Source	Bytes		Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
Module & CAN-ID	RCV Little Endla Big Endla Big Endlan Dr	an Hex 0 1 2 3 4 5 6	7 8 9 0A 0B 0C 0D 0E 0	F 10 11 12 13 14 15 16	17 18 19 1A 1B 1C 1D 1E	1F 20 21 22 23 24 25 26	18 17 16 15 14 13 12 11 1 27 28 29 2A 2B 2C 2D 2E 2 39 40 41 42 43 44 45 46 4	F 30 31 32 33 34 35 36 37	38 39 3A 3B 3C 3D 3E
	Zi Significant		ForqueForTCM		TorqueForTCM		ngTorque_TCM		andTorque_TCM
	eFor TCA								
97	eTonge	IndEngineTorqueForTCM Unit:Nm OffsetO;Mult:1;Div:1		EngFrictionTorqueForTCM		ActualEngTorque_TCM		IndEngineTorqueForTCM Unit:Nm Offset:0;Mult:1;Div:1	
97 PCM (Spanish)	Eg	Offset:0;Mult:1;Div:1		Unit-Nm Offset-0;Mult:1;Div:1		Actualing orque_ICM Unit:Nim Offset:0;Mult:1;Div:1		Offset:0;Mult:1;Div:1	
	g.								CHOC, Requested CH VICQ. CHARGE PURITY CHARGE PURITY CHARGE PURITY CHARGE CHARG
	100	mechan Control Onfocial view	8						C Active C Active Sve:1+Ac BrakeA Sve:1=A Sve:1=A Sve:1=A
PCM (Spanish)	ABSCo								TCS_S
	TOM_2	TranslpIndi	catedTorq_TCM	EstEngine	TorqueForTCM				
	xqueEq								
120 PCM (Spanish)	Engine To	TransipIndicatedTorq_TCM Units:Nm Offset:0;Div:1;Mult:1		EstEngineTorqueForTCM Units:Nm Offset0;Mult:1;Div:1					
		CAN_EngineAcceleration	ThrottlePositionForTCM	PedalPosition		Engine	SpeedForTCM		¥
								Addive Addive	P. Pes
	For TOM							rest_i=Request CrassSatus Parse_Off-i=Crass_Off-i=Cras	Ke was
	otterbos							orc estimble sume.7-	No.1=Yes No.1=Yes Stod 2011-Brake Reserved
120	SpeedTh					Status TI=On		- Requirement of the control of the	KinProg O= o=dalPre erved39
12D PCM (Spanish)	E30	Units:RPM/s Offset=-8256;Mult-1;Dly=64 Actuall	Units=% Offset=0;Mult=1;Div=2 EngTorque	Units=% Offset=0;Mult=1;Div=2 MinAv:	ailibleTorque	Units=RPM Offset=1;Mult=1;Div=4 MaxA	vailibleTorque	85 %	KeyOffTimer
								b	
	8							HS HYPendin R	
	Pogner							PCM ingine and with a PCM ingines	
200 PCM	spaganb	ActualEngTorque Units:Nm Offset:-512;Mult:1;Div:1		MinAvailibleTorque Units:Nm Offset-512:Mult:1;Div:1		MaxAvailible Torque Units: Nm Offset:-512;Mult:1;Div:1		TorqueTypo hordacing DwAde;1rif Coathobach Coathobach Coathobach DoOff;1=Or	KeyOffTimer UnitMinutes
РСМ	δ.	Offset:-512;Mult:1;Dlv:1		Offset-512;Mult:1;Div:1 RPM_ROC		Offset:-512;Mult:1;Div:1 Vel	nicle Speed	Po Eo ලිර Throttle Position	Unit:Minutes Offset:0;Mult:1;Div:1  Throttle Rate of Change
	F. F								
	W-W-W								
207 PCM Cruise Warning	Engine		RPM	RPM_RateOfChange Unit:RPM/sec Offset0, Mult:1, Div:4 GearRatio		Vehicle Speed Unit = KPH Offset=0;Mult=1;Div=128	_	ThrottlePosition Unit:% Offset0;Mult:1;Div:2	ThrottlePosition_ROC %/pass Offset:0;Mult:1;Div:1
A/C Compressor Clutch Statu A/C Shed Load		TransGearPosition_HS 0=Blank	Transi	searkatio	TorqueCo	onvertor_X_Factor	Iran	sLosses	, s
Speed Control Telltale Engine Coolant Temperature Engine RPM		1=Forward-Drive_1 2=Forward_Drive_2 3=Forward_Drive_3 4=Forward_Drive_4							nashon nashon
Engine Temperature Warning Engine Type / Cylinder Count	\$ <sup>1</sup>	5=Forward Drive 5 6=Fprward Drive D 10=Reverse Drive R							hed pLED all transmissible isplay
Engine RPM Engine Temperature Warning Engine Type / Cylinder Count Engine Torque ETC Warning Lamp Fuel Usage / Fuel Pulse Log DTC / DTC Logging Enabl ODO/Gdometer Count 230 OII Pressure Warning	odineco	O-state of the control of the contro							ses sessing, comen, sessing, comen, send comen, served
Log DTC / DTC Logging Enabl   ODO/Odometer Count   230	ns Geer T	18=Forward_Unive_8 19=Forward_Drive_9 F0=Park_P F1=Newtral_N	Unit=Ratio		Linital Initary				queCom No:1=Ye No:1=Ye No:1=Ye No:0-eth C Bash I C Bash I
Smartshield Warning Lamp/Fi	h Security Warning	FF=Inval EngineCoolantTemperature	Unit=Ratio Offset=0;Mult=0.000061035 EnglineOilPressure	AC_PressureTransducer	Unit=Unitary Offset=0;Mult=1;Div=1 BatteryVoltage_PCM	ODO_Count			FuelPulse
i nrottle Position Transmission Fall / Fault Transmission Gear / PRND Transmission Mode Transmission Overheat Transmission Type / Manual T							3		
Transmission Mode Transmission Overheat Transmission Type / Manual T	ensmission g						by 4 secs	Pag.	
Vehicle Speed Diagnostics	1,2						Tnot out I strate	T - D ep C	
	Thoons Ass		Unit:SED Offset0,Mult:1, Div:1 0=Sector_0 E=Sector_14 Offset-100,Mult:1, Div:1				iet on IC (if flash) (iet on IC (if flash) (iet on IC (if on IC (i	aming le confined aming aming aming aming aming aming aming aming aging. H	
427 PCM	Theory: Are 4XX messa for Cluster?	e Unit:DegC ages Offset:-40,Mult:1, Div:1 FF=Invalid	0=Sector_0		Unit:Volts Offset:0,Mult:1, Div:10 FF=Invalid	Unit/km Offset0,Mult:0.000201167, Div:1 FF=Invalid	Children Chi	ETC.W ETC.W ETC.W 1-eefba	Unit=Litres Offset=0;Mult=0.0000788519;Div=1 FF=Invalid
	COM					EngCoolantTempFo	rTCM	EngineOilTemperature	BarometricPressure
	Press a		-MIL_food						
	emplear of		FaultStab 			Units=DegC		Units=DegC	Units:%(1ATM)
44D PCM (Spanish)	Engite		OdometerReading			Units=DegC Offset=-40;Mult=1;Div=10 FFF=Invalid		Units=DegC Offset=-40;Multi=1;Div=1 FF=Invalid	Units:16(1ATM) Offset0;Mult:1;Div:2 FF=Invalid
4C0 PCM (Spanish)	- Charles	Units:KM	Guometerreading						
PCM (Spanish)	90	Offset=0;Multi=1;Div=10 EngineDisplacement	NumberOfCylinders NumberOfValve	es AirIndType FuelTypeAndDelive	ry PeakEngineTorque	AuxVehicleID			
623	neConfig			9=unknown 1=normal_asp 2=turbocharged 2=petrol_efi					
623 PCM	Engl	Units:Litres Offset:0;Mult:1;Div:10	Units:Cylinders Units:Cylinders Offset:0;Mult:1;Div:1 Offset:0;Mult:1;Div:1	2=petrol_efi 3=supercharged	Units:NMTorque Offset=0;Mult=4;Div=1	Units= Offset=0;Mult=1;Div=1		NumberOfForward	
			Axi	eRatio	Fraction	PortionAxleRatio	BaseTorqueSplit	ears	

Source		Bytes from 0	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
Module & CAN-ID	RCV	Big Endian Heo				28 27 26 25 24 23 22 21 28 17 18 19 1A 1B 1C 1D 1E 18 23 24 25 26 27 28 29 30 3				7 6 5 4 3 2 1 0 38 39 3A 38 3C 3D 3E 3F
		big Endan Decina	0 1 2 3 4 5 6 7	0 9 10 11 12 13 14 15	10 17 10 19 20 21 22	23 24 25 26 21 26 29 30 3	1 32 33 34 35 36 37 36 3	9 40 41 42 43 44 40 40	47 40 49 50 51 52 53 54 55	56 57 56 59 60 61 62 63
			S S S S S S S S S S S S S S S S S S S						Feb. 1	
	SH Topoc		FrontMheelDrive DaNG1=Yes Rear WeelDrive DaNG1=Yes AMMheelDrive DaNG1=Yes Manual Trans_H DaNG1=Yes DaNG1=Yes AMOT ransTOM DaNG1=Yes CanGT1=Yes CanGT1=Yes CanGT1=Yes CanGT1=Yes CanGT1=Yes CanGT1=Yes CanGT1=Yes CanGT1=Yes						a_e2655;1	
640 PCM	C Trans C			Units=Ratio Offset=0;Mult=0.00012207;Div=1  NumberOfCylinders NumberOfValves		Units=Ratio Offset=0;Mult=0.00012207;Div=1 M_CalLevel		Units=Ratio Offset=0;Mult=0.0078125;Div=1	Units=Gears Offset=0;Mult-1;Div=1	
	orling or 1		Header_ID	NumberOfCylinders NumberOfValves	AirIndType TC	M_CalLevel				
650	VertrainO			Units:Cylinders Units:Cylinders	9=unknown 1=normal_asp 2=turbocharged 3=supercharged Units:Numeric					
PCM (Spanish)			16 Header_ID	Units:Cylinders Units:Cylinders Offset:O;Mult:1;Div:1 Offset:O;Mult:1;Div:1	3=supercharged Units:Numeric 4=none Offset:0;Mult:1;Div:1					
	Age of Co.			A. Control						
650	ertrainCo			and rars. It is a contract of the contract of						
650 PCM (Spanish)	wo d		17 ImmobTransfer_PCM_1	ImmobTransfer_PCM_2	ImmobTransfer_PCM_3	ImmobTransfer_PCM_4	ImmobTransfer_PCM_5	ImmobTransfer_PCM_6	ImmobTransfer_PCM_7	ImmobTransfer_PCM_8
	Mmob. 14									
6F6 PCM	NCW.1		TorqueRedu	NonPaguart	TransmissionTorqueLimit	TorqueConvertorSlip	T	onInputSpeed	Tonominal	onOutoutSpeed
	Request		rorquereau	worm reguest	rransmission rorquerinit	rorquecunventorosip	rransmissi	omputapeeu	rransmissi	www.unean
	popularion									
0C9 TCM (ZF)	TorqueR		Units:Nm Offset=-511;Mult=1;Div=1		Units=Nm Offset=1;Mult=4;Div=1 FF=Invalid		Units=n/a Offset=0;Mult=1;Div=1 7F=Invalid		Units=RPM Offset=0;Mult=1;Div=1 0xFFFF = Invalid	
	Transmission Fault Transmission Gear - Selected Transmissions Gear - Actual		GearPositionSelected GearPositionActual	TransShiftMap	TransOilTemperature	de .	IdleGearboxLosses		GearPositionTarget	TorqueConvMult
	Transmission Mode Transmission Temperature					des				
	Servas C		0=Park 0=Neutral			odes_de			0=Neutral	
	[empD] (		1=First 2=Neutral 2=Second 3=Drive 3=Third 4=Fourth 4=Fourth	0=Normal_mode 1=Sports_mode 2=Not_used 3=Hot_mode		1-Fault Cooker Cooker Control			1=First 1=First 2=Second 2=Second 3=Third 1=Fourth 5=Fifth 6=Skith	
3E9 TCM (ZF)	Jan State		0=Park	OnNormal, mode 1 1 Spoots, mode 2 Not, used 3 Hot, mode 4 4 Gradient, mode 5 Traction, map 6 Manual, mode 7 C/Cruizemap	Unit=DegC Offset=40;Mult=1;Div=1 FF=Invalid	BDII.TO CA. DTC CA. DTC CA. DTC CA. DTC CA. DTC CA.	Units=Nm Offset=0;Mult=1;Div=1		5 = Fifth 5 0 0 6 = Skth 8 C = Reverse	Units=Ratio
Tom (LT)	-		3	7-Cidadhap	CabinTemperature_HS	SunLoadDriver	SunLoadPass		, o remain	Olist-O,Mai-1,DN-100
	Ignition Switch Position Cabin Temp Sensor		BB	g 2 2 2						
	Sunload Sensor Sunload Sensor Immobilization Codes Front Right Door Front Left Door Sensor Se	Theory: Are	D_Alas_HS No.1=Yes No.1=Yes No.1=Yes No.1=Yes No.1=Yes No.1=Yes No.1=Yes The Committee	On Wami key_2.} 1=Yes 1=Yes						
403 BEM	Rear Right Door Rear Left Door Boot Lid Door	Theory: Are 4XX messages for Cluster?	Fe 7-9 Se Se SA 52 12 25	Lights of Priority On-No.	Units:DegC Offset:-40;Mult:1;Div:2 FF=Invalid	Units:A/D Reading Offset:0;Mult:1;Div:1	Units:A/D Reading Offset:0;Mult:1;Div:1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Boot Lid Boor Rear Demist Low Wash Warning Headlamp Fail Hazard Request		ImmobTransfer_BEM_1	ImmobTransfer_BEM_2	ImmobTransfer_BEM_3	ImmobTransfer_BEM_4	ImmobTransfer_BEM_5	ImmobTransfer_BEM_6	ImmobTransfer_BEM_7	ImmobTransfer_BEM_8
	Headlamp Fall Hazard Request Security Warning On									
6F8 BEM	BBM_im									
	Blow/Temp Knob Positions Climate Control Push Buttons		MCC HVAC Buttons	ACC HVA	C buttons		ICC Buttons (other)	TemperaturePosn_HS	blower_pos_HS	
	ICC Module Type			φ c	o c		On/Off)			
	Overspeed Mode Switch Overspeed Up Switch		25 Se	Inch HS Inch H	M;1=On With H	S. Switch, HS D=Off; I=On Mh, HS *:I=On	- Adust 1			
	(Call CDU in IC section of Doco) Overspeed Active Verspeed Lip Switch Overspeed Up Switch Overspeed Dom Switch Overspeed Dom Switch Reset Average Speed Reset Trip Time Letternal LCD Illumination On		h, HS heh, HS htt: 1=0n htt: 1=0n ht	down_sw down_sw downsort downsy downs do	wsdrydu Ono O swo gdu	eNDC_SWI	ad Addive ad Up ad Down ad Down g Speed	00 = Maox Cold 01 = Cold 01 = Cold 0E = Hot	00 = Stop 01 = Slow	
307 ICC	External LCD Illumination On		AC_Swith D-OR Rectices Orc Floor_sw Floor_sw Floor_sw Floor_sw Screen_U	Ar_dist_ Auto_acc Cimates FanSpee FanSpee FanSpee	DriverTe	Traction	Overspe Overspe Overspe Overspe Reset As	OE = Hot EF=Invalid FF = ACC	00 = Stop 01 = Slow 0E = Fast EF=Invalid FF = ACC	
	\$5, T		DampedFuelLevel	InstFuelValue	- E S	z o	Illumination Level (Low)	Illumination Level (High)		MaxLitres
437 IC (Bench)	Damped Fuel Level Instantaneous Fuel Input Fuel Empty	Theory: Are			Low Fuel = 1 Puel Sender Fall Puel Condition Per Kulghis On 1 Per Rawon_F	8 Battery Voltage.	Switches Illumination Level 80 Low, B3 Lower Mid, D9 Upper Mid FF Full	ACC Illumination		
(Bench)	Damped Fuel Level Instantaneous Fuel Input Fuel Empty Fuel Sender Fail Park Lamps On Park Brake On	4XX messages for Cluster?	Units:Litres Offset;Mult:0.51;Div:1 AVG Speed?	Units:Litres Offset:Mult:0.51;Div:1 Avg Econ Mode	Avg Economy	84 = Running (13.2V)	D9 Upper Mid FF Full	Light Level set gradually from 8000 to FFFF (Byte MCC - set to 00	Tra	Units:Litres Offset:;Mult:0.51;Div:1
500	Battery Voltage level								Runtime 22.31hr = 0549 Runtime 22.46hr = 0556 Run Time = Minutes in Hex	
ıC	SwitchestCD Illustration Level Average Speed Average Economy Mode Average Economy Travel Time Range / Displey DTE Instantaneous Economy Mode		Convert to Dec = KM/H RAN	100=0 IGE	L/100km = Convert to Dec / 10  Inst Econ Mode	Instant Economy	0 0	0 ODOMETER	0 Display = HR:Minutes	
	Travel Time Range / Display DTE				100KW =					
553 IC	Instantaneous Economy Odometer Odometer Overflow				77					
iC	Odometer Overflow A/C Display Icon A/C max Display Icon A/C off Display Icon		In KM ??	2	PassTemperatureSetting_HS	L/100km = Convert to Dec / 10  DriverTemperatureSetting_HS	AmbientTemp_HS	EvapTemperature_HS	BlowerVolts_HS	0 0 BlowerSpeed_HS
				8 8 8 F						χ. χ.
	Drivers Temperature Select Passenger Temperature Select Ambient Temperature Climate Control mode (Auto/Semi/Off)		C, Seg, HS  OOOFFI-CO.  OOOFFI-CO.  OOOFFI-CO.  OOOFFI-CO.  OOOFFI-CO.  OOOFFI-CO.  OOOFFI-CO.  OOOFFI-CO.  OOOFFI-CO.	P. Seg. H. S. Seg. H.	Units=DegC 00=Blank	Units=DegC 00=Blank				Property (
353 HIM (bench)	Evaporator Temperature 5 Blower Voltage 2 A/C Clutch Request \$\frac{1}{2}\$		C. Seq. I Doubling Seq. I Doub	Dutade Te Decities Session Session Ses	01=C 02=reading FE=H FF=Rlank	Units=DegC 00=Blank 01=C 02=reading FE=H FF=Blank	Units=C Planks7F	Units=DegC Offset=30:Mult=1:Dix=3	Units=Volts Offset=0;Mult=1;Div=10 0=Fault Condition (or blower off)	Special Control of the Control of th
(Denoit)	T T		4- TO TO TO EO 00 TO EO	^- F ∩ F ∩ F ∩ Q 0 ≪ 0 % 0 0 0		1 · ·	1		aux Conumon (or MOWELDII)	4- 4-11010

			Bytes from 0	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
Source			Little Endian Hex				<del></del>	D 1F 1E 1D 1C 1B 1A 19 18			7 6 5 4 3 2 1
Module &		RCV									
CAN-ID			Big Endian Hex	0 1 2 3 4 5 6 7	8 9 0A 0B 0C 0D 0E 0F						38 39 3A 3B 3C 3D 3E
			Big Endian Decimal	0 1 2 3 4 5 6 7	8 9 10 11 12 13 14 15	16 17 18 19 20 21 22 2	3 24 25 26 27 28 29 30 31	1 32 33 34 35 36 37 38 39	40 41 42 43 44 45 46 4	7 48 49 50 51 52 53 54 55	56 57 58 59 60 61 62
				DesiredTorqu	eCommand			Desir		eCommandSlow	
210 ABS 4B0 TCS	ABS Warn (Hardwired on 5.3, CAN on 8.0) EBD Warn (Hardware 5.3, CAN 8.0) DSC Warn HGC Warn HGC Warn Wines Speels TCS Warning	freeSpeeds DestredTorqueBrakeConfig	Theory: Are	Desired TorqueCommand Units Ten Zuflut 1 Div 1 Office 51 2 Zuflut 1 Div 1 WheatSpeedForeEart Units Tenh Office 50 Abit 1 Div 10 Office 50 Abit 1 Div 10		Units km/h Offset 0;Multi:1;Div:100 0xFFFE=Initialization in progress		Desired TorqueCommandflior  United TorqueCommand		WheelSpeedReaRight Sinkson Other Older The Trick Other The Trick Other Older The Trick Other The The Trick Other The T	
ne following	are likely to be sensors for ABS/TCM, such as steering	sensor, yaw ra	te sensor								
					Counter (Up)						
'0 AW?	From YAW			00 01 03		FD-FF 7E-80 7C-7F	FF FF 00	01 to 04		0	
					Counter (Up)						
75 /AW?				00 01							
				Fine Steering Angle	Large Steering Angle	Rate of Change		Counter/CRC			
80 SAS					FF -> EC = Right (EC=Max) 00 = Centre 01 -> 13 = left (13 = max)						