

Achieve the impossible

ABRITES Diagnostics for Mercedes Online User Manual

Version: 31.7

www.ABRITES.com

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I. Abrites diagnostics for Mercedes Online:

The Abrites diagnostics for Mercedes Online is the next generation in the evolution of the Abrites Diagnostics for Mercedes. It provides dealer level diagnostics, live value and diagnostic trouble code monitoring, locating and clearing in order to assist the diagnostician to locate and resolve any issues with the vehicle at a dealer level in the environment of their own workshop. It can be installed on any Windows based system higher than XP and requires an AVDI interface to operate.

II. Using the Abrites diagnostics for Mercedes Online:

The Abrites diagnostics for Mercedes is an online application and as such it requires the computer you have installed it on to be connected to the internet. We can suggest a connection to the internet via 3G/ 4G from a mobile device as well as a WI-FI network. Please ensure to have port 8443 allowed by your internet service provider in order to ensure the correct functionality of your Abrites diagnostics for Mercedes Online. Using the icon in the top right of your software screen you will be able to see the internet connectivity and signal strength and the three horizontal lines will allow you to choose a language in which the software to operate:



When you open the Abrites Quick Start you can select the Abrites diangostics for Mercedes Icon:



After clicking the Abrites diagnostics for Mercedes Icon you will see the software start up. The software will automatically start detecting the vehicle your AVDI is connected to. Once that is done you will see a list of modules. You will also have the ability to choose to select a car by the model as well as by the vehicle VIN number in order to assure correct vehicle selection of the software. It is customary for Mercedes-Benz vehicles to share modules throughout the vehicle models and shared platforms. For this reason we strongly suggest for you to select the vehicle by the VIN number so that the software best determines the vehicle in the best way possible. This means that the software will be able to get the full list of modules and this is preferred to be done by VIN. For example a vehicle like the W218

(CLS 2nd generation) uses many modules from the W212 (E class) on which the CLS is based. It is the same for the X (W)164 (ML 2nd generation) which shares many electronic components with the W221 (S class). This is something we need to keep in mind while operating with Mercedes-Benz vehicle as a whole because sharing components is a strong part of the company's principle. For this reason we need to stress on selecting the vehicle by VIN.



There is also the option to select the particular ECU from the vehicle which allows operating specific modules in cases where a problem with the overall communication is present.

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There can be different approaches to starting work with Mercedes-Benz vehicles via the Abrites diagnostics for Mercedes but we suggest to start by automatically allowing the software to determine the vehicle type and begin communication. Once that is done it will find out what the car is and will then populate the list of modules. If this is not possible the software will generate the following message:



As mentioned above a reason for such message can be that the car is compiled from different modules or that the modules do not have VIN numbers inside them. In most of these cases the Abrites diagnostics for Mercedes Online will come up with a message saying that it cannot locate the vin. This is the "**Can not parse VIN**" case. In both of the cases described above we recommend the selection of the vehicle by VIN number. This is to be used in cases when the vehicle cannot be automatically detected when the software is started.

IMPORTANT: If the car is automatically detected by the software but the list of modules does not appear we have the same situation like described above(the "Can not parse VIN" case). This problem is often present with the US models due to the different VIN format which leads to wrong parsing. In such cases you will have to enter the VIN manually in the following format followed by the Enter button. Here is a simple example of a Mercedes Sprinter (W906, W221) : xxx906xxxxxxxxx , where 906 is the chassis number. When you are working on a W221 it is always recommended to enter the VIN manually in the same format as for the US models.

Searching the vehicle via its VIN number is done via the VIN search field in the top left of the screen:



Here you can enter the VIN and determine the car which needs to be made of 17 digits. These VINs can be found in various places in the vehicle. The scan by VIN only starts after the "Enter" button is pressed. If an impossible VIN is selected you will see the following message:



Only if all the previous methods fail do we suggest that you select the vehicle by chassis code.

If for some reason you see the error above or if you are unhappy with the results shown you can select from a full list of the electronic control modules installed in Mercedes vehicles worldwide.



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Once you reach this step you have a list of over 1300 separate electronic control modules which you can select from. We strongly suggest that you use the search option here in order to select the module you are looking for to avoid confusion.

ABRITES D	iagnostics 31.6 www.abrites.com	_	\times
< Home	Mercedes Benz Vehicles ECUs Vehicles selection		 \$
Enter Filter	Collect your ECU List:		
Select All	AAG169 - Electrical Chassis Control Module		^
Scan All	AAG203 - Electrical Chassis Control Module		
	AAG211 - Electrical Chassis Control Module		
	AAG220 - Electrical Chassis Control Module		
	AAG221 - Electrical Chassis Control Module		
	AAM2K - ALL ACTIVITY MODULE		
	AAM_H - ALL ACTIVITY MODULE		
	AB2TR_H - SRS Control Module		
	ABC - Active Body Control		
	ABC221 - Suspension module		
	ABC230_MOPF - Suspension module		
	ABR_XT - Reversible Belt Tensioner Module		
	ABS30_H - Traction system		
	ABS461 - Traction system		
	ABS50 - Traction system		
_	ACL199 - Air brake (spoiler) and central locking control unit		
	ACL2_199 - Air brake (spoiler) and central locking control unit		~

As you can see the list is large and you can search to select the unit you are looking for.

Once you have connected to the car you can see the following information:



In the particular case we have a W (X) 164 which we can can start diagnosing. Press "Continue".Once you press continue you will see a list of the modules installed in this vehicle:

	ABRITES D	iagnostics 31.6 www.abrites.com	_		\times
Each	< Home	Mercedes Rercedes Vehicles 164.886 EZS164		.c00	٢
module		Unit 5FF: 0 FAULTS Electronic ignition switch,	Variant: W164_0006		
nas iuli	Fault Codes	Fahrzeugidentnummer: FIN	4JGBF86E68A311815		
	Live Data	Musterstand: CAN-Treiber (Version)	276 (0x0114)		
	ECU Flashing	Musterstand: DBKOM (Version)	329 (0x0149)		
	Custom Session	Musterstand: Diagnosemodul (Version)	585 (0x0249)		
	SCN-Codiing	Musterstand: Flexer (Version)	0 (0x0000)		
		Musterstand: K-Matrix-Stand (Jahr)	4 (0x04)		
		Musterstand: K-Matrix-Stand (KW)	4 (0x04)		
		Musterstand: NM (Version)	835 (0x0343)		
		Musterstand: OSEK (Version)	769 (0x0301)		
		Musterstand: Prozessortyp	26642 (0x6812)		
		Musterstand: Transportlayer (Version)	614 (0x0266)		
	A·B·R·I·T·E·S				

identification and can be read with all the data included in it for diagnostics. As you can

see we provide multiple languages and the identification is done in the

language you find fits you best:

ABRITE	Diagnostics 31.6 www.abrites.com	—		×
< Hon	e Mercedes Benz Vehicles 164.886 EZS164 Values		.aDO	<u>ې</u>
Enter Filter	Values			
Query	✓ 01 - Clamps status			^
Graphics	✓ 02 - Drive authorisation system			
	- 03 - Last odometer value			
Select All	04 - Vehicle Identification Number			
	✓ 05 - System power supply			
	DC-Block			
	turnstile			
	electronic			
	Enhanced Status EZS			
	FBS3 information			
	Edge detection			
	ISM diagnosis data			
	KG configuration for motor cut-off			
	terminal status			
	MSG diagnosis data			
	Musterstand			
A·B·R·I·T·I	NAG2 Diagnostic data			~

As you can see you can select multiple live values to monitor depending on the best way you find fit to diagnose the vehicle.

NuaryABRITES Diagnostics for Mercedes Online019User Manual												
A	ABRITES Diagnostics 31.6 www.abrites.com								_		\times	
	Home	Mercedes Benz	Mercedes Vehicles	164.886	EZS164	Values	Query				.oOO	٢
						٧	alues					
Las	t stored odome	ter value							0 [km]			^
Igr	ition switch zer	o position							No			
Cla	mp 15								ON			
Cla	mp 15C								ON			
Cla	mp 15R								ON			
Cla	mp 15X								ON			
Cla	mp 50								OFF			
Ke	y retaining posit	ion							Yes			-1
Vo	tage on clamp 3	30B							0.0 [V]			
Ba	Battery voltage					12.9 [V]						
Co	Control unit 'Electronic ignition switch' is activated					Service not suppo	orted in active o	diagnostic mod	le			
Co	ntrol unit 'Electro	onic ignition s	witch' is initia	lized					Service not suppo	orted in active o	diagnostic mod	le
Co	ntrol unit 'Electro	onic ignition s	witch' is pers	onalized					Service not suppo	orted in active of	diagnostic mod	le 🗸

All the data can be viewed in the language that fits you best.



Live values can also be viewed as a table and saved in order to be used for later analysis.



Using the fault code function allows to view the fault codes, read them, check all the details in regards to them and then clear them after the issue is resolved.



As you can see the level of details here is very high and is on par with the OEM diagnostics. Once again this is a complete solution ad provides multilingual support:

A	BRITES D	iagnostics	s 31.6 wv	ww.abrite	s.com							×
<	Home	Mercedes Benz	Mercedes Vehicles	164.886	SAMV164	Fault Codes					-o00	0
				_			List of Foult Cos			-		
				A ENG	SINEERING N	OTES		?	×			•
Sav	e to File	9006	Feh		Test con Kein Mo	dition: No	ormaler Spannungsber	eich				
Clea	ar Faults	9008	Feh	le	Keine Bu	usruhe / In	nitialisierung					
Rea	ad Faults	900D	Feh	le	Standlic Parklicht	ht aktiv oo t links	der					
		STATUS:	DTC Present a	t	; Reset co	ondition: 1	10 Einschaltversuche (Z	vkluszeit 1s) min.			
		900E	Feh	le	500ms L	icht i. O. c	oder erneute Anforder	ung	,			
		9016	Feh	le	Handlur Test tim	ngsanweis e: Bei akti	ung: Leuchtmittel über ver Funktion	rprüfen ;				
		903B	Feh	le	, Faultpat Kurzschl	h/Latency luß nach U	r: Kundenmode Open-I J Batt oder Kurzschluß	Load oder nach Masse	nach	Oder beide F	Relais Open-Lo	ad 🗸
					abgelau Diagnos	ifenen Ein: semode O	schaltversuchen)pen-Load oder Kurzsc	hluß nach U	Batt			
		Fehler: S	Standlicht li : DTC Pres	n er	oder Ku	rzschluß n	ach Masse 250ms			indicator no	ot requested.	
		Extended	d DTC Data		SD-Erro	rcodes: 13	3					
		900D Ev	entbit: Fe	eh				C	Ж			
A·B·I	R·I·T·E·S										Additiona	l Info

For advanced users we also provide the option to send custom requests to the electronic modules in the vehicles.

A ABRITES Diagnostics 31.6 www.abrites.com	_ _ X
K Home Mercades Benz Mercades Vehicles 205.000 CEPC Cuttom Session	i 💿
Send: 22 F1 90	
	Tx: 10 03
Rx: 50 03 00 14 00 CB	Tx: 22 F1 00
Rx: 62 F1 00 02 2F 19 01	Tx: 22 F1 90
Rx: 62 F1 90 57 44 44 32 30 35 30 30 34 32 52 30 31 36 38 33 34	

The current version of the manual describes just the beginning of the development of the Abrites diagnostics for Mercedes. We will continue the development of the software by adding special functions to assist our customers and provide them with an incomparable solution for Mercedes-Benz vehicles. In this manual we will continue adding information about the software itself as well as the philosophy of Mercedes-Benz diagnostics – old, current and new.

III.Abrites diagnostics for Mercedes Online Buses and trucks

Using the Abrites diagnostics for Mercedes Online you can perform diagnostics for Mercedes-Benz buses and trucks. With the help of the Abrites online platform you can scan for units, observe the identification of the modules installed in these trucks and buses, read DTC (Diagnostic Trouble Codes), clear the DTCs and monitor live values. You can perform these features in the following way: 1. Select if you are working on a car, truck or bus:



2. Here is what the bus menu looks like:





Here is the start scan of the buses:

3. Full scan of the modules inside the buses and trucks including the number of fault codes registered in each of them:

4.

Home	Mercedes Mercedes Benz Buses	BUS MOD	E (*
©.			General Diagnostics
Scan	INS2010	No Faults	Instrument, Variant: V9
Clear All DTCs	CPC301T	2 FAULTS	Common Powertrain Controller, Variant: App_0216
Program IDs	MCM02T	No Faults	MCM - Motorstyring (10A20), Variant: mcm_0x010008
DAS Manager	TCM01B	1 FAULT	TCMV Transmission Control Module Voith, Variant: BASIC
Special Functions	RET01T	No Faults	RCM Retarder Control Module, Variant: App_0014
	RDF01T	3 FAULTS	RDF front radar sensor, Variant: App_0007
	ACM02T	1 FAULT	ACM - Exhaust aftertreatment (17A03), Variant: acm_0x084B
	MPC01T	1 FAULT	MPCControl unitMultifunction camera, Variant: App_0007

Once you enter a module you can see the identification of the module itself and on the left side of the screen you can see what options you have with each module:

Home	Mercedes Mercedes BUS MOD INS2010	≡ (??
	Unit 15: 0 FAULTS Instrument,	Variant: V9
	MB Number	3824466021
Fault Codes	Software version	75 (0x4B)
	Manufacturing date week/year	42 / 2016
Live Data	Hardware version	255 (0xFF)
	BCD software version	255 (0xFF)
Memory Manage	Control unit ID	INS
	Unit CAN ID	1440 (0xA005)
Custom Session		

5. Live values in query mode:

0	Home	Mercedes Benz	Mercedes Buses	BUS MOD	INS2010	Value	s)(Query	E 🖗
					Value	es			
MB pa	rt number of the h	ardware						Incorrect F	Response lenght
Daimle	er hardware versio	n: patchlevel						1 (0x01)	
Daimle	er hardware versio	n: week						25	
Daimle	er hardware versio	n: year						15	
Daimle	er software version	: patchlevel						1 (0x01)	
Daimle	er software version	: week						24	
Daimle	er software version	: year						16	
MB pa	rt number of the V	BF structure table						Service no	at supported
MB pa	rt number of the la	nguage files from th	e VBF-database					Service no	at supported
Compl	eteAnalogRealTim	eData						168 (0xA8)
Bus St	atus INN CAN							No INS me	essage received by GM
Compl	eteDigitalRealTime	Data						21 (0x15)	
Lesen	Address List of th	e Configured Contro	I Units. Eine Antwort					162 (0xA2)
Lesen:	ECU address list	of installed non diag	nosable control units	Eine Antwort				110 (0x6E)
MB Pa	rtnumber Boot							Service no	ot supported
MB Pa	rtnumber Code							Service no	ot supported
MB Pa	1B Partnumber Data Service not supported								
Hardw	are ZGS							Incorrect F	Response lenght

6. Full module identification:

0	Home	Mercedes Benz Buses BUS MOD CPC301T	E 🔅		
		Unit 18DAF100: 2 FAULTS Common Powertrain Controll	er, Variant: App_0216		
(Hardware Version: Patch Level	0 (0x00)		
	Fault Codes	Hardware Version: Week	50 (0x32)		
-		Hardware Version: Year	10 (0x0a)		
	Live Data	Software Version: Patch Level	0 (0x00)		
_		Software Version: Patch Level1	0 (0x00)		
	Momony Monagor	Software Version: Week	48 (0x30)		
	Welliory Wallager	Software Version: Week1	29 (0x1d)		
(Software Version: Year	15 (0x0f)		
	Custom Session	Software Version: Year1	16 (0x10)		
-		Hardware Supplier: Information	Continental		
		Software Supplier: Dataset Information	MB		
		Software Supplier: Software Information	Continental		
		ECU Serial Number: Value	31 36 32 38 38 30 30 31 30 36		
		VIN Original	WEB63440211001058		
		VIN Current	WEB63440211001058		

7. After scanning for faults you can enter each module and read the fault codes in full details as well as any possible solution where one is available. All of this is under the details menu – when the error occurred, what it is exactly and so on:

ABRITES D	liagnostics 31.1 www.abrites.com	n						
0	Home	Mercedes Benz	Mercedes Buses	BUS MOD	CPC301T	Fault Code	t es	≣ (†
						List of Fa	ult Coo	des
	Save to File	15F0E	7 Expansi	on tank too mar	ny control action	ns		
	Clear Foulta							
L		A2000	Shift lev	er (hardwired) s	ticked			
	Read Faults	STATUS: . D						
					Detai		ault A	420007
	Close Details	Shift lever (hardwired) st STATUS: . DTC confirme	licked ed					
		Extended DTC Data Rec	cord :					
		Standard_ENV DTCExte Standard_ENV Occurrer Standard_ENV Original Standard_ENV Most Re- Standard_ENV Frequen- Standard_ENV Operatio	endedDataNecordNumber: 1 (0x nce Flag: Error Odometer Value: 118352 [km] cent Odometer Value: 148512 [k cy Counter: 6 n Cycle Counter: 30	01) m]				

IV. Mercedes Coding

The coding in Mercedes will allow you to change different parameters related to functionality of an unit. It is important before making any changes in the coding groups, to save all current coding as backup. A warning will be displayed:

ABRITES D	agnostics 31.6 www.abrites.com	—		\times
< Home	Mercedes Benz Mercedes 164.886 KI164 Coding		ألاده	101 201
	Coding			
	Warning! It is strongly recommended to SAVE ALL before coding! Incorrect coding may cause unpredictable behavior! This functionality is intended to be used by experienced users at their own RISK!			
	ОК			
A·B·R·I·T·E·S				
	Please wait 3			STOP

Some parameters cannot be edited and the software will display a message if such a parameter is changed:



To enter the coding menu, please autodetect the car model or select it manually from the model list, enter the unit you want to code and enter the "Coding" option:

A ABRITES Diag	nostics 31.6 www.abrites.com	1 1000		
K Home	Mercedes Benz Vehicles 205.XXX CEPC Coding			
Enter Filter		Coding		
Save All Write All	CVN-Berechnung fertig	Params: 1		
	Explizite Variantencodierung	Params: 1	[SEGNUM=02]	
	HEX Variantencodierung	Params: 1		
	Implizite Variantencodierung	Params: 69	[SEGNUM=01]	
	VC Datenstand	Params: 1		
A B R I T E S				

After the changes are made, you can write the coding using the "WRITE GROUP" button. You can change as many parameters as you want, followed by "WRITE GROUP":

A ABRITES Diag	gnostics 31.6 www.abrites.com			_ 🗆 🗙
< Home	Mercedes Benz Vehicles 205.000 CEPC VCD_implizite Variantenco dierung			
Enter Filter	CODING	G GROUP 'VCD_Implizit	e_Variantencodierung'	
Write Group	intelligente_MotorabschaltungiECO_	No 15	IECO= intelligent engine cut off	*
Load Default	ECO_Anzeige	No 16	ECO_Anzeige	
	MWAGR	No 17	MWAGR	=
	VBS	No 18	VBS	
	Vernetzungsarchitektur	No 19	Vernetzungsarchitektur	
	Communication_UnitCU_	No 20	Communication_UnitCU_	
	Haptisches_FahrpedalFFAP_	No 21	FFAP= Force Feedback Accelerator Pedal	
APPLITES	Diagnoseumschaltung_EU_USA	No 22	Diagnoseumschaltung_EU_USA	
A'B'R'I'I'E'S	exhaust flan	No 23	exhaust flan	-

The following screenshot shows how to change the VMAX parameter responsible for the speed lmit:



The next screenshots show what the menu for activating/deactivating side sensors looks like:

A ABRITES D	agnostics 31.6 www.abrites.com	the lost.	Handing 3 Handing 2	200 50	and Links,	Englant	Interne L.	Strengt	Quele	Interne Q		X
< Home	Mercedes Hercedes 164.886 ARCADE164 r.N.r. Thirds										đ	۲
Enter Filter		CODING GR	OUP VCD_FZG_Austatt_2	Culieferer_nur_E	ntwicklung'							
Write Group	Schnittstellen Drucksensor vorne Fahrer/Beifahrer bzw. PAS hinte.	No 1	s	ichnittstellen	Drucksensor v	orne Fahre	er/Beifahr	er bzw. P	AS hinte	n Fahrer/	Beifahrer übe	i 📋
	Schnittstellen Drucksensor hinten Fahrer/Beifahrer bzw. PAS mitt.	. No 2	S	ichnittstellen	Drucksensor h	inten Fahı	er/Beifah	rer bzw. F	PAS mitte	e Fahrer/E	Beifahrer übe	r
	Seitensensoren (Fahrer/Beifahrer) vorne überwachen	No 3	S	eitensensor	en (Fahrer/Beif	ahrer) vorr	ne überwa	achen				
	Upfrontsensoren (Fahrer/Beifahrer) überwachen	No 4	ι	Jpfrontsenso	ren (Fahrer/Bei	fahrer) üb	erwacher	n				
	CAN Eingangssignal Datum/Zeit-Status verwendet	No 5	c	AN Eingang	ssignal Datum/	Zeit-Status	verwend	let				
	CAN Eingangssignal Klemmenstatus verwendet	No 6	c	AN Eingang	ssignal Klemme	enstatus ve	erwendet					
	CAN Eingangssignal Motorstart-Prozedur verwendet	No 7	c	AN Eingang	ssignal Motorst	art-Prozed	ur verwer	ndet				
A B R I T E S	CAN Eingangssignal Datum/Zeit-Tag verwendet	No 8	C	CAN Eingang	ssignal Datum/	Zeit-Tag v	erwendet					

🔀 ABRITES Diagnostics 31.6 www.abrites.com	in Londo London, England Starsell, Story	
C Huma Herodes 144.86 AACCEAH (UL), Andrea Colorg Area Vencios 144.86 AACCEAH (UL), Andrea Colorg (un), Entration Colorg		@ <u>h</u> t.
Seitensensoren (Fahrer/Beifahrer) vorme überwachen	ja noin	• SET
	1000 13	

V. Mercedes ECU Flashing

The Mercedes ECU Flashing option will allow you to flash the control unit using a CFF file as shown in the screenshots below:

1							
ABRITES Diag	nostics 31.6 www.abrites.com	_ 0 🗾	<				
K Home	Nerrodes 205.00X CEPC Flashing		٥				
	Flash Unit CEPC, VARIANT: VC11_0_STAR2						
Load CFF	0009041700 Bootloader SW number 0040 00-00-00 00 00 00 00	Valid	^				
	0009028924 Application SW number 0004 14-09-04 FF FF FF	Valid					
	0009033704 Data SW number 0004 14-09-04 FF FF FF FF	Valid	=				
	Active Diagnostic Information: Active Diagnostic Session	Extended					
	Active Diagnostic Information: Active Diagnostic Variant	47 (0x2f)					
	Active Diagnostic Information: Active Diagnostic Version	25 (0x19)					
	Active Diagnostic Information: ECU Software Mode	Running in Application					
	Active Diagnostic Information: Gateway true						
A·B·R·I·T·E·S	Hardware Supplier Identification	Delphi	-				
	3						

2										
A ABRITES Diag	mostics 31.6 ww	w.abrites.c	om	100	A REAL PROPERTY AND A REAL					
K Home	Mercedes Benz Vehicles	164.886	ME97	Flashing		al 🔍				
					Flash Unit ME97, VARIANT: M273_KE_VC13_2					
Load CFF	0094489340 Boot SW number 0003 01-00-00 10 07 20 04 Bosch									
	0094489340 Prog SW	number 0003	01-00-00	10 07 20 04	8	Bosch				
	0064477440 Data SW	number 000	8 01-00-00	10 07 20 04	8	Bosch				
	Mercedes car group H	IW part numb	er:		٥	3034467140				
	Supplier identification	from \$ 1.487			3	3 (0x03)				
	Parameter number				٥	3094489340				
	ZGS number				5	\$26592 (0x080900)				
	Program number	3064477440								
A-B-R-I-T-E-S										

Computer 1	New Volume (D.) + Wib_Flash_Files + St	Thash Fileseese FRW CEFC		• • • • • • • • • • • • • • • • • • • •	Search CEPC
Organize • New folder					•
🚖 Favorites 🔶	Name	Date modified	Туре	Size	
E Desktop	9 0009020131_001.CFF	1/14/2016 11:41 AM	CFF File	1,769 KB	
🔈 Downloads	0009020929_001.CFF	11/19/2015 3:46 PM	CFF File	1,741 KB	
Skecent Places	0009022712_001.CFF	11/19/2015 7:50 PM	CFF File	463 KB	
	0009028437_001.CFF	11/11/2016 3:24 PM	CFF File	1,789 KB	
🚆 Libraries 🔤	2 0009028829_001.CFF	11/19/2015 2:28 PM	CFF File	1,764 KB	
Documents	0009032205_001.CFF	11/20/2015 7:44 AM	CFF File	57 KB	
I Music	0009032212_001.CFF	11/11/2016 3:23 PM	CFF File	59 KB	
S Pictures	0009033507_001.CFF	1/14/2016 11:44 AM	CFF File	58 KB	
Stideos	0009034607_001.CFF	11/21/2015 2:00 PM	CFF File	57 KB	
	0009035503_001.CFF	11/20/2015 2:38 PM	CFF File	13 KB	
Scomputer	0009037213_001.CFF	4/18/2017 12:10 PM	CFF File	58 KB	
Scal Disk (C:)	0009041300_001.CFF	11/20/2015 10:16 A	CFF File	101 KB	
New Volume (D:)	2 0009041700_001.CFF	11/19/2015 9:09 AM	CFF File	101 KB	
I Local Disk (R:)	Type: CFF File				
Ella ana	Size: 100 KB			- MD Grad RI	- /# -60

4

A AB	RITES Dia	gnostics :	31.6 www	w.abrites.c	om			See mo	ore
<	Home	Mercedes Benz	Mercedes Vehicles	205.XXX	CEPC	Flashing		OO	٢
							Flash Unit CEPC, VARIANT: VC11_0_STAR2		
Loi	ad CFF	file:///D:/	/MB_Flash_Fi	les/SDFlash/I	Release/PKW	CEPC/00090	700_001.CFF Size: 103044 [Bytes]		-
BIN	N Export	ECU	Name	:			CEPC		=
Star	t writing	Software	supplier:				64		
		Flash tab	le key :				0009041700_001		
		Qualifier	:				BOOT0009041700124805		
		Flash me	thod:				WVC_FlashBoot		
		Logical pr	rogram :				0		
		Priority :				50			
		Diagnosti	c Version :				0x00032111		
A·B·I	R·I·T·E·S	Total Nur	mber of Flash	Sections:			1		Ŧ

VI. Mercedes FBS4 Manager

The Abrites Mercedes FBS4 Manager is a special function dedicated to the latest generation Mercedes- Benz FBS (DAS) related modules. It is where all the functions for FBS4 (around 2015+) vehicles will be developed. For the moment the focus of the function falls on its service related abilities. It allows the following for modules installed in Mercedes vehicles equipped with the FBS4 generation of DAS:

- Renewal of FBS4 7G Tronic units 722.9 (VGSNAG2). ALL BY OBD or internal CANBUS.
- Renewal of FBS4 CRD 3.X Engine Control Units. ALL BY OBD or internal CANBUS.

The FBS4 Manager can be opened once you enter an FBS4 module and clicking the "FBS4 Manager" button on the left side of the screen. **It very is important to follow the instructions as per the screenshot to avoid damage** :

A A	BRITES Dia	gnostics	31.6 www	v.abrites.	com		
<	Home	Mercedes Benz	Mercedes Vehicles	205.XXX	CRD3S2	FBS4 Manager	
						Flash Unit CRD3S2, VARIANT: CRD3S2_DIAG_313	37H
s (aveFlash (Backup)	65190409	000 Bootloade	er SW numbe	er 0040 18-	24-13 00 00 00 00	Valid
Res	FBS4 set/Re-new	65190280	001 Application	n SW numbe	er 0040 18	Very Important Warning!	Valid
	Vrite VIN	65190358	335 Data SW r	number	0040 18	Please be aware that every step you take after this may cause damage to the correct functioning of the vehicle! Since it is not in our control - all required conditions and user's actions, we cannot guarantee proper working of these procedures. FBS4 flashing poses DANGER ! Please proceed at your own RISK! It is highly recommended to connect external power supply before starting these procedures!	Valid
						ОК	
A·B	·R·I·T·E·S						

This is what the process looks like once the renew operation is started:



The FBS4 funcitonality offers the change of VIN in the supported units:

1. Writing the VIN



3. Uploading the modified Flash



2. Reading Flash



4. VIN writing has successfully finished



VII. Smart Functions

DPF mileage reset smart function – this function will clear all the DPF distance history. Select the ECU from the diagnostics menu and select SMART functions. The following message will appear:





2

ABRITES Diagn	ostics 31.7 www.abrites.com	_ 0 <u>X</u>
K Home He	rcedes Mercedes 205.004 CRD3S2 SMART Functions	
	S M A R T Functions	
	In order to take effect a successful DPF regeneration has to be done after execution of the function. Due to this, at the end of the procedure, this smart function will issue a DPF regeneration. That is why when the function is executed successfully, the car should be driven a certain distance with the engine temperature higher or equal 80°C, the RPMs has to be more than 1500, a minimum 15 liters fuel in the tank and almost constant velocity for the whole distance. In case of engine malfunctions (DTCs) a successful DPF regeneration cannot be done at all! START CANCEL	

VERY IMPORTANT NOTE:

If the total distance of the car has been manipulated (total distance is decreased) even the fact that the function will finish successfully, this will immediately cause a DTC generation due to the fact that a DPF mileage distance more than 400km will be set (due to a negative calculated distance value). In this case, a successful DPF regeneration will never be done!

To solve this issue, there is a 15 minutes test in the official Mercedes diagnostic tool which has to be executed!

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A ABRITES Diagnostics 31.7 www.abrites.com	
Home Mercedes Benz Verices 205.004 CRD352 SMART Functions	II ©
S M A R T Functions	
'DPF MILEAGE RESET' is finished successfuly!	
ОК	

DPF 400% ASH DTC RESET – this function will allow the DPF regeneration and reset the DPF Ash DTC P245900. Select the ECU from the diagnostics menu and select SMART functions. The following message will appear:

ABRI	TES Diagnostics 31.7 www.abrites.com			- X
< 1	Home Mercedes Benz Vehicles 205.004 CRD3S2 SM, Func	IRT cions		all ©
			S M A R T Functions	
<	DPF 400% ASH DTC RESET	ID#12	This Function resets DPF ash DTC P245900	
	DPF MILEAGE RESET	ID#12	This Function resets DPF mileage	

Actuators, Routine Tests, IO Controls, Adjustments/Calibrations added.

The "Actuators" and Routine tests" buttons will appear once you choose the module form the list and click on "Unit Info":

ABRITES Dia	gnostics 31.7 www.abrites.com		
< Home	Mercedes Benz Vehicles 205.004 CRD3S2		all 💿
		Unit CRD3S2	
Fault Codes	F100 APP_ACTIVE_DIAG_STATUS_APV	2	<u>^</u>
Live Data	F100 Active SG software	A	pplication active
ECU Flashing	F100 Gateway	Т	RUE
Actuators Routine	F111 Hardware part number	61	519014000
Tests FBS4 Manager	F121 Mercedes_Car_Group_Software_Teilenummer_CODE	61	519040900
SMART Functions	F121 Mercedes_Car_Group_Software_Teilenummer_CUSTOMER	61	519035835
A'B'R'I'T'E'S	F121 Mercedes_Car_Group_Software_Teilenummer_DATA	65	519028001

ABRITES Diagnostics 31.7 www.abrites.com		×
K Home Mercedes Benz Vehicles 205.004 CRD352 Actuators	Ditaa	0
	Actuators and Tests	
0420 Extended Powerlatch: Control	No#0 IO Control function	•
0420 Extended Powerlatch: Return Control	No#1 IO Control function: See specification R6511997 7.0_UDS I	
D010 Idle rpm iso drive test command	D010 Idle test: Return Control IO Control function: See specification R6515781 10.0_UDS Actuators test DAG CRD3 phtrol function	
D010 Idle test: Return Control	No#3 IO Control function: See specification R6515781 10.0_UDS	
D011 Demand for Egr valve Iso Drv test.	No#4 IO Control function	
D011 EGR Valve: Return Control	No#5 IO Control function: See specification R6515781 10.0_UDS	
D012 Vgt iso drive test command	No#6 IO Control function	
D012 Boost Pressure Actuator: Return Control	No#7 IO Control function: See specification R6515781 10.0_UDS	

A ABRITES Diagnostics 31.7 www.abrites.com	and the second	_ 🗆 🗾 📈
K Home Mercedes Benz Mercedes Vehicles 205.004 CRD3S2 Actuators SET		
D010 Idle rpm iso drive test command IO Control function status: Finished successfuly		SET
Idle rpm iso drive test command	1200 .00	rpm

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ABRITES Diagnostics 31.7 www.abrites.com		
K Home Mercedes Berz Mercedes Vehicles 205.004 CRD352 Actuators SET		.
D090 Climate compressor clutch relay DTI Drv activation IO Control function status:		SET
Climate compressor clutch relay DTI Drv activation	OFF V	
	ON	

Here is a list with some other SMART functions:

"SEAT BELTS ALARM" - "Activate/Deactivate seat belts alarm warning"

- SupportedUnits: IC222

"MAX SPEED LIMIT" - "Set/Reset of speed limit to max value"

- SupportedUnits: MED177, MED40, ME97, CR6EU5, CR6BIN5EU6

"V I M" - "Activate/Deactivate video in motion"

- SupportedUnits: HU5, HU5_ENTRY, HU5S1, HU_204, HU45,

HU221, HU221EVO - At the moment we support the older models only but we will have a solution very soon.

"AMG START UP DISPLAY" - "Activate/Deactivate AMG start up display"

- SupportedUnits: HU5, HU5_ENTRY, HU5S1, HU_204, HU45

HU221EVO, HU221 - At the moment we support the older models only but we will have a solution very soon.

"CAR ANDROID PLAYER" - "Activate/Deactivate car play android auto"

- SupportedUnits: HU5S1

"SUN ROOF CALIBRATION" - "Initiate sun roof calibration. WARNING: If runnig, anti-pinch detection will not be active!"

- SupportedUnits: TSSR166, TSSR176, TSSR_204, TSSR_212, TSSR_246 "360 DEGREE VIEW CALIBRATION" - "Calibrate ALL cameras of 360° suround view system"), /*FunctionDescription */

- SupportedUnits: "SVS207" "SVS FRONT CAMERA CALIBRATION" - "Calibrate FRONT camera of 360° suround view sistem"

- SupportedUnits: "SVS207" "SVS REAR CAMERA CALIBRATION" - "Calibrate REAR camera of 360° suround view sistem"

- SupportedUnits: "SVS207" "SVS RIGHT MIRROR CAMERA CALIBRATION" - "Calibrate RIGHT mirror camera of 360° suround view sistem"

- SupportedUnits: "SVS207" "SVS LEFT MIRROR CAMERA CALIBRATION" - "Calibrate LEFT mirror camera of 360° suround view sistem"

- SupportedUnits: "SVS207" "DPF MILEAGE RESET" - "This Function resets DPF mileage"

- SupportedUnits: CRD3, CRD3S2, CRD3H

"ADDLUE EMERGENCY START" - "Allow engine start in case of remaining 0km of ADBLUE" - SupportedUnits: "CR60LS"

IMPORTANT:

ScanAll == Connect

'ECU Selection' is intended to be used for collecting of a custom car's device list.

For example if you have a too new car, which is missing in our database, the user can collect a list of units which corresponds to this new car and to start 'Scan All' of all those units.

That is why using of button 'Connect' (instead of ScanAll) is confusing due to the fact that if you have collected a list of 100 devices, it is impossible to connect with them in parallel.

When the list with the selected devices is done, clicking on 'ScanAll' button will start the procedure for scanning of every selected unit.

When scanning process is finished, every existing and detected unit from the list will be shown on the screen as it is done after automatic detection and scanning of a normal car. Of course, there is no limitation about the number of the selected devices - it could be from 1 to thousands, so you can use it also for testing of a module on your desk, by selecting of only this module in the shown list and just pushing 'Scan All' button after that - if the device is connected and works properly, you will see it after scan process and you can continue with your work. If the device is defective or not connected properly you will see an empty list (blank page).