2C99 114°		System voltage	P0562	System Voltage Low	System Voltage	Electrical														
MED17.2 0x2			System voltage	P0562 P0560	System Voltage  System Voltage	System Voltage	Electrical														
WED17.2 OX2	(203A 114	FLAUS	System voltage	1 0300	System voltage	System voltage	Liectifical											Data-sair- sub-therealt-sait- fault is assessed			
																	Altamatan	Determine whether alternator fault is present			
															V. II		Alternator	Incorrect jump-start or faulty booster used			
MEDITO	(2C9C 1142								_		UBatt > 16 V				Voltage downstream from	om main	Unamer	If this fault has been logged multiple times, or is constantly			
		OO MAY	Valida sustana valtana DME saaataa salav	D0007	FOM/DOM Device Delevi Central Circuit High	FOM/DOM Down Bolow										N I	DME	Denler DMC			
MED172 0v2		20 MAX	Vehicle system voltage, DME master relay	P0687	ECM/PCM Power Relay Control Circuit High	ECM/PCM Power Relay	Electrical	DME in Status Drive or Postdrive	5 sec.	none	ODall > 10 V	none	none	none	relay	N	Charger DME	present: Replace DME.	MIL on		
	(2C9D 1142			P0687 P0686	ECM/PCM Power Relay Control Circuit High ECM/PCM Power Relay Control Circuit Low	ECM/PCM Power Relay ECM/PCM Power Relay	Electrical Electrical	DME in Status Drive or Postdrive	5 Sec.	rione	OBAIL > 10 V	none	none	none	relay	N	DME				
				P0687 P0686			Electrical Electrical	DME in Status Drive or Postdrive	5 Sec.	none	OBAIL > 10 V	none	Hone	none	relay	N	DME	Check Fuse F03,			
MESTIZ UNZ				P0687 P0686			Electrical Electrical	DME in Status Drive or Postdrive	5 Sec.	none	ODdit > 10 V	none	none	none	relay	N	DME				
				P0687 P0686	ECM/PCM Power Relay Control Circuit Low		Electrical Electrical	DME in Status Drive or Postdrive	5 sec.	none	OBdit > 10 V	none	none	none	relay	N	Fuse	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making.			
	(2C9D 1142	21 <b>MIN</b>	Vehicle system voltage, DME master relay		ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit	ECM/PCM Power Relay	Electrical				OBdit > 10 V	none		none	relay	N	Fuse Main relay	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine	MIL on		
MED17.2 0x2	(2C9D 1142		Vehicle system voltage, DME master relay	P0687 P0686 P2510	ECM/PCM Power Relay Control Circuit Low		Electrical Electrical	DME in Status Drive or Postdrive	5 sec.	Terminal 15	none	none	none	none	relay	N	Fuse	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3			
	(2C9D 1142	21 <b>MIN</b>	Vehicle system voltage, DME master relay		ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance	ECM/PCM Power Relay	Electrical					none		none	relay	N	Fuse Main relay	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine	MIL on		
MED17.2 0x2	(2C9D 1142 (2C9E 1142	21 MIN 22 PLAUS	Vehicle system voltage, DME master relay	P2510	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit	ECM/PCM Power Relay  ECM/PCM Power Relay	Electrical					none	none	none	relay	N N	Fuse Main relay Wiring harness Knock sensor not plugged in correctly	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3	MIL on		
MED17.2 0x2	(2C9D 1142 (2C9E 1142	21 MIN 22 PLAUS	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay	P2510	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance	ECM/PCM Power Relay  ECM/PCM Power Relay	Electrical  Electrical	none	5 sec.			none  none  Engine temperature > 40 °C	none	none	U	N N Y	Fuse Main relay Wiring harness	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness	MIL on		
	(2C9D 1142 (2C9E 1142	21 MIN 22 PLAUS	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay		ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective	ECM/PCM Power Relay	Electrical			Terminal 15	none	none  none  Engine temperature > 40 °C	none	none	U	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor	MIL on		
MED17.2 0x2	(2C9D 1142 (2C9E 1142	21 MIN 22 PLAUS	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay	P2510	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective	ECM/PCM Power Relay  ECM/PCM Power Relay	Electrical  Electrical	none	5 sec.	Terminal 15	none	none  none  Engine temperature > 40 °C	none	none	U	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness	MIL on		
MED17.2 0x2	(2C9D 1142 (2C9E 1142	21 MIN 22 PLAUS	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay	P2510	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor	ECM/PCM Power Relay  ECM/PCM Power Relay	Electrical  Electrical	none	5 sec.	Terminal 15	none	none  none  Engine temperature > 40 °C	none	none	U	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first	MIL on		
MED17.2 0x2 MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160	21 MIN 22 PLAUS 00 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking	P2510 P137B	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System	Electrical  Electrical  Super Knocking	none  Engine operating at part-load	5 sec.	Terminal 15 none	none		none	none  none	relay  U  none	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition	none		
MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160	21 MIN 22 PLAUS	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking	P2510	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor	ECM/PCM Power Relay  ECM/PCM Power Relay	Electrical  Electrical	none	5 sec.	Terminal 15	none	none  none  Engine temperature > 40 °C  Engine temperature > 40 °C	none	none none none none		N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness	MIL on		
MED17.2 0x2 MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160	21 MIN 22 PLAUS 00 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking	P2510 P137B	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System	Electrical  Electrical  Super Knocking	none  Engine operating at part-load	5 sec.	Terminal 15 none	none		none	none none none none		N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness None (delete fault)	none none none	This fault is logged only to provent redundant component	
MED17.2 0x2  MED17.2 0x2  MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160 (2D51 1160	21 MIN  22 PLAUS  00 MAX  01 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking  Super knocking	P2510 P137B P137A	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective Ignition Coil	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System  Knock Control System	Electrical  Electrical  Super Knocking  Super Knocking	none  Engine operating at part-load  Engine operating at part-load	5 sec.  none  none	Terminal 15  none  none	none none none	Engine temperature > 40 °C	none none none	none none none	none	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system  Transient contamination in combustion chamber or	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness  None (delete fault)  If a genuine defect is present additional faults will be	none none none	This fault is logged only to prevent redundant component	
MED17.2 0x2  MED17.2 0x2  MED17.2 0x2  MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160 (2D51 1160 (2D52 1160	21 MIN  22 PLAUS  00 MAX  01 MAX  02 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking  Super knocking  Super knocking	P2510 P137B P137A	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective Ignition Coil	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System  Knock Control System	Electrical  Electrical  Super Knocking  Super Knocking  Super Knocking	none  Engine operating at part-load	5 sec.	Terminal 15 none	none		none none none	none none none none none		N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness None (delete fault)	none none none	This fault is logged only to prevent redundant component replacements in response to customer complaints	
MED17.2 0x2  MED17.2 0x2  MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160 (2D51 1160 (2D52 1160	21 MIN  22 PLAUS  00 MAX  01 MAX  02 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking  Super knocking  Super knocking	P2510 P137B	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective Ignition Coil	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System  Knock Control System	Electrical  Electrical  Super Knocking  Super Knocking	none  Engine operating at part-load  Engine operating at part-load	5 sec.  none  none	Terminal 15  none  none	none none none	Engine temperature > 40 °C	none none none	none none none none none	none	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system  Transient contamination in combustion chamber or	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness  None (delete fault)  If a genuine defect is present additional faults will be	none none none		
MED17.2 0x2  MED17.2 0x2  MED17.2 0x2  MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160 (2D51 1160 (2D52 1160	21 MIN  22 PLAUS  00 MAX  01 MAX  02 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking  Super knocking  Super knocking	P2510 P137B P137A	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective Ignition Coil	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System  Knock Control System	Electrical  Electrical  Super Knocking  Super Knocking  Super Knocking	none  Engine operating at part-load  Engine operating at part-load	5 sec.  none  none	Terminal 15  none  none	none none none	Engine temperature > 40 °C	none none none	none none none none	none	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system  Transient contamination in combustion chamber or	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness  None (delete fault)  If a genuine defect is present additional faults will be logged	none none none		
MED17.2 0x2  MED17.2 0x2  MED17.2 0x2  MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160 (2D51 1160 (2D52 1160	21 MIN  22 PLAUS  00 MAX  01 MAX  02 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking  Super knocking  Super knocking	P2510 P137B P137A	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective Ignition Coil	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System  Knock Control System	Electrical  Electrical  Super Knocking  Super Knocking  Super Knocking	none  Engine operating at part-load  Engine operating at part-load	5 sec.  none  none	Terminal 15  none  none	none none none	Engine temperature > 40 °C	none none none	none none none none	none	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system  Transient contamination in combustion chamber or	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness  None (delete fault) If a genuine defect is present additional faults will be logged  Check wiring harness between DME and injection valve:	none none none		
MED17.2 0x2  MED17.2 0x2  MED17.2 0x2  MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160 (2D51 1160 (2D52 1160	21 MIN  22 PLAUS  00 MAX  01 MAX  02 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking  Super knocking  Super knocking	P2510 P137B P137A	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective Ignition Coil	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System  Knock Control System	Electrical  Electrical  Super Knocking  Super Knocking  Super Knocking	none  Engine operating at part-load  Engine operating at part-load	5 sec.  none  none	Terminal 15  none  none	none none none	Engine temperature > 40 °C	none none none	none none none none	none	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system  Transient contamination in combustion chamber or induction tract	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness  None (delete fault) If a genuine defect is present additional faults will be logged  Check wiring harness between DME and injection valve: P_EVZ4	none none none		
MED17.2 0x2  MED17.2 0x2  MED17.2 0x2  MED17.2 0x2	(2C9D 1142 (2C9E 1142 (2D50 1160 (2D51 1160 (2D52 1160	21 MIN  22 PLAUS  00 MAX  01 MAX  02 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking  Super knocking  Super knocking	P2510 P137B P137A	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective Ignition Coil	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System  Knock Control System	Electrical  Electrical  Super Knocking  Super Knocking  Super Knocking	none  Engine operating at part-load  Engine operating at part-load	5 sec.  none  none	Terminal 15  none  none	none none none	Engine temperature > 40 °C	none none none	none none none none	none	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system  Transient contamination in combustion chamber or induction tract  Short circuit to positive	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness  None (delete fault) If a genuine defect is present additional faults will be logged  Check wiring harness between DME and injection valve: P_EVZ4 Interchange injection valves and determine whether the	none none none		
MED17.2 0x2 MED17.2 0x2 MED17.2 0x2 MED17.2 0x2 MED17.2 0x2	(2C9E 1142 (2C9E 1142 (2D50 1160 (2D51 1160 (2D52 1160 (2D53 1160	21 MIN  22 PLAUS  00 MAX  01 MAX  02 MAX  03 MAX	Vehicle system voltage, DME master relay  Vehicle system voltage, DME master relay  Super knocking  Super knocking  Super knocking	P2510 P137B P137A	ECM/PCM Power Relay Control Circuit Low  ECM/PCM Power Relay Sense Circuit Range/Performance  Knock Control Super Knocking Caused by Defective Knock Sensor  Knock Control Super Knocking Caused by Defective Ignition Coil	ECM/PCM Power Relay  ECM/PCM Power Relay  Knock Control System  Knock Control System	Electrical  Electrical  Super Knocking  Super Knocking  Super Knocking	none  Engine operating at part-load  Engine operating at part-load	5 sec.  none  none	Terminal 15  none  none	none none none	Engine temperature > 40 °C  Engine temperature > 40 °C	none none none	none none none none	none	N N Y	Fuse Main relay Wiring harness Knock sensor not plugged in correctly Short to ground or positive Defective knock sensor  Fault in ignition system  Transient contamination in combustion chamber or induction tract	Check Fuse F03, check main relay: Switch on TERM15 and use circuit diagram to determine whether relay is making. Check wiring harness between DME and engine compartment current distributor A400a: U_HR<3  1. Check installation of knock sensor 2. Check wiring harness 3. Replace knock sensor  If faults are present in the ignition system, repair these first Check for damage: Spark plugs, ignition coils, ignition wiring harness  None (delete fault) If a genuine defect is present additional faults will be logged  Check wiring harness between DME and injection valve: P_EVZ4	none none none		

MED17.2 0x2D65 11621 <b>MAX</b>	High-pressure fuel injector 3, Highside, activation	P3156	Cylinder 3 High Pressure Injector High Side Circuit High	Injector High Side	Short to Batt	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short circuit to positive Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ3 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D66 11622 <b>MAX</b>	High-pressure fuel injector 4, Highside, activation	P3159	Cylinder 4 High Pressure Injector High Side Circuit High	Injector High Side	Short to Batt	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short circuit to positive Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ1 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D67 11623 <b>MAX</b>	High-pressure fuel injector 2, Highside, activation	P3153	Cylinder 2 High Pressure Injector High Side Circuit High	Injector High Side	Short to Batt	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short circuit to positive Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ2 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D68 11624 <b>MIN</b>	High-pressure fuel injector 1, Highside, activation	P3149	Cylinder 1 High Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short circuit to ground Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ4 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D69 11625 <b>MIN</b>	High-pressure fuel injector 3, Highside, activation	P3155	Cylinder 3 High Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short circuit to ground Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ3 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D6A 11626 <b>MIN</b>	High-pressure fuel injector 4, Highside, activation	P3158	Cylinder 4 High Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short circuit to ground Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ1 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D6B 11627 <b>MIN</b>	High-pressure fuel injector 2, Highside, activation	P3152	Cylinder 2 High Pressure Injector High Side Circuit Low	Injector High Side	Short to Ground	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short circuit to ground Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ2 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D6C 11628 <b>PLAUS</b>	High-pressure fuel injector 1, Highside, activation	P3148	Cylinder 1 High Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Interturn short circuit Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ4, U_EVZ4 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D6D 11629 <b>PLAUS</b>	High-pressure fuel injector 3, Highside, activation	P3154	Cylinder 3 High Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Interturn short circuit Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ3, U_EVZ3 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D6E 11630 <b>PLAUS</b>	High-pressure fuel injector 4, Highside, activation	P3157	Cylinder 4 High Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Interturn short circuit Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ1, U_EVZ1 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	
MED17.2 0x2D6F 11631 <b>PLAUS</b>	High-pressure fuel injector 2, Highside, activation	P3151	Cylinder 2 High Pressure Injector High Side Shorted to Coil	Injector High Side	Shorted Coil	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Interturn short circuit Injection valve DME	Check wiring harness between DME and injection valve: P_EVZ2, U_EVZ2 Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve. Replace DME.	CC status report	

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MED17.2	0x2D70 11632	MIN	DME, internal fault	P16A5	Timeout Control Module Multiple Output Stage SPI-Bus	ECM	Multiple Output Stage	Engine running	1.1 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	HW defect N in DME	Replace DME	MIL on and CC message
MED17.2	0x2D71 11633	PLAUS	DME, internal fault	P16A5	Timeout Control Module Multiple Output Stage SPI-Bus	ECM	Multiple Output Stage	Engine running	1.1 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	HW defect N in DME	Replace DME	MIL on and CC message
MED17.2		SIG	DME, internal fault	P16A5	Timeout Control Module Multiple Output Stage SPI-Bus	ECM										HW defect N in DME	Replace DME	MIL on and CC message
WED17.2	UX2D72 11634	SiG	DME, internal fault	PIDAS	Timeout Control Module Multiple Output Stage SPI-Bus	EUN	Multiple Output Stage	Engine running	1.1 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	IN III DIVIE	·	
																	Check wiring harness between DME and injection valve U EVZ4	
																Short circuit to positive	Interchange injection valves and determine whether the	
MED17.2	0x2D73 11635	MAX	High-pressure fuel injector 1, Lowside, activation	P3102	Cylinder 1 High Pressure Injector Low Side Circuit High	Injector Low Side	Short to Batt	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	Injection valve N DME	fault follows the valve, if yes: Replace injection valve.  Replace DME.	CC status report
																	Check wiring harness between DME and injection valve	
																Chart sixsuit to positive	U_EVZ3	
																Short circuit to positive Injection valve	Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve.	
MED17.2	0x2D74 11636	MAX	High-pressure fuel injector 3, Lowside, activation	P3110	Cylinder 3 High Pressure Injector Low Side Circuit High	Injector Low Side	Short to Batt	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
																	Check wiring harness between DME and injection valve U_EVZ1	
																Short circuit to positive	Interchange injection valves and determine whether the	
MED17.2	0x2D75 11637	MAX	High-pressure fuel injector 4, Lowside, activation	P3114	Cylinder 4 High Pressure Injector Low Side Circuit High	Injector Low Side	Short to Batt	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	Injection valve N DME	fault follows the valve, if yes: Replace injection valve.  Replace DME.	CC status report
																	Check wiring harness between DME and injection valve	
																	U_EVZ2	
																Short circuit to positive Injection valve	Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve.	
MED17.2	0x2D76 11638	MAX	High-pressure fuel injector 2, Lowside, activation	P3106	Cylinder 2 High Pressure Injector Low Side Circuit High	Injector Low Side	Short to Batt	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
																	Check wiring harness between DME and injection valve	
																Short circuit to ground	U_EVZ4 Interchange injection valves and determine whether the	
MED17.2	0x2D77 11639	MIN	High-pressure fuel injector 1, Lowside, activation	P3101	Cylinder 1 High Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	u	Injection valve N DME	fault follows the valve, if yes: Replace injection valve.  Replace DME.	CC status report
											, and the second							
																	Check wiring harness between DME and injection valve U_EVZ3	
																Short circuit to ground Injection valve	Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve.	
MED17.2	0x2D78 11640	MIN	High-pressure fuel injector 3, Lowside, activation	P3109	Cylinder 3 High Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
																	Check wiring harness between DME and injection valve	
																Short circuit to ground	U_EVZ1 Interchange injection valves and determine whether the	
MED17.2	0x2D79 11641	MIN	High-pressure fuel injector 4, Lowside, activation	P3113	Cylinder 4 High Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	П	Injection valve N DME	fault follows the valve, if yes: Replace injection valve.  Replace DME.	CC status report
			5 pressure real injustion in 20110100 addition		Symmetry and the second superior for Glad Griddin EOW	,33.0. 20.1 0.00		ge										
																	Check wiring harness between DME and injection valve U_EVZ2	
																Short circuit to ground Injection valve	Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve.	
MED17.2	0x2D7A 11642	MIN	High-pressure fuel injector 2, Lowside, activation	P3105	Cylinder 2 High Pressure Injector Low Side Circuit Low	Injector Low Side	Short to Ground	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
																	Check wiring harness between DME and injection valve	
																Interturn short circuit	P_EVZ4, U_EVZ4 Interchange injection valves and determine whether the	
MFD17 2	0x2D7B 11643	PLAUS	High-pressure fuel injector 1, Lowside, activation	P3103	Cylinder 1 High Pressure Injector Low Side Booster Time Error	Injector Low Side	Booster Time Error	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	Injection valve N DME	fault follows the valve, if yes: Replace injection valve.  Replace DME.	CC status report
WLD17.2	5A2D7D 11043	. LAGO	riigii procedio idei injector 1, Edwarde, activation	1 0100	LIIO	injuster Low Glad	Docator Time Error	Engine running	J 360.	Tomina 10	o v > Dattery voltage < 10 V	110110	none	, ione	<u> </u>	. DIVIE		
																	Check wiring harness between DME and injection valve P_EVZ3, U_EVZ3	
					Cylinder 3 High Pressure Injector Low Side Booster Time											Interturn short circuit Injection valve	Interchange injection valves and determine whether the fault follows the valve, if yes: Replace injection valve.	
MED17.2	0x2D7C 11644	PLAUS	High-pressure fuel injector 3, Lowside, activation	P3111	Error	Injector Low Side	Booster Time Error	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report

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																Charle wining harmone hatware DMF and injection value.	
																Check wiring harness between DME and injection valve: P_EVZ1, U_EVZ1	
															Interturn short circuit	Interchange injection valves and determine whether the	
			www.	Cylinder 4 High Pressure Injector Low Side Booster Time					***						Injection valve	fault follows the valve, if yes: Replace injection valve.	
MED17.2 0x2D	2D7D 11645	PLAUS High-pressure fuel injector 4, Lowside, activation	P3115	Error	Injector Low Side	Booster Time Error	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
																Check wiring harness between DME and injection valve:	
																P_EVZ2, U_EVZ2	
															Interturn short circuit	Interchange injection valves and determine whether the	
				Cylinder 2 High Pressure Injector Low Side Booster Time				_							Injection valve	fault follows the valve, if yes: Replace injection valve.	
MED17.2 0x2D	2D7E 11646	PLAUS High-pressure fuel injector 2, Lowside, activation	P3107	Error	Injector Low Side	Booster Time Error	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
																Q	
																Check wiring harness between DME and injection valve:	
															Open wire	U_EVZ4 Interchange injection valves and determine whether the	
															Open wire Injection valve	fault follows the valve, if yes: Replace injection valve.	
MED17.2 0x2D	2D7F 11647	SIG High-pressure fuel injector 1, Lowside, activation	P3100	Cylinder 1 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	П	N DME	Replace DME.	CC status report
MEDIT.2 OX20	-577	Tright pressure ruer injector 1, Eswarde, delivation	10100	Cymraer 1 mgrif ressure injector Low Glac Griodit Open	injector Low Gide	Open Gridati	Linguic running	0 300.	Terminal 10	o v \ Battery voltage \ 10 v	Hone	none	none	<u> </u>		Replace BML.	OO status report
			· ·										The control of the co			Check wiring harness between DME and injection valve:	
																U EVZ3	
															Open wire	Interchange injection valves and determine whether the	
															Injection valve	fault follows the valve, if yes: Replace injection valve.	
MED17.2 0x2D	2D80 11648	SIG High-pressure fuel injector 3, Lowside, activation	P3108	Cylinder 3 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
			***************************************						*****								
																Check wiring harness between DME and injection valve:	
																U_EVZ1	
															Open wire	Interchange injection valves and determine whether the	
MED47.0	2004 44040	CIO	D0440	Outined Allieb Brossons Initiative Law Oids Circuit On an	lais atau Law Cida	On an Oireasta	Facina manina	<b>5</b>	T	0.1/ D-## 40.1/				11	Injection valve	fault follows the valve, if yes: Replace injection valve.	00 4444
MED17.2 0x2D	2D81 11649	SIG High-pressure fuel injector 4 low side, activation	P3112	Cylinder 4 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
													•			Charle wining harmon between DME and injection value	
																Check wiring harness between DME and injection valve: U_EVZ2	
															Open wire	Interchange injection valves and determine whether the	
															Injection valve	fault follows the valve, if yes: Replace injection valve.	
MED17.2 0x2'	2D82 11650	SIG High-pressure fuel injector 2, Lowside, activation	P3104	Cylinder 2 High Pressure Injector Low Side Circuit Open	Injector Low Side	Open Circuit	Engine running	5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N DME	Replace DME.	CC status report
																Check positive wire between DME and knock sensor,	
															Short to positive: Positive wire between DME and knock	replace knock sensor,	
MED17.2 0x2D	2D8B 11659	MAX Knock sensor, electric	P0328	Knock Sensor 1 Circuit High (Bank 1 or Single Sensor)	Knock Sensor	Sensor 1	Engine running	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N sensor	replace DME	MIL on
																Check positive wire between DME and knock sensor,	
															Short circuit to ground: Positive wire between DME and		
MED17.2 0x2D	2D8C 11660	MIN Knock sensor, electric	P0327	Knock Sensor 1 Circuit Low (Bank 1 or Single Sensor)	Knock Sensor	Sensor 1	Engine running	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N knock sensor	replace DME	MIL on
															0, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	Check ground wire between DME and knock sensor,	
MED47.2	DDD 11661	MAY Knock concer electric	Dogge	Knock Concert Circuit High (Book 1 or Circus Concer)	Knook Concor	Sonoor 1	Engine rupping	2000	Torminal 15	0 V + Pottony voltage + 40 V	2020	nono	nono	11	Short to positive: Ground wire between DME and knock	replace knock sensor,	Million
MED17.2 0x2D	2D8D 11661	MAX Knock sensor, electric	P0328	Knock Sensor 1 Circuit High (Bank 1 or Single Sensor)	Knock Sensor	Sensor 1	Engine running	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N sensor	replace DME	MIL on
													and the second s		Short circuit to ground: Ground wire between DME and	Check ground wire between DME and knock sensor, replace knock sensor,	
MED17.2 0x2D	2D8E 11662	MIN Knock sensor, electric	P0327	Knock Sensor 1 Circuit Low (Bank 1 or Single Sensor)	Knock Sensor	Sensor 1	Engine running	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N knock sensor	replace Milock Sellsoli,	MIL on
				ansan conson a constant parim i or origin doridar)		201001 1	Engine at part-load			- 1 - 2 and 1 vollage 1 10 v					Defective or loose ancillary components causing	Check engine for mechanical defects and loose	
							Engine speed > 1200 rpm						W. Charles		mechanical engine noise	ancillary components	
							No additional faults logged						and the second s		Knock sensor loose or installed incorrectly	<ol><li>Check knock sensor installation</li></ol>	
MED17.2 0x2D	2D9B 11675	MAX Knock sensor, signal	P0328	Knock Sensor 1 Circuit High (Bank 1 or Single Sensor)	Knock Sensor	Sensor 1	No limp-home mode	none	none	none	Engine temperature > 40 °C	3 sec.	none	none	Y Defective knock sensor	3. Replace knock sensor	none
							Engine at part-load										
							Engine speed > 1600 rpm						Venezative		Knock sensor not plugged in correctly	<ol> <li>Check installation of knock sensor</li> </ol>	
MED17.2 0x2D						_	No additional faults logged				_		Vacano		Short to ground or positive	2. Check wiring harness	
	2D9C 11676	MIN Knock sensor, signal	P0327	Knock Sensor 1 Circuit Low (Bank 1 or Single Sensor)	Knock Sensor	Sensor 1	No limp-home mode	none	none	none	Engine temperature > 40 °C	3 sec.	none	none	Y Defective knock sensor	<ol><li>Replace knock sensor</li></ol>	none

Column   C				
10   10   10   10   10   10   10   10				
The control of the				1. Check whether valve is sticking;
The control of the				2. Check rail-pressure sensor;
Second Continue of the Conti				3. Check rail-pressure sensor wire:
## 10 10 10 10 10 10 10 10 10 10 10 10 10				
Sign of the second of the seco				
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AND THE PROPERTY OF THE PROPER				
## Description of the control of the				damage, solared his abusin the second at the second
AND THE REPORT OF THE PROPERTY				
Service Servic				instance, a snop temperature of roughly 20 °C should be
The control of the				reflected in the sensor data)
Fig. 1. The second of the control of				
Service of the servic				
May   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1/24   1				
Fig. 1 And 1				determined. Is currently still under development)
SECTION OF THE PARTY OF THE PAR				9. Replace valve
Miles				10. Replace rail-pressure sensor
## Page   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965   1965				
MEDICA 1989 MAX PROPRIES AND THE PROPRIE	MED17.2 0x2DA5 11685 MAX High-pressure fuel injector 1 mechanical	P301A Injector 1 Stuck Open Injector	Stuck Engine running none	
Contract of the contract of	INED 17.2 OXZDAO 11000 MAX Trigit pleasure fuer injector 1, medianical	Total injector Folder Open injector	Ottok Engine running none	note in
Contract				
Contract of the contract of				1. Check whether valve is sticking:
## Code a September Process    Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and September Process   Code and Septe				2 Check rail-pressure sensor.
A Cost for record value  Cost for record valu				2. Charle rail-pressure soner wire
A TOTAL OF A CONTROLLAR OF A C				
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MADUTY 2 DOZING 1988 MAX 1989 PERSON TO A 1989 PERSON TO				
Inflication in the case of an in- inflication of the case of an in- your divided Counted to design and pressure source recovery. In the case of the ca				
Inflication in the case of an in- inflication of the case of an in- your divided Counted to design and pressure source recovery. In the case of the ca				instance, a shop temperature of roughly 20 °C should be
A Contract victor and processor of the contract of the contrac				reflected in the sensor data)
MEDIT 2 GUIDAD 11600 MAX High-pressure have finded by the control of the control				7. Check vehicle speed signal
Institute of the Control and				
determined. Its currently self-under control (in plants of processes)  MEDIT 2 0.20 40 1168 MAX High-pressure full injector 3 suck Open				(must be defined Cannot be defined until after strategy is
MEDIT 2 0.00 As MAX High-pressure sensor arror, wing havess MAX High-pressure fluid vigilous 3, mechanical FRID C Injector 3 Stuck Open Injector 9, Stuck Friging numbig C Injector 1, mechanical FRID C Injector 1, mec				determined to currently will under development)
MEDIT 2 0x20 A 1689 MAX High-pressure fuel injector 3 Stack Open I				determined. Is confined an adversion in the confined and
MEDIT 2 0x:DAS 11885 MAX High-pressure senior error, witing harmess 11. Replace flow-control valve Limp-horner, IPM and power Injector 3. Stuck Open Injector 3.				9. Replace valve
MEDIT 2 0x20x8 11688 MAX High-pressure fuel injector 3, mechanical P301C Injector 3 Stuck Open Injector 5 Stuck Engine running none none none none none none none no				
1. Check mal-pressure is stoking: 2. Check mal-pressure sensor; 3. Check mal-pressure sensor; 4. Check mal-pressure pump; 5. Check plays pressure pump; 6. Check plays p				
1. Check white role is slicking: 2. Check reli-pressure sensor: 3. Check call-pressure sensor wire: 4. Check low-control valve: 5. Check high-pressure suprop: 6. Check slow-control valve: 7. Check high-pressure sensor some chanical or thermal demands installation and writing and the man demand of the control valve: 8. Check slow-control valve: 9. Check slow-cont	MED17.2 0x2DA8 11688 MAX High-pressure fuel injector 3, mechanical	P301C Injector 3 Stuck Open Injector	Stuck Engine running none	none none none none none none none none
2. Chock rail-pressure sensor: 3. Check rail-pressure sensor: 4. Check flow-control valve: 5. Check high-pressure pump; 6. Check high-pressure pump; 6. Check temperature sensors for mechanical or thermal damage, intact installation and wiring (ambient air, intake air, cocal any) plausibility (ambient air of cocal and the company of the control of th				
2. Chock rail-pressure sensor: 3. Chock rail-pressure sensor: 4. Check flow-control valve: 5. Check high-pressure pump; 6. Check hig				
3. Check prices: 4. Check flore-source not viet; 5. Check high-pressure proprie; 6. Check they-pressure pump; 6. Check temperature of the chanical or thermal is damage, intact installation and wring (ambient air, intake air, coolant), plausification and source of the chanical or thermal is damage, intact installation and wring (ambient air, intake air, coolant), plausification and source of the chanical and the change of the c				
4. Check floh-pressure pump; 5. Check high-pressure pump; 6. Check temperature sensors for mechanical or thermal damage, indanct installation and wiring (ambient air, inface air, coolant); plausibility and wiring (ambient air, coolant); plausibility and air, coolant); plausibility and air, coolant,				
S. Check temperature sensors repumprs 6. Check temperature sensors repumprs 6. Check temperature sensors for mermal damage, intact installation and wiring (ambient air, intake air, coolant), plausibility foat (for ear, coalsnot permperature of roughly 20 °Cs about be reflected in the sensor data) 7. Check temperature of roughly 20 °Cs about be reflected sensor data)				
6. Check temperature sensors for mechanical or thermal damages within gambient and wiring (ambient and wiring dambient and wir				4. Check flow-control valve;
6. Check temperature sensors for mendandical or thermal damanical or the management of the management				
damage, intact installation and wiring (ambient air, intake air, coolant); plausibility check on sensor data (for enter the sensor data) air, coolant, coola				
air, coolant); plausibility check on sensor data (for tender of the content of th				
instance, a shop temperature of roughly 20 °C should be reflected in the sensor data)  7. Check vehicle speed signal				air coolant): plausibility check on sensor data (for
reflected in the sensor data) 7. Check vehicle speed signal				
7. Check vehicle speed signal				instance, a snot entered in the concentrate to
7. Uneck venicie speed signal  9. Adopt questom according to 'quipplementary instructions'				Tellecture III tille Seriou data)
O Adont quetom according to 'quinnlamentariu instructions'				7. Cneck venicie speed signal
o. Adapt system according to supplementary instructions				8. Adapt system according to 'supplementary instructions'
(must be defined! Cannot be defined until after strategy is				(must be defined! Cannot be defined until after strategy is
determined. Is currently still under development)				determined. Is currently still under development)
9. Replace valve				9. Replace valve
10. Replace rail-pressure sensor				10. Replace rail-pressure sensor
Valve sticking, rail-pressure sensor error, wiring harness 11. Replace flow-control valve Limp-home; RPM and power				
MED17.2 0x2DAB 11691 MAX High-pressure fuel injector 4, mechanical P301D Injector 4 Stuck Open Injector 4 Stuck Open Injector 4 Stuck Open Injector 5 Injector 4 Stuck Open Injector 5 Injector 4 Stuck Open Injector 5 Injector 5 Injector 5 Injector 5 Injector 6 Injector 6 Injector 7 Injector 7 Injector 7 Injector 7 Injector 7 Injector 8 Injector 9 Inje	MED17.2 0x2DAB 11691 MAX High-pressure fuel injector 4, mechanical	P301D Injector 4 Stuck Open Injector	Stuck Engine running none	none none none none none none none none
		injuster injuster	1 2 3 1 2 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	the state of the s

MED17.2 0x2DAE 11694 MAX High-pressure fuel injector 2, mechanical P301B	Injector 2 Stuck Open Injector Stuck	1. Check whether valve is sticking: 2. Check rail-pressure sensor: 3. Check rail-pressure sensor wire; 4. Check for rail-pressure sensor wire; 4. Check for-correct valve; 5. Check temperature sensor wire; 6. Check temperature sensor method on the mend damage, intext installation and winning (ambitation and winning (a
MED17.2 0x2DB1 11697 MAX High-pressure fuel injectors 1 and 3, electrical P301E	Injector 1 or 3 Stuck Open Injector Stuck	1. Check whether value is stainling; 2. Check valve output circuit; 3. Check an impressure sensor. 4. Check and pressure sensor. 4. Check high-pressure sensor. 5. Check therepressure sensor were; 6. Check high-pressure purpor. 7. Check interpressure sensor were; 8. Check high-pressure purpor. 8. Check high-pressure of metalhoid and thermal demands in the check high pressure of metalhoid and the check high-pressure of metalhoid and the check hi
MED17.2 0x2DB4 11700 MAX High-pressure fuel injectors 2 and 4, electrical P301F	Injector 2 or 4 Stuck Open Injector Stuck	1. Chack whether valve is stocking: 2. Chack where output circuit. 3. Check where output circuit. 4. Check whether valve is stocking: 4. Check inspectation service. 5. Check fine-control valve: 6. Check inspectation where 7. Check inspectation pump; 7. Check inspectation pump; 7. Check inspectation pump; 8. Check fine-control valve: 8. Check fine-control valve: 9. Check fine-control valve:

											Check connection between DME and injection valve relay
											S_EVZ, replace injection valve relay K6327,
MED17.2 0x2DBD 11709 MAX High-pressure fuel injection, relay activation	P2148	Fuel Injector Group 'A' Supply Voltage Circuit High	Supply Voltage Injector	Electrical Engine runn	ng 0.5 sec.	Terminal 15 none	none	none	none U	N	Short to positive replace Injection valve relay 10327,  CC status report Engine fails to start
											Check connection between DME and injection valve relay
											S_EVZ,
MED17.2 0x2DBE 11710 <b>MIN</b> High-pressure fuel injection, relay activation	P2147	Fuel Injector Group 'A' Supply Voltage Circuit Low	Supply Voltage Injector	Electrical Engine runn	ng 0.5 sec.	Terminal 15 none	none	none	none	N	replace injection valve relay K6327, Short to ground replace DME. CC status report Engine fails to start
INCOME ON THE PRODUCTION IN TH	12111	Tadi injector eroup // Eupphy voltage erroam zem	Cappiy Vollago Injector		,		TIONS	none			Check connection between DME and injection valve relay
											S_EVZ,
MED17.2 0x2DBF 11711 SIG High-pressure fuel injection, relay activation	D04.40	First train than One in IAI Organ to Walter an Oise with One an	O	Flatia	0.5	Tamainal AE				N	replace injection valve relay K6327, Open circuit replace DME. CC status report Engine fails to start
MED17.2 0x2DBF 11711 SIG High-pressure fuel injection, relay activation	P2146	Fuel Injector Group 'A' Supply Voltage Circuit/Open	Supply Voltage Injector	Electrical Engine runn	ng 0.5 sec.	Terminal 15 none	none	none	none	N	Open circuit replace DME. CC status report Engine fails to start
											If the fault has been logged only once or if the entry is old,
											delete the fault
											If possible, question customer to determine fuel quality
											If possible, determine oil consumption Check intercooler
											Low-quality fuel Check for loose engine-mounted ancillaries
											High oil consumption Check spark plugs, ignition coils and ignition wiring
											Inadequate intercooling harness for damage
											Loose engine-mounted ancillaries (turbo bracket)  Defect in ignition system  Inspect induction tract for contamination, focusing on oil contamination
		Knock Control Torque Limitation Caused by Too High		Tmot >40 °	,						Contaminants in induction tract or combustion chamber Check crankcase ventilation
MED17.2 0x2DC0 11712 MAX Super knocking	P137D	Number of Super Knocking	Knock Control System	Super Knocking from part-lo	1	Terminal 15, engine running +/-5V	-40 ° to +130		none none	N	Poor oil separation in crankcase ventilation system  Check combustion chamber for deposits  none
											If the fault has been logged only once or if the entry is old, delete the fault
											If possible, question customer to determine fuel quality
											If possible, determine oil consumption
											Check intercooler  Check for loose project mounted annillaries
											Low-quality fuel Check for loose engine-mounted ancillaries High oil consumption Check spark plugs, ignition coils and ignition wiring
											Inadequate intercooling harness for damage
											Loose engine-mounted ancillaries (turbo bracket)  Inspect induction tract for contamination, focusing on oil
		Knock Control Permanent Torque Limitation Caused by		Tmot >40 °							Defect in ignition system contamination Contaminants in induction tract or combustion chamber Check crankcase ventilation
MED17.2 0x2DC1 11713 MAX Super knocking	P137E	Too High Number of Super Knocking	Knock Control System	Super Knocking from part-lo		Terminal 15, engine running +/-5V	-40 ° to +131		none none	N	Poor oil separation in crankcase ventilation system  Check combustion chamber for deposits  none
											If the fault has been logged only once or if the entry is old,
					1						
											delete the fault
											If possible, question customer to determine fuel quality
											If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Low-quality fuel Check for loose engine-mounted ancillaries
											If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler  Low-quality fuel Check for loose engine-mounted ancillaries High oil consumption Check spark plugs, ignition coils and ignition wiring
											If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler  Low-quality fuel Check for loose engine-mounted ancillaries High oil consumption Inadequate intercooling  Approximately quality Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring harness for damage
											If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries High oil consumption Inadequate intercooling Loose engine-mounted ancillaries (turbo bracket) Defect in ignition system  If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil contamination
MED17.2 0v2DC2 11714 MAY Super-knocking	D136C	Knock Control Super Knocking Detected	Knock Control System	Super Knocking Engine operating of	art-load	none	Engine temperature > 40 °C	none	none	V	If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring Inadequate intercooling Loose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber  If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil contaminants in induction tract or combustion chamber Check crankcase ventilation
MED17.2 0x2DC2 11714 MAX Super knocking	P136C	Knock Control Super Knocking Detected Knock Control Fuel Cut-Off due to Super Knocking	Knock Control System	Super Knocking Engine operating a	part-load none	none none	Engine temperature > 40 °C	none	none none	Y	If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries High oil consumption Inadequate intercooling Loose engine-mounted ancillaries (turbo bracket) Defect in ignition system  If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil contamination
MED17.2 0x2DC2 11714 MAX Super knocking  MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4	P136C P13A3	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4	Knock Control System	Super Knocking Engine operating a	art-load none	none none	Engine temperature > 40 °C	none	none none	Y	If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring Inadequate intercooling Loose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber  If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil contaminants in induction tract or combustion chamber  Check crankcase ventilation
MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4	P13A3	Knock Control Fuel Cut-Off due to Super Knocking	Knock Control System	Super Knocking Engine operating a	art-load none	none none	Engine temperature > 40 °C	none	none none	Y	If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring Inadequate intercooling Loose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber  If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil contaminants in induction tract or combustion chamber  Check crankcase ventilation
		Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2	Knock Control System	Super Knocking Engine operating a	nart-load none	none none	Engine temperature > 40 °C	none	none none	Y	If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring Inadequate intercooling Loose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber  If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil contaminants in induction tract or combustion chamber Check crankcase ventilation
MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4  MED17.2 0x2DCB 11723 MAX Fuel shutoff due to super knocking, cyl. 2	P13A3 P13A1	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2 Knock Control Fuel Cut-Off due to Super Knocking	Knock Control System	Super Knocking Engine operating a	part-load none	none none	Engine temperature > 40 °C	none	none none	Y	If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring Inadequate intercooling Loose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber  If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil contaminants in induction tract or combustion chamber  Check crankcase ventilation
MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4  MED17.2 0x2DCB 11723 MAX Fuel shutoff due to super knocking, cyl. 2  MED17.2 0x2DCC 11724 MAX Fuel shutoff due to super knocking, cyl. 1	P13A3 P13A1 P13A0	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 1 Knock Control Fuel Cut-Off due to Super Knocking	Knock Control System	Super Knocking Engine operating a	none none	none none	Engine temperature > 40 °C	none	none none	Y	If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring Inadequate intercooling Loose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber  If possible, question customer to determine fuel quality If possible, determine oil consumption Check intercooler Check for loose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil contaminants in induction tract or combustion chamber  Check crankcase ventilation
MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4  MED17.2 0x2DCB 11723 MAX Fuel shutoff due to super knocking, cyl. 2	P13A3 P13A1	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2 Knock Control Fuel Cut-Off due to Super Knocking	Knock Control System	Super Knocking Engine operating a	part-load none	none none	Engine temperature > 40 °C	none	none none	Y	Low-quality fuel High oil consumption Inadequate intercooling Lose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber Poor oil separation in crankcase ventilation system  If possible, question customer to determine fuel quality If possible, determine oil consumption Check for lose engine-mounted ancillaries Check spark plugs, ignition coils and ignition wiring harness for damage Inspect induction tract for contamination, focusing on oil Contaminanto Check crankcase ventilation Check combustion chamber for deposits  none
MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4  MED17.2 0x2DCB 11723 MAX Fuel shutoff due to super knocking, cyl. 2  MED17.2 0x2DCC 11724 MAX Fuel shutoff due to super knocking, cyl. 1	P13A3 P13A1 P13A0	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 1 Knock Control Fuel Cut-Off due to Super Knocking	Knock Control System	Super Knocking Engine operating a	part-load none	none none	Engine temperature > 40 °C	none	none none	Y	Low-quality fuel High oil consumption Inadequate intercooling Lose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber Poor oil separation in crankcase ventilation system  1. Check wiring harness between alternator and DME
MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4  MED17.2 0x2DCB 11723 MAX Fuel shutoff due to super knocking, cyl. 2  MED17.2 0x2DCC 11724 MAX Fuel shutoff due to super knocking, cyl. 1	P13A3 P13A1 P13A0	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2 Knock Control Fuel Cut-Off due to Super Knocking Cylinder 1 Knock Control Fuel Cut-Off due to Super Knocking	Knock Control System	Super Knocking Engine operating a	part-load none	none none	Engine temperature > 40 °C	none	none none	Y	Low-quality fuel High oil consumption Inadequate intercooling Lose engine-mounted ancillaries (turbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber Poor oil separation in crankcase ventilation system  Check combustion chamber for deposits  1. Check wiring harness between alternator and DME (D.BSD)
MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4  MED17.2 0x2DCB 11723 MAX Fuel shutoff due to super knocking, cyl. 2  MED17.2 0x2DCC 11724 MAX Fuel shutoff due to super knocking, cyl. 1  MED17.2 0x2DCD 11725 MAX Fuel shutoff due to super knocking, cyl. 1  Fuel shutoff due to super knocking, cyl. 3	P13A3 P13A1 P13A0	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4  Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2  Knock Control Fuel Cut-Off due to Super Knocking Cylinder 1  Knock Control Fuel Cut-Off due to Super Knocking Cylinder 3  Lost Communication With Generator via BSD (Bit Serial	Knock Control System	Super Knocking Engine operating a	part-load none	none none	Engine temperature > 40 °C	none	none none	Y	Low-quality fuel High oil consumption Inadequate intercooling Lose engine-mounted ancillaries (furbo bracket) Defect in ignition system Contaminants in induction tract or combustion chamber Poor oil separation in crankcase ventilation system  Check combustion chamber for deposits  1. Check wiring harness between alternator and DME (D.BSD) 2. Replace alternator 3. Do not repeace DME vuless all communications
MED17.2 0x2DCA 11722 MAX Fuel shutoff due to super knocking, cyl. 4  MED17.2 0x2DCB 11723 MAX Fuel shutoff due to super knocking, cyl. 2  MED17.2 0x2DCC 11724 MAX Fuel shutoff due to super knocking, cyl. 1	P13A3 P13A1 P13A0	Knock Control Fuel Cut-Off due to Super Knocking Cylinder 4  Knock Control Fuel Cut-Off due to Super Knocking Cylinder 2  Knock Control Fuel Cut-Off due to Super Knocking Cylinder 1  Knock Control Fuel Cut-Off due to Super Knocking Cylinder 3	Knock Control System	Super Knocking Engine operating a	part-load none  25.5 sec.	none none  Terminal 15 none	Engine temperature > 40 °C	none	none none none none none	Y N	Low-quality fuel High oil consumption Inadequate intercooling Contaminants in induction tract or combustion chamber Poor oil separation in crankcase ventilation system  1. Check combustion chamber for deposits  1. Check wiring harness between alternator and DME (D_BSD) 2. Replace alternator

			<u> </u>									
												If multiple entries of the fault have been logged, or the
												fault is present continuously, respond by checking the
				Engine running			Battery voltage					Alternator not being powered alternator drive
MED17.2 0x2E20 11808 <b>MAX</b>	Alternator	P325A	Generator Electrical Error Calculated	No field current	51 sec.	none	< 11.5V	none	none	none none	Υ	No field current Replace the alternator Charge indicator lamp
											***	If multiple entries of the fault have been logged, or the
												fault is present continuously, respond by checking the
												Alternator not being powered alternator drive
MED17.2 0x2E24 11812 <b>MAX</b>	Alternator	P0620	Generator Control Circuit	Engine running	25.5 sec.	none	none	none	none	none none	Υ	No field current Replace the alternator Charge indicator lamp
												If multiple entries of this fault have been logged:
												Check to determine whether additional electrical devices
												that comsume substantial energy or reduce the flow of
												cooling air have been installed, determine whether dirt and
MED17.2 0x2E28 11816 <b>MAX</b>	Alternator	P324C	Generator Over Temperature Calculated	Engine speed < 1400 rpm	25.5 sec.	none	none	Alternator intake air < 140 °C	none	none none	Υ	Alternator overheated contaminants are obstructing alternator cooling Charge indicator lamp
												If multiple entries of this fault have been logged:
												Check to determine whether additional electrical devices
						***						that comsume substantial energy or reduce the flow of
												cooling air have been installed, determine whether dirt and
MED17.2 0x2E2C 11820 <b>MAX</b>	Alternator	P0A3B	Generator Over Temperature	Engine running	25.5 sec.	none	none	none	none	none none	Υ	Alternator overheated contaminants are obstructing alternator cooling Charge indicator lamp
												If multiple entries of this fault have been logged:
												Check to determine whether additional electrical devices
												that comsume substantial energy or reduce the flow of
											***	cooling air have been installed, determine whether dirt and
MED17.2 0x2E30 11824 <b>MAX</b>	.2 0x2E30 11824 <b>MAX</b> Alternator	P0A3B	Generator Over Temperature	Engine running	none	none	none	none	none	none none	Υ	Alternator overheated contaminants are obstructing alternator cooling Charge indicator lamp
												Incorrect alternator installed
MED17.2 0x2E31 11825 <b>MIN</b>	Alternator	P3225	Generator Communication Error	Engine running	none	none	none	none	none	none none	Υ	Communications errors causing intermittent fault Replace the alternator only if this fault is always present Charge indicator lamp
												If multiple entries of the fault have been logged, or the
												fault is present continuously, respond by checking the
												Alternator not being powered alternator drive
MED17.2 0x2E32 11826 <b>PLAUS</b>	Alternator	P3223	Generator Mechanical	Engine running	none	none	none	none	none	none none	Υ	No field current Replace the alternator Charge indicator lamp
												If multiple entries of the fault have been logged, or the
												fault is present continuously, respond by checking the
												Alternator not being powered alternator drive
MED17.2 0x2E33 11827 <b>SIG</b>	Alternator	P0620	Generator Control Circuit	Engine running	none	none	none	none	none	none none	Υ	No field current Replace the alternator Charge indicator lamp
												If multiple entries of the fault have been logged, or the
												fault is present continuously, respond by checking the
												Alternator not being powered alternator drive
MED17.2 0x2E34 11828 <b>MAX</b>	Alternator	P3223	Generator Mechanical	Engine running	25.5 sec.	none	none	none	none	none none	Υ	No field current Replace the alternator Charge indicator lamp
												Incorrect voltage regulator installed Replace the voltage regulator only if this fault is always
MED17.2 0x2E38 11832 <b>MAX</b>	Alternator			none	25.5 sec.	Terminal 15	none	none	none	none none	N	Communications error causes intermittent fault present none
												Incorrect alternator installed
MED17.2 0x2E3C 11836 <b>MAX</b>	Alternator			none	25.5 sec.	Terminal 15	none	none	none	none none	N	Communications errors causing intermittent fault Replace the alternator only if this fault is always present none
												1. With battery sensor removed, check TERM15/Wakeup
												wire 15WUP for short circuit to ground
												2. Check for unapproved electrical requipment connected
											***************************************	Short to ground in TERM15/Wakeup wire 15WUP from to TERM15/Wakeup wire
												intelligent battery sensor  3. Replace the battery sensor if the fault is currently  No warning lamp or CC status
MED17.2 0x2E40 11840 <b>MAX</b>	Intelligent battery sensor, self-diagnosis 2	P150D	Battery Sensor Temperature Error	none	none	Terminal 15	none	none	none	N none	N	Defective intelligent battery sensor present or has been logged multiple times report
				,		*						

										Check whether additional faults have been entered for the appropriate to the appropr			
										other control modules with Terminal 15 wakeup (SPEG, DME, SZL, CAS, ABS/DSC, EPS)	,		
										2. Check TERM15/wakeup wire 15WUP for open or			
										intermittent open			
										3. With battery sensor disconnected and TERM 15 off,			
								view in the second seco		check TERM15/wakeup wire 15WUP for short to positive			
			***************************************							With battery sensor disconnected and TERM 15 on, check TERM15/wakeup wire 15WUP for short to ground			
									1. TERM15/ Wakeup wire 15WUP from battery senso	or 5. With battery sensor connected and TERM 15 off, chec			
									open	TERM15/wakeup wire 15WUP for short to positive,			
								To the state of th	2. TERM15/wakeup wire 15WUP has intermittent ope	., ,	_1.		
			***************************************						3. TERMIS/wakeup wire 15WOP is shorted to positive ground	e or 6. With battery sensor connected and TERM 15 on, chec TERM15/wakeup wire 15WUP for short to ground, replace			
MED17.2 0x2E42 11842 <b>PLAUS</b> Intelligent battery sensor, self-diagnosis 2 P150F Ba	Battery Sensor Current Error	none	none	Change Terminal 15 none	none	none	N	none N	4. Defective driver circuit in battery sensor	battery sensor as indicated	report		
											No warning lamp or CC status		
MED17.2 0x2E43 11843 SIG Intelligent battery sensor, self-diagnosis 2 P150E Battery Sensor	Battery Sensor Voltage Error	none	none	Terminal 15 none	none	none	N	none N	Internal fault in battery sensor	Replace battery sensor	report		
							The second secon			1. Check BSD wire			
			veneroni						Brief malfunctions in bus     Defective alternator	Disconnect to determine whether alternator is causing fault	g		
Battery Sensor	r BSD (Bit Serial Data Interface) Extended		***************************************						3. BSD bus has intermittent open	3. If the fault is currently present or has multiple log	No warning lamp or CC status		
	Communication Circuit	none	none	Terminal 15 none	none	none	N	none N	4. Defective battery sensor	entries, respond by replacing the battery sensor	report		
											No warning lamp or CC status		
MED17.2 0x2E46 11846 PLAUS Intelligent battery sensor, signal transmission P150C Batter	ery Sensor Firmware Implausible	none	none	Terminal 15 none	none	none	none	none N	Installed sensor incompatible or too old	Install sensor with current part number	report		
									4. Onen DCD wire	1. Check BSD			
									1. Open BSD wire 2. Defect in other BSD device generates interference	Systematically unplug other BSD devices and replace     as indicated	e		
			***************************************						affecting BSD	3. If multiple entries of this fault have been logged, or it is	is		
	ensor BSD (Bit Serial Data Interface)							THE PARTY OF THE P	3. Intermittent short circuit	present continuously, respond by replacing the intelliger			
MED17.2 0x2E47 11847 SIG Intelligent battery sensor, signal transmission P150B	Communication Circuit	none	none	Terminal 15 none	none	none	none	none N	Defective intelligent battery sensor	battery sensor	report		
									Defect in intelligent bottom concer, problem with inter-	If multiple entries of the fault have been logged, or the fault is present continuously, respond by replacing the			
MED17.2 0x2E48 11848 MAX Intelligent battery sensor, self-diagnosis 1 P151A Battery Ser	ensor Terminal 15/30 Wakeup Circuit	none	none	Terminal 15 none	none	none	none	none N	temperature measurement	intelligent battery sensor	report		
										If multiple entries of the fault have been logged, or the			
								vi provinci		nal fault is present continuously, respond by replacing the			
MED17.2 0x2E4A 11850 PLAUS Intelligent battery sensor, self-diagnosis 1 P151B Bat	attery Sensor Wakeup Circuit	none	none	Terminal 15 none	none	none	none	none N	current measurement	intelligent battery sensor	report		
			***************************************						Defect in intelligent bottom, concer, problem with inter-	If multiple entries of the fault have been logged, or the fault is present continuously, respond by replacing the			
MED17.2 0x2E4B 11851 SIG Intelligent battery sensor, self-diagnosis 1 P151C Ba	Battery Sensor System Error	none	none	Terminal 15 none	none	none	none	none N	voltage measurement	intelligent battery sensor	report		
										Check wiring harness between intelligent battery sense			
										and DME (D_BSD)			
	DDD (D)( 0 11 D 1 11 ( )								0 1 000 1 1 1 2 015 11 11 11	2. Replace intelligent battery sensor			
MED17.2 0x2E4F 11855 SIG No BSD message from intelligent battery sensor P150B	ensor BSD (Bit Serial Data Interface) Communication Circuit	none	45 sec.	Terminal 15 none	none	none	none	Communications: Voltage in block form 0 - UBatt N	Open in BSD wire between DME and intelligent batte sensor	Do not replace DME unless no communications are being expedited between any BSD components	none		
NILD17.2 0x2L41 11003 316 No DSD message norm intelligent battery sensor 1 1005	Continuincation Circuit	noile	40 360.	Terrilliai 13	none	none	none	IOIII 0 - OBatt	Selisoi	Check wiring harness between alternator and DME			
										(D_BSD)			
								view in the second seco		Replace alternator			
Lost Communic	ication With Generator via BSD (Bit Serial		202	T. 145				Communications: Voltage in block	0 000 1 1 1 000	Do not replace DME unless all communications			
MED17.2         0x2E67         11879         SIG         No BSD message from generator         U1132	Data Interface)	none	60S	Terminal 15 none	none	none	none	form 0 - UBatt N	Open BSD wire between DME and alternator	between BSD components have been suspended Check wire	Charge indicator lamp		
			www.common						Short circuit to positive	Replace AC pressure sensor			
MED17.2 0x2EE0 12000 MAX Refrigerant pressure sensor P0533 A/C Refrige	erant Pressure Sensor 'A' Circuit High	none	5 sec.	Terminal 15 none	none	none	ADAPTIONEN_LOESCHEN	Analog; < 5V N	AC pressure sensor	Delete initialization adaptation on vehicles without AC	none	none	Air conditioner fails to operate
										Check wire			
MEDAZO 0.00554 40004 MIN Defines to second s	One of the Control of		5	Tambalds			ADADTIONEN LOCOCUEN	A I	Short circuit to ground	Replace AC pressure sensor			A :
MED17.2 0x2EE1 12001 MIN Refrigerant pressure sensor P0532 A/C Refrige	erant Pressure Sensor 'A' Circuit Low	none	5 sec.	Terminal 15 none	none	none	ADAPTIONEN_LOESCHEN	Analog; < 5V	AC pressure sensor	Delete initialization adaptation on vehicles without AC Check wiring harness between DME and thermostat,		none	Air conditioner fails to operate
							A			replace thermostat,	Engine temperature		
MED17.2 0x2EE2 12002 MAX Map thermostat, activation P0599 Thermo	nostat Heater Control Circuit High Thermostat	Electrical Engine running	none	Terminal 15 9 V < Battery voltage < 1	16 V none	none	STEUERN_KFK	U	Short to positive	replace DME	too high/low		
										Check wiring harness between DME and thermostat,			
MEDITO 000FF0 40000 MIN Month are start as the start	Postat Haday Cantral Circuit Law	Floatrical		Torminal 4F	10.)/	<b></b>	OTELIEDAL KEK		Ob	replace thermostat,	Engine temperature		
MED17.2 0x2EE3 12003 MIN Map thermostat, activation P0598 Thermostates and the state of the stat	nostat Heater Control Circuit Low Thermostat	Electrical Engine running	none	Terminal 15 9 V < Battery voltage < 1	16 V NONE	none	STEUERN_KFK	U N	Short to ground	replace DME	too high/low		

															Check fuse,			
															check wiring harness between DME and thermostat,			
							www								replace thermostat,	Engine temperature		
MED17.2 0x2EE5 12005 <b>SIG</b>	Map thermostat, activation	P0597	Thermostat Heater Control Circuit/Open	Thermostat	Electrical	Engine running	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_KFK	U	N Open circuit	replace DME	too high/low		
															Check wiring harness between Relay K21 and DME:			
							***************************************								_ T_ELUE			
MEDATO O OFFO 10000 MAY	EL	Dagge	5 40 + 10; "HEL			<b>.</b>	0.5	T : 145	0.1/ D.//			OTELIEDN E LUEETED			Replace relay,	Engine temperature		
MED17.2 0x2EE6 12006 MAX	Electric fan, activation, power stage 1	P0692	Fan 1 Control Circuit High			Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_E_LUEFTER	U	N Short to positive	replace DME.	too high/low		
							vene								Check wiring harness between Relay K21 and DME:			
							***************************************								T_ELUE Replace relay,	Engine temperature		
MED17.2 0x2EE7 12007 <b>MIN</b>	Electric fan, activation, power stage 1	P0691	Fan 1 Control Circuit Low			Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN E LUEFTER	П	N Short to ground	replace DME.	Engine temperature too high/low		
WILDIT.Z GAZELT 12007 WIIN	Liectric fari, activation, power stage i	1 0031	Tail Toolidol Circuit Low			Engine running	0.3 sec.	Tellilliai 13	9 V Challery Vollage C 10 V	none	none	STEUERN_E_EUEFTER	O .	N Short to ground		toomiginow		
															Check fuse F05 Check wiring harness between relay K21 and DME:			
															T_ELUE			
							***************************************								Check wiring harness between relay K21 and fuse F05:			
							and the second s								U_HR<5			
							voca								Relais tauschen,	Engine temperature		
MED17.2 0x2EE8 12008 <b>SIG</b>	Electric fan, activation, power stage 1	P0480	Fan 1 Control Circuit			Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_E_LUEFTER	U	N Open circuit	DME tauschen.	too high/low		
															Check wiring harness between DME and intake air			
							www							Defect in wiring harness	temperature sensor			
						No absolute definition possible for								Defective intake air temperature sensor	<ol><li>Replace intake air temperature sensor</li></ol>			
MED17.2 0x2EEE 12014 <b>MIN</b>	Intake-air temperature on cold start	P105D	Cold Start Intake Air Temperature - Too Low	Intake Air Temperature	Cold Start	service use	2 sec.	Terminal 15	none	none	none	none	none	N Defective DME	3. Replace DME	MIL ON		
															<ol> <li>Check wiring harness between intake temperature</li> </ol>			
							**************************************						Analog; 3.3 -0V over response	Short to ground	sensor and DME A_TANS, U_DSB			
							_						curve in	Intake temperature sensor	Replace intake temperature sensor B6123			
MED17.2 0x2EF1 12017 <b>MAX</b>	Intake-air temperature sensor, signal	P0113	Intake Air Temperature Sensor 1 Circuit High (Bank 1)	Intake Air Temperature Sensor	1 Electrical	none	2 sec.	Terminal 15	none	none	none	none	-40.5 - 134.3°C	Y DME	3. DME	none	none	
							***************************************								Check wiring harness between intake temperature			
													Analog; 3.3 -0V over response	Short circuit to positive	sensor and DME A_TANS, R_DSB			
MED17.2 0x2EF2 12018 <b>MIN</b>	Intoko air tamparatura aanaar aignal	P0112	Intake Air Temperature Sensor 1 Circuit Low (Bank 1)	Intoko Air Tomporatura Canaar	1 Electrical	Engine rupping	2 sec.	none	none	200	20 and ofter angine start	2000	curve in -40.5 - 134.3°C	Intake temperature sensor Y DME	Replace intake temperature sensor B6123     DME	none	nana	
WIED17.2 UXZEFZ 12016 WIIN	Intake-air temperature sensor, signal	PULIZ	intake Ali Temperature Sensor T Circuit Low (Bank T)	make All Temperature Sensor	i Electricai	Engine running	2 Sec.	none	none	none	30 sec. after engine start	none	-40.5 - 134.3 C	T DIVIE		riorie	none	
														Defect in wiring harness	Check wiring harness between DME and intake air			
			Intake Air Temperature Sensor 1 Maximum Temperature				and the second s							Defect in wring namess  Defective intake air temperature sensor	temperature sensor  2. Replace intake air temperature sensor			
MED17.2 0x2EF9 12025 <b>MAX</b>	Intake air temperature sensor, plausibility	P111E	Implausible (Bank 1)	Intake Air Temperature Sensor	1 Temperature	Engine running	2 sec.	none	none	none	none	none	none	N Defective intake all temperature sensor	3. Replace DME	MIL ON		
MEDITIZ ORZEIO IZOZO MIAK	make all temperature serioor, placestimy	11112	Implacione (Dank 1)	make 7th Temperature consor	1 Temperature	Engine running	2 300.	110110	110110	none	none	none	none	N DOISOUNG DINE	Check wiring harness between DME and intake air	MIL OIV		
														Defect in wiring harness	temperature sensor			
			Intake Air Temperature Sensor 1 Circuit			No absolute definition possible for	www							Defective intake air temperature sensor	Replace intake air temperature sensor			
MED17.2 0x2EFB 12027 <b>PLAUS</b>	Intake air temperature sensor, plausibility	P0111	Range/Performance (Bank 1)	Intake Air Temperature Sensor	1 Plausibility	service use	2 sec.	Terminal 15	none	none	none	none	none	N Defective DME	3. Replace DME			
															•			
						Engine starting temperature < 65												
						°C '												
						960 rpm < Engine speed < 6000	and the second s											
			Coolant Thermostat (Coolant Temperature Below			rpm	vene			Engine starting temperatu	ıre < 65					Engine temperature		
MED17.2 0x2F07 12039 <b>PLAUS</b>	Map thermostat, mechanism	P0128	Thermostat Regulating Temperature)	Thermostat	Functional Check	10 km/h< Vehicle speed < 95 km/h	none	Terminal 15	8.5 V < Battery voltage < 17.9	/ °C	none	STEUERN_KFK	none	N Thermostat physically seized	Replace thermostat	too high/low		tmot rises more slowly
															Replace coolant temperature sensor			
						· ·								Short to ground	Check wiring harness between coolant temperature			
MED17.2 0x2F19 12057 <b>MAX</b>	Coolant temporativa	D0440	Engine Coolert Transporture Co. 4 Ct. 1919	Engine Coolent Towns and	4 Flactorian		0 F s = -	T 145					Analog; 3.3 - 0V through	Coolant temperature sensor	sensor and DME	NAUL		
MED17.2 0X2F19 12057 MAX	Coolant temperature sensor, signal	P0118	Engine Coolant Temperature Sensor 1 Circuit High	Engine Coolant Temperature Sensor	1 Electrical	none	0.5 sec.	Terminal 15	none	none	none	none	response curve to -45 - 140°C	Y DME	3. Replace DME	MIIL on	none	
														Ob and alternative and addition and a	Replace coolant temperature sensor     Check wiring barrage between evalent temperature.			
													Analog; 3.3 - 0V through	Short circuit to positive or open wire Coolant temperature sensor	Check wiring harness between coolant temperature sensor and DME			
MED17.2 0x2F1A 12058 <b>MIN</b>	Coolant temperature sensor, signal	P0117	Engine Coolant Temperature Sensor 1 Circuit Low	Engine Coolant Temperature Sensor	1 Electrical	none	0.5 sec.	Terminal 15	none	none	none	none	response curve to -45 - 140°C		sensor and DME  3. Replace DME	MIL on	none	
WILD IT.2 UNZI IA 12000 WIII	Socialit temperature selisor, signal	1 0117	Engine Godiant Temperature Gensor Torreut Low	Engine Coolant Temperature Censul	i Liedillai	HOIG	0.0 360.	reminal 13	11016	lione	HOIG	rione	response curve to -45 - 140 C		Repair any thermostat faults that may be present	WIL OII	HOHE	
														Wiring harness Coolant temperature sensor	Check operation of water pump			
														Collateral fault from defective thermostat	Replace coolant temperature sensor			
			Engine Coolant Temperature Sensor 1 Minimum											Collateral fault stemming from defective water pu				
MED17.2 0x2F22 12066 <b>MIN</b>	Engine temperature, plausibility	P112B	Temperature Implausible	Engine Coolant Temperature Sensor	1 Temperature	Engine running	none	Terminal 15	none	none	none	none	none	N DME	Replace DME	MIL ON		
	<u> </u>					No clear diagnosis possible in field								Engine temperature changes less than in mode				
						service operations, can only be								Wiring harness	If a thermostat fault is present, repair this first			
			Engine Coolant Temperature Sensor 1 Circuit			detected using special test								Defective coolant temperature sensor	Check wiring harness			
MED17.2 0x2F23 12067 <b>PLAUS</b>	Engine temperature, plausibility	P0116	Range/Performance	Engine Coolant Temperature Sensor	1 Plausibility	technology	none	Terminal 15	none	none	none	none	none	Y Collateral fault from defective thermostat	Replace coolant temperature sensor	MIL ON		
MED17.2 0x2F25 12069 <b>MAX</b>	Ambient temperature sensor, signal	P0073	Ambient Air Temperature Sensor Circuit High	Ambient Air Temperature Sensor	Electrical	none	5 sec.	Terminal 15	none	none	none	none	none	Y I-cluster transmits invalid value	Continue fault diagnosis with I-cluster	MIL ON		
MED17.2 0x2F26 12070 <b>MIN</b>	Ambient temperature sensor, signal	P0072	Ambient Air Temperature Sensor Circuit Low	Ambient Air Temperature Sensor	Electrical	none	5 sec.	Terminal 15	none	none	none	none	none	Y I-cluster transmits invalid value	Continue fault diagnosis with I-cluster	MIL ON		
MED17.2 0x2F28 12072 <b>SIG</b>	Ambient temperature sensor, signal	P110F	Ambient Air Temperature Sensor Faulty CAN Signal		Signal	none	18 sec.	Terminal 15	none	none	none	none	none	Y I-cluster transmits implausible value	Continue fault diagnosis with I-cluster	MIL ON		
		<del></del>		·	-		·	-		·		·						

			1											
MED17.2 0x2F2F 12079 PLAUS Ambient temperature sensor, plausibility P0071 Ambient Air Temperature Sensor Range	Performance Ambient Air Temperature Sensor Plausibility	Engine running	5 sec.	none	none	none	none	none	none	Υ	I-cluster transmits implausible value	Continue fault diagnosis with I-cluster	MIL ON	
MED17.2 0x2F30 12080 SIG Ambient temperature sensor, plausibility P0071 Ambient Air Temperature Sensor Range	/Performance Ambient Air Temperature Sensor Plausibility	Engine running	5 sec.	none	none	none	none	none	none	Υ	I-cluster transmits implausible value	Continue fault diagnosis with I-cluster	MIL ON	
												Check wiring harness between turbocharger coolant pum	ηp	
												and DME: S_TC Check operation of turbocharger coolant pump and		
												replace as indicated,		
MED17.2 0x2F35 12085 MAX Auxiliary water pump, activation P023C Charge Air Cooler Coolant Pump Control	l Circuit High	Engine running	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_WAPUT	U	N	Short to positive	replace DME.	Message	
												Check wiring harness between turbocharger coolant pum and DME: S TC	ηp	
		variation of the state of the s									Short to ground	Replace turbocharger coolant pump,		
MED17.2 0x2F36 12086 MIN Auxiliary water pump, activation P023B Charge Air Cooler Coolant Pump Contr	ol Circuit Low	Engine running	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_WAPUT	U	N	Stiction in pump	replace DME.	Message + limp-home mode	
												Check wiring harness between turbocharger coolant pum and DME: S_TC	ıμ	
												Check voltage supply to turbocharger coolant pump		
											Open wire S_TC	Check operation of turbocharger coolant pump and replace as indicated,		
MED17.2 0x2F37 12087 SIG Auxiliary water pump, activation P023A Charge Air Cooler Coolant Pump Control	l Circuit/Open	Engine running	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_WAPUT	U	N	Voltage supply to turbocharger coolant pump	replace DME.	Message	
												Check wiring harness between Relay K22 and DME: T ELUE2		
												replace relay,	Engine temperature	
MED17.2 0x2F3C 12092 MAX Electric fan, activation, power stage 2 P0694 Fan 2 Control Circuit High		Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_E_LUEFTER	U	N	Short to positive	replace DME.	too high/low	
												Check wiring harness between Relay K22 and DME: T ELUE2		
					_							replace relay,	Engine temperature	
MED17.2 0x2F3D 12093 MIN Electric fan, activation, power stage 2 P0693 Fan 2 Control Circuit Low		Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_E_LUEFTER	U	N	Short to ground	replace DME.  Check Fuse FL9	too high/low	
												Check wiring harness between Relay K22 and DME:		
												T_ELUE2	Faring Assessment and	
MED17.2 0x2F3F 12095 SIG Electric fan, activation, power stage 2 P0481 Fan 2 Control Circuit		Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	STEUERN_E_LUEFTER	U	N	Open circuit	replace relay, replace DME.	Engine temperature too high/low	
												Check wiring harness between DME and Relay K6539:		
									Voltage on oil separator hea	ıter		S_BBHR Replace relay K6539		When line is frozen excessive crankcase pressure can
MED17.2 0x2F40 12096 MAX Engine-ventilation heating, activation P118A Engine Oil Separator Heating Circ	uit High Engine Oil Separator Heating Electrical	Engine running	0.5 sec.	none	none	none	none	STEUERN_KGEH	relay	N	Short to positive	Replace DME	none	cause leaks
												Check wiring harness between DME and Relay K6539:		
									Voltage on oil separator hea	iter		S_BBHR Replace relay K6539		When line is frozen excessive crankcase pressure can
MED17.2 0x2F41 12097 MIN Engine-ventilation heating, activation P118B Engine Oil Separator Heating Circ	uit Low Engine Oil Separator Heating Electrical	Engine running	0.5 sec.	none	none	none	none	STEUERN_KGEH	relay	N	Short to ground	Replace DME	none	cause leaks
												Check wiring harness between DME and Relay K6539: S BBHR		
									Voltage on oil separator hea	iter		Replace relay K6539		When line is frozen excessive crankcase pressure can
MED17.2 0x2F42 12098 SIG Engine-ventilation heating, activation P118C Engine Oil Separator Heating Circ	uit/Open Engine Oil Separator Heating Electrical	Engine running	0.5 sec.  Brake activated 120 sec. if wire is	none	none	none	none	STEUERN_KGEH	relay	N	Open circuit	Replace DME	none	cause leaks
			open								Implausible signal Open wire	Check wiring harness between DME and brake light switch		
MEDAZ O 0.05AA 40000 PLAUO Projectivite Projectivite Projectivity Proj	Danier Orithala		10 brake activations of 2 sec.	T				CTATUS COULTEDOTAL	-	N.	Brake light switch	Replace brake light switch		
MED17.2 0x2FAA 12202 PLAUS Brake-light switch P0571 Brake Switch 'A' Circuit	Brake Switch Electrical	none	duration each if implausible	Terminal 15	none	none	none	STATUS_SCHALTERSTAT	II U	IN .	DME	Replace DME  If this fault has been entered frequently and/or is currently	V	
											Received CAN time from I-cluster not plausible relative	ve to present;		
MED17.2 0x2FAC 12204 PLAUS Engine switch-off time, plausibility P1515 Engine Off Timer Plausibility	/ Engine Off Timer, External Electrical	none	10 sec.	Terminal 15	none	none	none	none	CAN	Υ	internally calculated time	continue fault diagnosis with I-cluster  If this fault has been entered frequently and/or is currently	none	none Power loss / Starting problems / Rough engine running
												present;	у	
MED17.2 0x2FAD 12205 SIG Engine switch-off time, plausibility P1551 Engine Off Timer Timeout	Engine Off Timer, External Electrical	none	5 sec.	Terminal 15	none	none	none	none	CAN	Υ	No time received from I-cluster	continue fault diagnosis with I-cluster or SPEG	none	none Power loss / Starting problems / Rough engine running
MED17.2 0x2FB7 12215 MIN Energy-saving mode		none	none	Terminal 15	9 V < Battery voltage < 16 V	none	none	STATUS_ENERGIESPARM	MODE none	N	Vehicle in FETRAWE mode	Delete FETRAWE mode with ENERGY SAVING MODE	none	Energy saving mode for production, shipping and service
		Vehicle speed > 30 km/h												
		If less than 2 clutch-release contact have been detected during									Defect in wiring harness Defective clutch switch	Check wiring harness between DME and clutch switch Replace clutch switch		
MED17.2 0x2FC1 12225 SIG Clutch switch, signal P0704 Clutch Switch Input Circuit		gearshifts	none	none	none	none	none	none	none	Υ	Defective DME	Replace Clutch Switch  Replace DME	none	
													-Automatic start/stop button:	
											Short circuit to positive	Check wiring harness between DME and brake vacuum sensor	LED = ON -Symbol and CC message:	
											Defective brake vacuum sensor	Replace brake vacuum sensor	'Automatic start/stop	-No engine shutdown
MED17.2 0x2FC2 12226 MAX Brake vacuum-pressure sensor P0558 Brake Booster Pressure Sensor Circ	cuit High	none	none	Terminal 15	none	none	none		0.2 4.88 V	N	Defective DME	Replace DME	failure! '	from automatic start/stop

																	-Automatic start/stop button:		
																Check wiring harness between DME and brake vacuum	LED = ON		
															Short to ground or open wire	sensor	-Symbol and CC message:		N
MED17.2 0x2FC3 12227 <b>MIN</b>	Brake vacuum-pressure sensor	P0557	Brake Booster Pressure Sensor Circuit Low			none	none	Terminal 15	nono	nono	nono		0.2 4.88 V	N	Defective brake vacuum sensor Defective DME	Replace brake vacuum sensor Replace DME	'Automatic start/stop failure! '		<ul><li>-No engine shutdown from automatic start/stop</li></ul>
MED17.2 0x2FC3 12227 MIN	Blake vacuum-piessule sensoi	F0937	Blake Boostel Flessule Sellsol Cilcuit Low			Tione	noie	Tellilliai 13	none	none	TIONE		0.2 4.00 V	IN .	Delective Divis	4	ialiule:		nom automatic starystop
										Oil temperature between 100	and DME in shutdown phase for	or at			Defective oil pressure switch	Check wiring harness between oil pressure switch and DME			
MED17.2 0x2FC4 12228 <b>PLAUS</b>	Oil-pressure switch, plausibility	P0520	Engine Oil Pressure Sensor/Switch Circuit			DME in shutdown phase	3 faults detected consecutively	Terminal R	none	150 °C	least 3 s.	none	none	N	Defect in wiring harness	Replace oil pressure switch	none	none	
MED17.2 0x2FC5 12229 MAX	DME, internal fault	P2229	Barometric Pressure Sensor 'A' Circuit High	Ambient Pressure Sensor	Electrical	Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Internal DME fault	Replace DME		none	
MED17.2 0x2FC6 12230 <b>MIN</b>	DME, internal fault	P0520 P2229 P2228	Barometric Pressure Sensor 'A' Circuit Low	Ambient Pressure Sensor	Electrical	Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Internal DME fault	Replace DME			
																Do not replace DME unless this fault has been logged			
MED17.2 0x2FCD 12237 <b>MAX</b>	Ambient-pressure sensor, plausibility	P321E	Ambient Pressure Sensor Maximum Pressure Implausible	Ambient Pressure Sensor	Pressure	none	2 sec.	Terminal 15	none	none	none	none	none	N	Defective DME	multiple times or is entered continuously	MIL ON		
																Do not replace DME unless this fault has been logged			
MED17.2 0x2FCE 12238 <b>MIN</b>	Ambient-pressure sensor, plausibility	P321F	Ambient Pressure Sensor Minimum Pressure Implausible	Ambient Pressure Sensor	Pressure	none	2 sec.	Terminal 15	none	none	none	none	none	N	Defective DME	multiple times or is entered continuously	MIL ON		
			Ambient Pressure Sensor Comparison Current to Last													Do not replace DME unless this fault has been logged			
MED17.2 0x2FCF 12239 <b>PLAUS</b>	Ambient-pressure sensor, plausibility	P323C	Driving Cycle Implausible	Ambient Pressure Sensor	Driving Cycle Comparison	none	2 sec.	Terminal 15	none	none	20 sec.	none	none	N	Defective DME	multiple times or is entered continuously	MIL ON		
																Do not replace DME unless this fault has been logged			
MED17.2 0x2FD0 12240 <b>SIG</b>	Ambient-pressure sensor, plausibility	P322A	Ambient Pressure Sensor Continuity Error	Ambient Pressure Sensor	Pressure	none	2 sec.	Terminal 15	none	none	20 sec.	none	none	N	Defective DME	multiple times or is entered continuously	MIL ON		
			EWS (Electronic Immobilizer) Start Value not yet																
MED17.2 0x2FD6 12246 <b>MIN</b>	EWS anti-tampering protection	P1667	Programmed			none	1 sec.	Terminal 15	none	none	none	none	none	N	No start value yet programmed.	Return the DME to the factory	none	Start data can only be programmed at the factory	none
															Communications error between DME and CAS stemmin			New control modules can only be calibrated at the factory	
MED17.2 0x2FD7 12247 <b>PLAUS</b>	EWS anti-tampering protection	P1665	EWS (Electronic Immobilizer) Tampering via Rolling Code			none	1 sec.	Terminal 15	none	none	none	none	none	N	from mutual interchange	Return to installation status prior to interchange	none	the control modules were mutually switched	none
																Check CAS bus wiring harness			
			EWS (Electronic Immobilizer) Interface to ECM, Hardware												Problem with communications between CAS and DME	If the fault has been logged more than 5 times or is			
MED17.2 0x2FD9 12249 <b>MAX</b>	Interface EWS-DME	P165A	Error			Engine off	2 sec. 2 sec.	Terminal 15	none	none	none	none	CAS bus telegram	N	Defective DME	present continuously, respond by replacing the DME	none	none	none
MED17.2 0x2FDA 12250 <b>MIN</b>	Interface EWS-DME	P1660	EWS (Electronic Immobilizer) Telegram Error			Engine off	2 sec.	Terminal 15	none	none	none	none	CAS bus telegram	N	Telegram structure not as expected	Continue problem diagnosis with CAS	none	none	none
MEDITO 0 OFFID 400F4 BLAUG	L C EWO DME	DAGED	EWS (Electronic Immobilizer) Interface to ECM,			F . "		T : 145					0.401		<b>-</b>				
MED17.2 0x2FDB 12251 <b>PLAUS</b>	Interface EWS-DME	P165B	Checksum Error			Engine off	2 sec.	Terminal 15	none	none	none	none	CAS bus telegram	N	Telegram structure not as expected	Continue problem diagnosis with CAS	none	none	none
																Check CAS bus wiring harness			
															D. I.I. W	If the fault has been logged more than 5 times or is			
															Problem with communications between CAS and DME	present continuously, then			
MED17.2 0x2FDC 12252 <b>SIG</b>	Interface EWS-DME	P1661	Timeout EWS (Electronic Immobilizer)-Telegram			Engine off	2 sec.	Terminal 15	nono	nono	nono	nono	CAS bus telegram	N	Defective CAS Defective DME	replace the CAS, replace DME	none	none	nono
WED17.2 UX2FDC 12232 SIG	Interface EVVS-DIVIE	F1001	EWS (Electronic Immobilizer) Data, No Available Storage			Engine off	z sec.	Tellillai 15	none	none	none	none	CAS bus telegram	IN	Defective Divic	replace Divie	none	none	none
MED17.2 0x2FDD 12253 <b>MAX</b>	DME, internal fault	P165C	Possibility			Calibration procedure	none	Terminal 15	none	none	none	none	none	N	Defective DME	Replace DME	none	none	none
WIEDTY.2 OXZI DD 12233 MAX	DNL, internal radii	1 1000	EWS (Electronic Immobilizer) Data, Faulty Release Code			Campration procedure	none	Terrimar 15	none	none	none	none	none	IN .	DOICEUTE DIVIL	Troplace DWL	none	none	Hone
MED17.2 0x2FDE 12254 <b>MIN</b>	DME, internal fault	P165D	Storage			Calibration procedure	none	Terminal 15	none	none	none	none	none	N	Enable code storage defective	Replace DME	none	none	none
																Replace DME if fault is currently present or has been			
MED17.2 0x2FDF 12255 <b>PLAUS</b>	DME, internal fault	P165E	EWS (Electronic Immobilizer) Data, Checksum Error			Terminal 15	none	Terminal 15	none	none	none	none	none	N	Fault in checksum for EWS data content	logged at least 3 times	none	none	
																Replace DME if fault is currently present or has been			
MED17.2 0x2FE0 12256 <b>SIG</b>	DME, internal fault	P1668	EWS (Electronic Immobilizer) Start Value Destroyed			Terminal 15	none	Terminal 15	none	none	none	none	none	N	EWS code defective	logged at least 3 times	none	none	none
			Message Monitoring EWS (Electronic Immobilizer) -																
MED17.2 0x2FE2 12258 <b>MIN</b>	Message EWS-DME incorrect	U1166	Frame Error			Engine off	2 sec.	Terminal 15	none	none	none	none	CAN bus telegrams	N	Telegram structure not as expected	Continue problem diagnosis with CAS	none	none	none
			Lost Communication With Vehicle Immobilizer Control												-				
MED17.2 0x2FE4 12260 <b>SIG</b>	Message EWS-DME incorrect	U0167	Module			Engine off	2 sec.	Terminal 15	none	none	none	none	CAN bus telegrams	N	Messages are not received	Problem diagnosis with CAS and/or SPEG	none	none	none
																Check connection between CAS and DME: S_START			
																Continue fault diagnosis with CAS			
MED17.2 0x2FE5 12261 <b>MAX</b>	Starter motor, activation	P0617	Starter Relay Circuit High			Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short to positive	Replace DME.			
												***************************************							
																Check connection between CAS and DME: S_START			
NED (5.0		D0040					0 -		01/ 5 // 101/							Continue fault diagnosis with CAS			
MED17.2 0x2FE6 12262 <b>MIN</b>	Starter motor, activation	P0616	Starter Relay Circuit Low			Engine running	0.5 sec.	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	U	N	Short to ground	Replace DME.			
																0			
																Check connection between CAS and DME: S_START			
MED17.2 0x2FE7 12263 <b>SIG</b>	Starter motor, activation	P0615	Starter Relay Circuit			Engine rupping	0.5.000	Terminal 15	9 V < Battery voltage < 16 V	none	none	none	11	N	Open circuit S_START	Continue fault diagnosis with CAS Replace DME.			
MED17.2 0x2FE7 12263 SIG MED17.2 0x2FF2 12274 MAX	DME, internal fault	P0634	PCM/ECM/TCM Internal Temperature 'A' Too High	ECM/TCM	Internal Temperature	Engine running	0.5 sec.	·}	9 V < Battery voltage < 16 V	none none		none	II	N	Internal DME fault	Replace DME.  Replace DME	CC etatue report		
MED17.2 0x2FF2 12274 MAX MED17.2 0x2FF3 12275 MIN	DME, internal fault  DME, internal fault	P163A	PCM/ECM/TCM Internal Temperature A 100 High PCM/ECM/TCM Internal Temperature Too Low	ECM/TCM	Internal Temperature	Engine running	0.5 sec.	Terminal 15			none	none	II	N	Internal DME fault	Replace DME	CC status report CC status report		
MED17.2 0x2FF3 12275 MIN MED17.2 0x2FF4 12276 MAX	Vehicle speed, plausibility	P163A P1577	Speed Indication Signal Instrument Pack	EGIVI/ TGIVI	internal remperature	Engine running	0.5 sec. 0.5 sec.	Terminal 15 Terminal 15	9 V < Battery voltage < 16 V none	none none	none none	none none	CAN	V	I-cluster transmits invalid value	Continue fault diagnosis with I-cluster		none	
IVIED 17.2 UXZFF4 1ZZ70 IVIAX	verilole speed, plausibility	P10//	Speed Indication Signal Instrument Pack  Speed Indication Instrument Pack / DSC Signal			none	0.3 Sec.	rellillat 15	HOLE	none	none	HUHE	CAN	I	i-ciustei tiaristillis litvaliu value	Continue fauit diagnosis with i-diuster	none	HOHE	
MED17.2 0x2FF5 12277 <b>PLAUS</b>	Vehicle speed, plausibility	P15B5	Correlation			none	0.5 sec.	Terminal 15	none	none	none	none	CAN	Υ	I-cluster or DSC/ASC transmits implausible value	Continue fault diagnosis with I-cluster or DSC/ASC	none	none	
MED17.2 0x2FF6 12278 MAX	Vehicle speed, plausibility  Vehicle speed, signal	P0503	Vehicle Speed Sensor 'A' Intermittent/Erratic/High	Vehicle Speed Sensor	Electrical	none	3 sec.	Terminal 15	none	none	none	none	none	Y	Implausible speed signal	Continue fault diagnosis with DSC/ASC	Hone	none	
THE CALL OF THE STATE OF THE ST	voinoio opoou, oigriui	1 0000	Vollido opoda ocilos. A interinació Errado Ingli		Lioundi	110110	<u> </u>	1011111101 10	110110		110110	110110	1010		impleacible opeca olyrici	Commo ladit diagnosis Will DOOM CO			
MED17.2 0x2FF7 12279 <b>MIN</b>	Vehicle speed, signal	P0500	Vehicle Speed Sensor 'A'	Vehicle Speed Sensor	Electrical	Vehicle speed > 10 km/h	10 sec.	none	none	none	none	none	none	Υ	Speed signal from right front wheel sticks at one value	Continue fault diagnosis with DSC/ASC			
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		*			7	,		3	i	i	i	7		3				
			Vehicle Speed Sensor, Speed Too Low Compared to			Vehicle speed > 4 km/h 1500 rpm < Engine speed < 4500												
MED17.2 0x2FFF 12287 <b>MIN</b>	Vehicle speed, plausibility	P152B	Reference in Coast Down	Vehicle Speed Sensor	Plausibility	rpm	7 sec.	none	none	Tmot > 40 °C	none	none	none	Υ	Vehicle speed is higher than measured	Continue fault diagnosis with DSC/ASC		
MED17.2 0x3000 12288 <b>PLAUS</b>	Vehicle speed, plausibility	P0501	Vehicle Speed Sensor 'A' Range/Performance	Vehicle Speed Sensor	Plausibility	Vehicle speed > 40 km/h	3 sec.	none	none	none	none	none	none	Υ	Vehicle speed does not correlate with calculated speed	Continue fault diagnosis with DSC/ASC		
																***************************************		- MSA fails to start when fault appears the first time,
						- MSA start									1.) Short circuit to positive (MSA_Enable or MFS)	1.) Check wiring harness		- no MSA start after stalling the engine,
MED17.2 0x301C 12316 <b>MAX</b>	Enable line, MSA: activation					- Automatic Terminal 15 deactivation	none	Terminal 15	Battery voltage > 10 V	none	none	none	none	N	2.) CAS defective 3.) DME defective	2.) Replace CAS 3.) Replace DME	MSA deactivated (ID450)	- MSA function is not available, - no automatic deactivation of Terminal 15 is available
WEDTI.2 0X0010 12010 MAX	Enable line, Won. activation					deachvallon	none	Terrimar 10	Dattery Voltage > 10 V	none	none	none	Hone	IN .	3.) DIVIL delective	о.) первое ымс	INOA deadivated (ID-500)	
															1.) Short to ground (MSA_Enable or MFS)	1.) Check wiring harness		- MSA fails to start when fault appears the first time, - no MSA start after stalling the engine,
									_						2.) Defective CAS	2.) Replace CAS		- MSA function is not available,
MED17.2 0x301D 12317 <b>MIN</b>	Enable line, MSA: activation					Diagnosis function encoded  Diagnosis function encoded and	none	Terminal 15	Battery voltage > 10 V	none	none	none	none	N	3.) Defective DME	3.) Replace DME	MSA deactivated (ID450)	- no automatic deactivation of Terminal 15 is available
						- three test pulses following												
						Terminal 15 = ON; - or MSA start request;									1.) Open wire (MSA_Enable or MFS)	1.) Check wiring harness		- MSA fails to start when fault appears the first time, - no MSA start after stalling the engine,
MEDAT 0 0:2045 40040 010	Enable line, MSA: activation					- or confirmation of automatic		T	D-44					N	2.) Defective CAS 3.) Defective DME	2.) Replace CAS 3.) Replace DME	MSA deactivated (ID450)	- MSA function is not available,
MED17.2 0x301E 12318 SIG	Enable line, MSA: activation					Terminal 15 deactivation	none	Terminal 15	Battery voltage > 10 V	none	none	none	none	N	3.) Defective DME	3.) Replace DME  1.) PWM signal test with diagnosis job	MSA deactivated (ID450)	- no automatic deactivation of Terminal 15 is available
																'STATUS_NULLGANG_ERKENNUNG' ->should not		
																exceed 94 % in any transmission position; 2.) If PWM signal is not OK replace the neutral sensor a	nd	
																reinitialize the neutral position using tester job	ind	
																'STEUERN_NULLGANG_LERNEN'; 3.) If the fault appears again, check shift shaft to ensur	e	
																that magnet is installed correctly -> if not, replace		
																transmission and reinitialize neutral position using testorion job 'STEUERN_NULLGANG_LERNEN'	er	
																4.) If transmission is OK replace engine management a	nd	- MSA non-starter when fault appears the first time,
MED17.2 0x3028 12328 <b>MAX</b>	Zero-gear sensor, signal					none	none	Terminal 15	none	none	none	none	Pulse-duty factor of neutral sensor (0 %100 %)	II N	Magnet not installed correctly on shift shaft     3.) Defective DME	reinitialize neutral position using tester job 'STEUERN_NULLGANG_LERNEN'	MSA deactivated (ID450)	- No MSA start after engine is stalled, - MSA functionality is not available
																1.) PWM signal test with diagnosis job		
																'STATUS_NULLGANG_ERKENNUNG' ->should not fa below 6 % in any transmission position;	all	
																2.) If PWM signal is not OK replace the neutral sensor a	ınd	
																reinitialize the neutral position using tester job 'STEUERN_NULLGANG_LERNEN';		
																3.) If the fault appears again, check shift shaft to ensur	e	
																that magnet is installed correctly -> if not, replace transmission and reinitialize neutral position using test	er	
																job 'STEUERN_NULLGANG_LERNEN'		
													Pulse-duty factor of neutral	I	Defective sensor     Magnet not installed correctly on shift shaft	4.) If transmission is OK replace engine management a reinitialize neutral position using tester job	na	<ul> <li>MSA non-starter when fault appears the first time,</li> <li>No MSA start after engine is stalled,</li> </ul>
MED17.2 0x3029 12329 <b>MIN</b>	Zero-gear sensor, signal					none	none	Terminal 15	none	none	none	none	sensor (0 %100 %)	N	3.) Defective DME	'STEUERN_NULLGANG_LERNEN'	MSA deactivated (ID450)	- MSA functionality is not available
																1.) Check wiring harness:		
																- Short between +5V sensor supply and sensor sign	nal	
																wire - Open sensor signal wire		
																- Open circuit in +5V power supply to sensor		
																- Open circuit in ground to sensor 2.) Replace neutral sensor and reinitialize neutral positi	on	
																using tester job 'STEUERN_NULLGANG_LERNEN'		- MSA non-starter when fault appears the first time,
MED17.2 0x302E 12334 <b>MAX</b>	Zero-gear sensor, signal					none	none	Terminal 15	none	none	none	none	none	N	Defective neutral sensor     3.) Defective DME	<ol> <li>Replace DME and reinitialize neutral position using tester job 'STEUERN_NULLGANG_LERNEN'</li> </ol>	g MSA deactivated (ID450)	<ul> <li>No MSA start after engine is stalled,</li> <li>MSA functionality is not available</li> </ul>
																1.) Check wiring harness:		
														***************************************		- Short circuit between ground and sensor signal wi	re	
															Wiring harness between neutral sensor and DME	<ol><li>Replace neutral sensor and reinitialize neutral positi with tester job 'STEUERN_NULLGANG_LERNEN'</li></ol>	on	- MSA non-starter when fault appears the first time,
MED47.2	7000 0000 0000 0000						non-	Ta			<b></b>	<b></b>		N	2.) Defective neutral sensor	3.) Replace DME and reinitialize neutral position using	g	- No MSA start after engine is stalled,
MED17.2 0x302F 12335 <b>MIN</b>	Zero-gear sensor, signal	1		<u> </u>		none	none	Terminal 15	none	none	none	none	none	N N	3.) Defective DME	tester job 'STEUERN_NULLGANG_LERNEN'	MSA deactivated (ID450)	- MSA functionality is not available

MEDIT 2   0.03328   12338   PLAUS   260-quest central registration   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1.05   1	MED47.2	0v2024 12227	MAY Zoro go	or concer signal											1						
The content of the	MED17.2	UX3U31 12337	MAX Zero-ge	ar sensor, signal																	
	MED17.2	0x3036 12342	PLAUS DME, man	ipulation prevention						2.5 sec.			none	none	none	none	2.) Neutral sensor installed incorrectly 3.) Defective neutral sensor  N 4.) Magnet on shift shaft is not installed correctly	and other transmission positions with the initialized neutra position using tester job  'STATUS_NULLGANG_ERKENNUNG' -> The sensor values will vary according to transmission position  2.) If the sensor provides plausible data, and is not within the range for the initialized neutral position when in neutral, determine whether the sensor is installed correctly and correct as necessary, while also reinitializing the neutral position using tester job  'STEUERN_NULLGANG_LERNEN';  3.) If sensor is OK and installed correctly, then check and correct the magnet's installation on the shift shaft, and reinitialize the neutral position using tester job  'STEUERN_NULLGANG_LERNEN'.  4.) Replace neutral sensor and reinitialize neutral position using tester job 'STEUERN_NULLGANG_LERNEN'		-	MSA non-starter when fault appears the first time, - No MSA start after engine is stalled, - MSA functionality is not available
Part	MED17.2	0x303E 12350	PLAUS N	No coding	P3239	Control Module Coding Process No Coding			none	none	Terminal 15	none	none	none	C_C_LESEN	none	Y DME code missing	Encode DME	none		
A STANDARY OF THE PROPERTY OF	MED17.2	0x3043 12355	<b>PLAUS</b> Clutc	h switch 10%					Clutch pedal depressed 100 %	none	Terminal 15	none	none	none	none	none	2.) Defect in wiring harness 3.) Defect in engine-management system	'STATUS_KUPPLUNG_LESEN'. The specification data are as follows:  - 0 % -> No pressure on clutch pedal - 10 % -> Gentle pressure on clutch pedal - 90 % -> Clutch pedal depressed fully  2.) If the readings for the various positions are not obtained, check the wiring harness between the enginemanagement ECU and the clutch switch, and between the CAS and clutch switch  3.) Replace the clutch switch.  4.) If no output for the 10 % clutch signal has ever been generated, replace DME  If the 90 % position for the clutch signal has been		-	MSA non-starter when fault appears the first time, - No MSA start after engine is stalled, - MSA functionality is not available
March   Marc																					
## A company of the control of the c		0x3044 12356	MAX	stage 1					none	none	Terminal 15	none	none	none	none	none		FC SWID test failed F9 Signature test failed F6 FSC not present F4 FSC cancelled	none		
MEDIT 2 0.0000 1 2250 SIG PT-CAN teamment active from the process of the process	===		MIN	stage 2																	
Hob 1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/2   1/					P3202	Powertrain CAN, CAN Chip Cut-Off	Communication	Powertrain	none	0.02 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal	15 none	none	CAN bus N DME	present; Check PT CAN	Various lamps or no lamps at a may light up. Depends on		
MED17.2 0x3094 12436 MIN CAN message, DSC P3209 CAN Message Monitoring ASC/DSC Alive Check none 0.08 sec. Terminal 15 statery voltage > 10.V none 0.08 sec. Terminal 15 statery voltage > 10.V none 0.08 sec. Terminal 15 statery voltage > 10.V none 0.08 sec. after Terminal 15 none 0.08 sec. Terminal 15 statery voltage > 10.V none 0.08 sec. after Terminal 15 none 0.08 sec. after Terminal 15 none 0.08 sec. Terminal 15 none 0.08																		If this fault has been entered frequently and/or is currently	·		
MEDT 7.2 0/3095 12437 PLAUS CAN message_DSC Control module Continue function for cont	MED17.2	0x3094 12436	MIN CAN r	message, DSC	P3209	CAN Message Monitoring ASC/DSC Alive Check			none	0.08 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal	115 none	none	N DSC control module		DSC lamp may light up	Determine whether alive signal from CAN interface is correct for control module: DSC	
MEDIT.2 0x3095 12437 PLAUS CAN message, DSC Plaus billing of Can Message, BSC Plaus billing of Can Message,				J.,								,						If this fault has been entered frequently and/or is currently			
MED17.2 0x3096 12438 SIG No CAN message, DSC P1721 CAN Timeout ASC/DSC none 0.8 sec. after Terminal 15 none 0.8 sec. after Ter	MED17.2	0x3095 12437	PLAUS CAN r	nessage, DSC	P3210	CAN Message Monitoring ASC/DSC Plausibility			none	0.08 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal	none	none	N DSC control module	continue fault diagnosis with DSC		for control module: DSC	
If this fault has been entered frequently and/or is currently present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface is present;   Determine whether alive signal from CAN interface i	MED17.2	0x3096 12438	SIG No CAN	Lmessage DSC	P1721	CAN Timeout ASC/DSC			none	0.5 sec	Terminal 15	Battery voltage > 10 \/	none	0.8 sec after Terminal	115 none	none	N DSC control module		DSC Jamp may light up	Determine whether CAN interface is present for control	
MED17.2 0x3097 12439 MIN CAN message, EGS U1202 Message Monitoring TCM Alive Check Communication TCM one 0.08 sec. after Terminal 15 none 0.08 sec. after Terminal 15	WILD IT.2	3,0000 12-30	SIO INCOM	cocayo, 200	1 1121	O. W. Timodic Add/200			HOTIC	0.0 360.	Tomina 10	Dattory voitage > 10 v	IIIII	o.o sec. and reminal	1010	110110	., Doo control module				
present;  Determine whether checksum for CAN interface is correct	MED17.2	0x3097 12439	MIN CAN r	nessage, EGS	U1202	Message Monitoring TCM Alive Check	Communication	ТСМ	none	0.08 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal	15 none	none	N EGS control module	continue fault diagnosis with EGS	÷		
	MED17.2	0x3098 12440	PLAUS CAN r	nessage, EGS	P3214	CAN Message Monitoring ETC Plausibility	Communication	ETC	none	0.08 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal	15 none	none	N EGS control module	present;			

															If this fault has been entered frequently and/or is currently			
															present;		Determine whether CAN interface is present for control	
MED17.2 0x3099 12441 <b>SIG</b>	No CAN message, EGS	U0101	Lost Communication With TCM	Communication	ТСМ	none	0.5 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	EGS control module	continue fault diagnosis with EGS	none	module: EGS	
			CAN Message Monitoring IHKA (Automatic Heating and												If this fault has been entered frequently and/or is currently		Determine whether CAN interface is present for control	
MED17.2 0x309D 12445 <b>SIG</b>	No CAN message, IHKA	P3215	Air Conditioning) No Signal			none	5 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	IHKA control module	continue fault diagnosis with IHKA or SPEG	none	module: IHKA	
			, iii condino iii gy, i co oigilia.												If this fault has been entered frequently and/or is currently			
															present;		Determine whether alive signal from CAN interface is	
MED17.2 0x309F 12447 <b>MIN</b>	CAN message, instrument cluster	U112A	Message Monitoring Instrument Pack Status Alive Check	Communication	Instrument Pack	none	0.2 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	I-cluster	continue fault diagnosis with I-cluster or SPEG	none	correct for control module: I-cluster	In the worst case the I-cluster is completely off
										······					If this fault has been entered frequently and/or is currently	······································		
															present;		Determine whether MIL activation control is correct	
MED17.2 0x30A0 12448 <b>PLAUS</b>	CAN message, instrument cluster	P3217	CAN Message Monitoring Instrument Pack Plausibility	Communication	Instrument Pack	none	6 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 STEUERN_MIL	none	N	I-cluster	continue fault diagnosis with I-cluster or SPEG	none	(control module: I-cluster)	In the worst case the I-cluster is completely off
															If this fault has been entered frequently and/or is currently			
							0.5 sec. or 5 sec. or 50 sec.								present;		Determine whether CAN interface is present for control	
MED17.2 0x30A1 12449 <b>SIG</b>	No CAN message, instrument cluster	U112B	Lost Communication With Instrument Pack Status	Communication	Instrument Pack	none	(depends on the message	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	I-cluster	continue fault diagnosis with I-cluster or SPEG	none	module: I-cluster	In the worst case the I-cluster is completely off
															If this fault has been entered frequently and/or is currently			
			CAN Message Monitoring SZL (Switch Cluster Steering												present;		Determine whether alive signal from CAN interface is	
MED17.2 0x30A4 12452 <b>MIN</b>	CAN message, SZL	P3219	Column) Alive Check			none	0.5 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	SZL/LWS control module	continue fault diagnosis with SZL/LWS	none	correct for control module: SZL/LWS	
															If this fault has been entered frequently and/or is currently			
MEDATO 0 00AE 40450 BLAUG	0.451	D0004	CAN Message Monitoring SZL (Switch Cluster Steering				0.5	T : 145	D # # 40.1/		00 K T 145		N	071/11/0	present;		Determine whether checksum for CAN interface is correct	
MED17.2 0x30A5 12453 <b>PLAUS</b>	CAN message, SZL	P3221	Column) Plausibility			none	0.5 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N N	SZL/LWS control module	continue fault diagnosis with SZL/LWS	none	for control module: SZL/LWS	
			CAN Message Monitoring SZL (Switch Cluster Steering		***										If this fault has been entered frequently and/or is currently		Determine whether CAN interface is present for control	
MED17.2 0x30A6 12454 <b>SIG</b>	No CAN message, SZL	P3220	CAN Message Monitoring SZL (Switch Cluster Steering Column) No Signal			none	1.000	Terminal 15	Battery voltage > 10 V	nono	0.8 sec. after Terminal 15 none	nono	N	SZL/LWS control module	present; continue fault diagnosis with SZL/LWS	none	module: SZL/LWS	
MED17.2 0x30A6 12454 <b>SIG</b>	No CAN message, SZL	F3220	Column) No Signal			none	1 sec.	reminal 15	battery voltage > 10 v	none	0.6 Sec. after reminal 15 Hone	none	IN	SZL/LWS control module	If this fault has been entered frequently and/or is currently	none	module. SZL/LVVS	
															present;		Determine whether checksum and alive signal are correct	
MED17.2 0x30A7 12455 <b>PLAUS</b>	Message (terminal status, 130)	U111F	Message Monitoring Terminal Status Check Sum Error			none	none	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	CAS control module	continue fault diagnosis with CAS or SPEG	none	for CAN message: Terminal status	
MEDITIZ OXOUTI 12400	Wessage (terrimar states, 100)	01111	Message Monitoring Terminal Status Greek Gam Error			Hone	Hone	TOTTIMIA TO	Dattery Voltage > 10 V	none	0.0 Sec. and Terminal To	none		Crite control module	If this fault has been entered frequently and/or is currently	TIONO	101 O/WWW.coago. Forminal status	
															present;			
MED17.2 0x30A8 12456 <b>SIG</b>	No message (terminal status, 130)	U111E	Lost Communication With Terminal Status			none	0.5 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	CAS control module	continue fault diagnosis with CAS or SPEG	none	Check whether CAN message is present: Terminal status	
	<u> </u>														If this fault has been entered frequently and/or is currently		3 1	
No	o message (status, crash deactivation, electric fuel		Lost Communication With Control Crash Cut-Off EKP			***************************************									present;		Check whether CAN message is present: Check EKP	
MED17.2 0x30A9 12457 <b>SIG</b>	pump, 135)	U112D	(Electrical Fuel Pump)			none	50 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	ACSM control module	continue fault diagnosis with ACSM or SPEG	Airbag	crash deactivation	
															If this fault has been logged frequently and/or is currently			
															present;		Check whether CAN message is present: MSA switch	
MED17.2 0x30AA 12458 <b>SIG</b>	No message (operation, MSA, 195)					none	25.5 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	SPEG control module	continue fault diagnosis with SPEG	MSA switch	user-activation	
															If this fault has been entered frequently and/or is currently			
															present;			
MED17.2 0x30AD 12461 <b>SIG</b>	No message (time/date, 2F8)	U113C	Lost Communication With Time/Date			none	50 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	I-cluster	continue fault diagnosis with I-cluster or SPEG	none	Check whether CAN message is present: Time/date	
															If this fault has been entered frequently and/or is currently			
MED47.0 0:200 100	No manage (status southed looking lide OFO)	P113A	Mass or Volume Air Flow 1 Correction Signal Plausibility	Mana Air Elass	Otion Cinnel		40	Tamain at 45	D-#		0.0 <del></del>		N.I.	000	present;		Check whether CAN message is present: ZV and valve	
MED17.2 0x30AE 12462 <b>SIG</b>	No message (status, central locking, lids, 2FC)	PTT3A	Period Too Long	Mass Air Flow	Correction Signal	none	18 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	CAS control module	continue fault diagnosis with CAS or SPEG	none	status	
			Message Monitoring Vehicle Mode Status Check Sum												If this fault has been logged frequently and/or is currently		Determine whether sheeksum and alive signal are correct	
MED17.2 0x30AF 12463 <b>PLAUS</b>	Message (vehicle mode, 315)	U1116	Error			none	none	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	SPEG control module	present; continue fault diagnosis with SPEG	none	Determine whether checksum and alive signal are correct for CAN message: Vehicle mode	
MEDITIZ GAOGAI 12400 I EAGO	Wiessage (vernole mode, 010)	01110	End			none	Hone	TOTTIMIA TO	Dattery Voltage > 10 V	110110	0.0 300. ditel Ferninal To	none		of 20 donard module	If this fault has been logged frequently and/or is currently	TIONE	Tor Critt message. Verillole mode	
					***************************************										present;			
MED17.2 0x30B0 12464 <b>SIG</b>	No message (vehicle mode, 315)	U1115	Lost Communication With Vehicle Mode Status			none	25 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	SPEG control module	continue fault diagnosis with SPEG	none	Check whether CAN message is present: Vehicle mode	
															If this fault has been entered frequently and/or is currently			
													***************************************		present;		Check whether CAN message is present: Reverse-gear	
MED17.2 0x30B2 12466 <b>SIG</b>	No message (status, reverse gear, 3B0)	U1129	Lost Communication With Reverse Status		See a se	none	3 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	FRMFA control module	continue fault diagnosis with FRMFA or SPEG	none	status	
															If this fault has been entered frequently and/or is currently			
															present;		Check whether CAN message is	
	No message (sport mode EGS, 1D2)	U1169	Lost Communication with OBD-Sensor	Communication	OBD Sensor	none	25.5 sec.	Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	EGS control module	continue fault diagnosis with EGS	none	present:OBD_SENSOR_DIAG_STATUS	
MED17.2 0x30BA 12474 <b>SIG</b>	No message (sport mode LGS, TDZ)														If this fault has been entered frequently and/or is currently			
MED17.2 0x30BA 12474 <b>SIG</b>	No message (sport mode EGS, 1D2)				3										present;		Check whether CAN message is present:	
									:D-# 40 \/	none	0.8 sec. after Terminal 15 none	none	N	I-cluster control module	agentique facult diagnosis with Lalvator or CDEC	none		
	No message (sport mode EGS, 1D2)	U116F	Lost Communication With Sports Mode ETC			none	1.2 sec.	Terminal 15	Battery voltage > 10 V	Horic	0.0 300. after reminal to mone			1-cluster control module	continue fault diagnosis with I-cluster or SPEG	Tione	Display_Transmission	
		U116F	Lost Communication With Sports Mode ETC			none	1.2 sec.	Terminal 15	Battery voltage > 10 V	none	0.0 sec. and Tennina 10	no	N .	i-cluster control module	If this fault has been logged frequently and/or is currently	none		
MED17.2 0x30BB 12475 <b>SIG</b> N	No message (diagnosis status, OBD sensor, 5E0)	U116F	Lost Communication With Sports Mode ETC										N.		If this fault has been logged frequently and/or is currently present;		Check whether CAN message is plausible: Driver	
		U116F	Lost Communication With Sports Mode ETC			none	1.2 sec.	Terminal 15  Terminal 15	Battery voltage > 10 V	none	0.8 sec. after Terminal 15 none	none	N	ACSM control module	If this fault has been logged frequently and/or is currently present; continue fault diagnosis with ACSM	none		
MED17.2 0x30BB 12475 <b>SIG</b> N	No message (diagnosis status, OBD sensor, 5E0)	U116F	Lost Communication With Sports Mode ETC										N		If this fault has been logged frequently and/or is currently present; continue fault diagnosis with ACSM If this fault has been entered frequently and/or is currently		Check whether CAN message is plausible: Driver recognition	
MED17.2 0x30BB 12475 <b>SIG</b> N	No message (diagnosis status, OBD sensor, 5E0)	U116F	Lost Communication With Sports Mode ETC										N		If this fault has been logged frequently and/or is currently present; continue fault diagnosis with ACSM		Check whether CAN message is plausible: Driver	