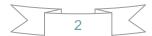
VVDI – MB TOOL User Manual

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1.Document Declaration

Please view the following declaration carefully:

- VVDI MB TOOL User Manual can help you maintenance vehicles with VVDI MB TOOL device. Please DON'T used for illegal purpose, Please follow the national law
- VVDI MB TOOL User Manual is written by VVDI-MB, please DON'T used for commercial purposes without authorize
- VVDI MB TOOL User Manual can help you how to use VVDI MB TOOL software, please view carefully
- Any illegal use VVDI MB TOOL User Manual, illegal use VVDI MB TOOL device, The user should take all risks, the company does not assume any responsibility

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2. Overview

2.1. Noun explanation

- Mercedes Benz: A car brand come from German, we simply use MB, BENZ instead
- **EIS**: Sometimes we call it EZS. The immobilizer system for MB cars
- ESL: Sometimes we call it ELV
- Chassis: Mainly use to distinguish car platform, the same platform will have same EIS type, example: W204, W216 etc

2016-02-26 Ver: 1.2

2.2. VVDI – MB TOOL Hardware



- 1. VVDI-MB TOOL device
- 2. IR adaptor
- 3. USB cable
- 4. NEC adaptor 1
- 5. NEC adaptor 2
- 6. NEC adaptor base PCB
- 7. K Line in OBD line
- 8. OBD line

2016-02-26 Ver: 1.2



2.3. Mainly function

Read Write Key

- 1. Read key basic information
- 2. Key with BE version, we can read password from key via IR directly. Of course, renew key, write new key file via IR is also supported
- 3. Support IR repair key, repair key not work via IR
- 4. NEC adaptor can read key password from NEC v51, v57 version
- Support write and renew (NEC adaptor) NEC key versions following: v51, v57

v28, v35, v40

- v03, v06, v08 (Keyless Go)
- v05, v07, v09 (Keyless Go)
- v59, v61 (Keyless Go)

EIS Tools

- 1. Support read EIS data via OBD and IR adaptor
- 2. Under OBD mode, we provide auto detect EIS type for CAN protocol
- **3.** Support renew EIS, make 2nd hand EIS to new one (online)
- 4. Support replace EIS, you can write original EIS data to new EIS via IR
- 5. Support write new VIN
- 6. Support clear TP
- 7. Support disable key position
- 8. Support personalize W204 ESL
- 9. Support test EIS, ELV, working key status
- 10. Support type:
 - W164
 - W164 2009-
 - W166, 197, 212, 218, 246
 - W169, 209, 211

W172, 204, 207, 212(old, with ELV)

- W203, 463, 639 (K)
- W202, 208, 210 (K)
- W215, 220 (K)
- W230 (K)
- W216
- W221
- W639 2009-



Password Calculation: support working key and lost all key

- 1. Password calculation can get the key password from working key and EIS(online)
- CAN protocol EIS all support password calculation (support BGA keys and other NEC keys)
- **3.** We also support calculate password for NEC v51, v57 keys. No soldering.
- 4. Data acquisition time depends on the key version. It needs about 3.5 minutes -13 minutes, BGA version need about 5 minutes
- 5. Calculate time in server: 30 seconds 1 minute
- 6. Now VVDI-MB TOOL is the fastest tool for password calculation
- 7. Lost all key password calculation: Now we support calculate password for W166, W212, W246, W212(old, with ELV) while lost all key
- 8. Support type (have working key):

W164 W164 2009-W166, 197, 212, 218, 246 W169, 209, 211 W172, 204, 207, 212(old, with ELV) W216 W221 W639 2009-

• Prepare Key File

- 1. Prepare key file means prepare the key file which you will write to new key(online)
- 2. Prepare key file need about 20 seconds
- 3. Support VVDI-MB type EIS data and old Motorola EEPROM dump

♦ ESL Tools

- 1. Support read ESL data via OBD (K-Line)
- 2. Support renew ESL, make 2nd hand ESL to new one (online)
- 3. Support replace ESL, you can write original ESL or EIS data to new ESL
- 4. Support write new VIN
- 5. Support clear TP
- 6. Support auto personalized ESL, no need renew EIS
- 7. Support check ESL damage status

• Renew ECU/Gearbox

1. This function support renew, write VIN, personalization operation for module ECU, Gearbox, ISM etc



Special Instructions (2016.02.26)

- **1.** Write key via NEC adaptor now don't support. Only support read and renew. Write function will added soon
- 2. The newest cars after 2015 with FBS4 EIS don't support read data and password, we are researching it
- 3. For read key from EIS while lost all key, it will add in future
- 4. Old motorola EIS (K-Line) don't support password calculation now, it will add in future
- **5.** Renew EIS and renew ESL require erase password. Now search erase password have 50% success rate. We are building a new server for erase password. It will support all erase password after new server finished
- 6. Auto personalized ESL: Now only support auto personalized ESL with key password all 00, we will support all the passwords in future (You can use "Personalize W204 ESL" instead before we publish new version)



3.Options

3.1. Language

Please manual set user language after first run program Support following languages:

- Chinese (Simplified)
- English

3.2. User Manual

Open user manual folder

3.3. Open Log

Open log folder



4. Read Write Key

Read Write Key support read key basic information, write key file, renew/write NEC key (Support Keyless Go). BE keys can read password directly via IR, renew BE key, write new key file to BE key

NEC adaptor support v51, v57 key password

4.1. IR mode

Identification key: Support read key basic information: SSID, counter, remain times, use times, key number, status, version, mark values etc

BE key: Key version is BE, support read password and key eeprom stored in BE key, write new key file to make a working key, **renew used BE key to new one** etc

If working key is BE version, you can read password from key directly, no need read password from EIS

Write mark values: Only BE key support, you can write information for yours'

Copy key password: You can copy the password to clipboard after success read key password

Repair key via IR: When identification key, you can only get SSID, Status, Version, then you can repair this key via IR

😿 VVDI – 💵 TOOL V	2.0.5 Remain	ing Synchronization	Time: 28 days				
Options Special Function Process Wizard Update Online							
	Key Information -			Function			
	SSID	0AE1B74E]	Mode IR NEC Adaptor			
Read Write Key	Counter	2F1F77		Type BE key			
_	Remain times	196599					
and the second s	Use times	8		Identification key Diagram			
EIS Tools	Key number	3					
1 9 9 F	Status	14EC Used		Read BE key password			
Password Calculation	Version	BE		Save Key file			
	Mark values	FFFFFFFF730C	Write				
	Key Password	AF5ECCFC6EE4635B	Сору	Load Key file			
Prepare Key File	Key EEPROM						
a	OC 72 20 EB 2 FB BF CC 3D (FC 6E E4 63 5B 0A E1 B 27 DF DF 98 72 8D 34 90 C4 74 90 B5 7B F0 02 6	C 5D BD B0 E0 7 4F 41 B0 43	Write			
ESL Tools		92 2E 44 F5 02 0E 12 7) 7D 84 FE 52 6C 1E 2E 7)					
		CO 84 A1 87 CA C3 FC 7 DF 6C 39 75 80 CF 77 1	3 AE 74 FE FC 3 AA BF 4F 1D	Renew			
	CB 76 51 BB (
Renew ECU/Gearbox		FF FF FF FF 29 4B B4 7 FF FF FF FF 73 0C FF F1		Repair key via IR			
				100%			
Reading data success.				100 %			

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4.2. NEC Adaptor mode

Renew/Write new key file via NEC adaptor

Support versions:

v51, v57

v28, v35, v40

v03, v06, v08 (Keyless Go)

v05, v07, v09 (Keyless Go)

v59, v61 (Keyless Go)

The above keys all with NEC chip (not BGA type). You need solder the NEC chip from key and place it to NEC adaptor

For NEC v51, v57 version, support read password from working key directly, no need read password from EIS

For all NEC types, you must use "Identification key" to read one time before renew/write key

🜌 VVDI – IB TOOL V	2.0.5 Remain	ning Synchronization Time: 28 days	
Options Special Functio	n Process Wizard	Update Online	
	Key Information -		Function
	SSID	98DB7DB8	Mode OIR ONEC Adaptor
Read Write Key	Counter		Type v51, v57
	Remain times		
	Use times		Identification key Diagram
EIS Tools	Key number		
1203	Status	14EC Used	Read v51,v57 key password
Password Calculation	Version	57	Save Key file
	Mark values		
	Key Password	5C4DAECBFB71B006 Copy	
Prepare Key File	Key EEPROM		Load Key file
0	E6 E0 F1 20 1 B1 1E 69 19 8	CB FB 71 B0 06 98 DB 7D B8 59 4E 92 11 41 B9 DA 55 03 E2 20 3F 69 55 0A 3E B3 89 34 54 94 4A 51 9B D9 ED 10	Write
ESL Tools		92 2E D2 94 6C 74 8A 45 4C 71 31 2F 9A 6E B0 8A 27 1E 20 33 95 4A 3C EE	
		34 EC B9 19 D8 0C 05 C9 7B 7C 53 13 75 8F F3 78 EE 7F FF FF FF FF FF FF	Renew
	FF FF FF CA 7	77 AC CC DD AE A2 7C 7F FF 00 00 02	
Renew ECU/Gearbox		FF FF FF FF B0 50 97 93 98 DB 7D B8 FF FF FF FF 73 0C FF FF FF FF 04 FC	Repair key via IR
			100%
Reading data success.			100 %



	a second second	1	版本:1 VERSION:	1	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		SRE 81 MM86 #-00 06 07 06 09 28 35 40 51 57		
通配器底座 Ada 上插槽1 Socket-1	ptor base PCB 插槽2 Socket-2	适配器1 上插针A CONS-A	Adaptor 1 CON2 插针B CONS-B-		記器2 Adaptor 2 -A 播针B CONS-B
断开 适配器1中的 CON v51, v57, v28, v35, v40 v07, V09: v03, V06, V08: V59, v61:		槽1, CON2短接 槽2, CON2短接		Adaptor 1, CONS-B co	nnect Socket-1, CON2 disconn onnect Socket-1, CON2connect onnect Socket-2, CON2 connec onnect Socket-2

How to place key NEC chip to adaptor via read/write/renew key via NEC adaptor:

5.EIS Tools

EIS data can prepare key file

VVDI MB TOOL support 2 mode to read EIS data: OBD and IR adaptor

This picture is read from W246 EIS

😿 VVDI – 💵 TOOL V	72.0.6 R	emaining Synchroniza	ntion	Time: 28 days				
Options Special Function Process Wizard Update Online								
	- EIS Basic Ir	formation	_		EIS Function			
2	SSID	08BB90B3		✓ Initialized	Mode 💿 OE	ID 🔿 IR		
Read Write Key	EIS P/N	246 905 99 00]	TP Cleared	Chassis	Allow user		
	КМ	12800]	Personalized	W166, 197, 212	, 218, 246 🛛 👻		
	VIN		Write	Activated	Read	EIS data		
EIS Tools	EIS Key Inf	formation		1				
200	Key Pass.	000000000000000000000000000000000000000	Paste	Previous used key Key 4	Save I	EIS data		
13 F	Erase Pass.	000000000000000000000000000000000000000	Get	Last used key	Save EIS data			
Password Calculation	Special key	413492478C280525]	Key 1	l beo l	-IS data		
			- Used -	Disabled				
	Key 1	B1CBE8C1179F6893			Write	EIS data		
Prepare Key File	Key 2	556A97B69480572D			VVIICe	EID UALA		
1.00	Key 3	61B570A285381EF6			Renew EIS			
	Key 4	BA28464336927165			INC.ITC			
ESL Tools	Key 5	D108719486687467			Clear TP	Disable Key		
	Key 6	FB48A71F765C03F8				Disable Key		
	Key 7	AFA76BD53342DA8E			Personalize W204	Test EIS status /		
Renew ECU/Gearbox	Key 8	7BEFC8C44BD8DEEE			ESL	Working key		
						100%		
Reading data success.								

5.1. EIS type

Support types:

W164 W164 2009-W166, 197, 212, 218, 246 W169, 209, 211 W172, 204, 207, 212(old, with ELV) W203, 463, 639 (K) W202, 208, 210 (K) W215, 220 (K) W230 (K) W216 W221 W639 2009-

5.2. Functions

- 1. **Mode**: Support OBD and IR adaptor read EIS. You need connect OBD line to car in OBD mode, IR mode only need IR adaptor
- 2. Chassis: EIS type, support auto detect CAN protocol EIS under OBD mode
- Allow user: When you select this option, allow input key information, password, VIN manually
- 4. Read EIS data: Read basic information and key information from EIS
- 5. **Save EIS data**: Save the read EIS data. Support save 2 types: VVDI-MB type and HC05 type
- 6. Load EIS data: Load VVDI-MB type EIS data
- Write EIS data: First you should read EIS or load EIS data, second write EIS data to new EIS. This function can use to replace EIS. Attention: Only support under IR mode, but you must connect OBD line to car
- 8. **Renew EIS**: Input correct key password and erase password, renew 2nd hand EIS to a new one. Attention: Only support under IR mode
- 9. Clear TP: This function only use to close transport protection. Once the EIS activated, this option will be always selected even renew EIS. The EIS without transport protection closed doesn't support write data
- 10. Disable Key: This function can disable key position
- 11. Personalize W204 ESL: This function can synchronize key information from EIS to W204 ESL, use for change W204 ESL. Before run this function, make sure "EIS status: Personalized selected, Activated not selected", "ESL status: Activated not selected". After success, ESL will have personalized selected. Open ignition with working key will activate ESL automatically. Attention: Only support under OBD mode, and chassis number select W172, 204, 207
- 12. Test EIS status/Working key: This function can test EIS, ELV and working key status

Test EIS status / Vorking key									
EIS Status	EIS Status								
Test EIS and ELV working or not with working key support ON: key inserted; 15R: ACC, 15: ignition ON; 50: engine									
ON H0 15R 15 50									
Meh. status							Stop		
Can status 🗸 📄 🗸 🗸									
Test working key									
1. Test working key status 2. Require connect OBD line to car before test Test working key									
Testing EIS									

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5.3. EIS Basic Information

ssid: Eis p/n:	The identification ID in EIS, use to recognize key, something like key ID EIS part number, the front 3 characters is the main type, example: W164, W166, W246 etc				
KM:	KM stored in EIS				
VIN:	VIN stored in EIS				
Write VIN:	Under OBD mode, we support write VIN to ESI without activated status				
Initialized:	Selected means EIS was already initialized. All EIS include new one with				
	selected status				
TP Cleared:	Selected means transport protection was closed. You can't write data to EIS				
	without transport protection closed				
Personalize	Selected means already written car information, insert working key will				
	activate EIS automatically				
Activated:	Selected means this EIS already have working key. You can't write data				
	to EIS with activated status				

5.4. EIS Key Information

Key Password:	Key password use for EIS to recognize working key. It is also the
	password when prepare key file (IMPORTANT)

Paste key password: You can paste your password here directly

Erase Password: Renew activated EIS to un-activated status, make EIS allow write new data. Attention: Renew EIS not only need erase password but also key password

Get erase password: First read EIS, then press button "Get", get erase password online **Special Key**: A special key stored in EIS

Previous used key: The previous used key in EIS, it is always different from last key

Last used key:The last used key in EIS. Example: insert working key with 3, 3, 1,1: the lasted used key is 1, the previous used key is 3

Key 1 – Key 8: Key track (hash) for every key. Attention: key track is not a fixed value.When you insert a working key to EIS, it's key track will changed. You can verify working key status though this method

Key used: Selected means this position have a working key

Key Disabled: Selected means this position was disabled, not accept any key. Now we don't support enable key

6. Password Calculation

6.1. Overview

Password calculation support working key mode and lost all key mode. <u>WORKING</u> <u>KEY MODE NEED PAY 1 TIME FOR SUCCESS CALCULATION. LOST ALL KEY NEED PAY 2 TIMES</u> <u>FOR SUCCESS CALCULATION</u>

Password calculation – working key: can get key password through EIS and working key (online)

CAN protocol EIS all support password calculation

Support BGA keys and other NEC keys

Support calculate password for NEC v51, v57 keys. No soldering, safe method. Data acquisition time depends on the key version. It needs about 3.5 - 13 minutes BGA version need about 5 minutes, some versions only need 3.5 minutes Calculate time in server: 30 seconds – 1 minute

Password calculation – lost all key: support W166, W212, W246, W212(old with ELV) EIS for password calculation while lost all working key

Lost all key data acquisition time depends on EIS type, It needs about 3.5-8 minutes Lost all key calculate time in server: 30 seconds – 1 minute

😿 VVDI – 💵 TOOL V2	2.0.5 Remaining Synchronization Time: 28 days	X
Options Special Function	. Process Wizard Update Online	
	Password Calculation	
	Step 1: Select working key, communicate mode and chassis	
Read Write Key	Attention: Connect device OBD line to car Mode OBD IR	
	Step 2: Press "Data Acquisition" to start with following steps	-
and the second s	 1. Insert working key to ignition, waiting 5 seconds W164 	
EIS Tools	2. Take out working key, insert again, last insert to IR reader, 3. Data acquisition	
	4. Insert working key to ignition, waiting 30 seconds	ן ר
A BE	5. Insert working key to device IR reader, wait end 6. Save acquisition data	
Password Calculation		7
	Step 3: Press "Upload Data" to send acquistion data Upload Data	
Prepare Key File	Step 4: Press "Query result" to get result Auto reflash	
CARLES.	Key Password 8016380 CD08E1D75 Copy Stop acquisite after success	
	Time SSID Status Filename	
ESL Tools	20:19:24 - 08BB90B3 - Password:8016380CD08E1D75 (Free) - VM_OBD_08BB90B3_1.dat	-
Renew ECU/Gearbox		~
		%
L	Ŭ	70
		_



6.2. Support type

- Add key support type
 W164
 W164 2009 W166, 197, 212, 218, 246
 W169, 209, 211
 W172, 204, 207, 212(old with ELV)
 W216
 W221
 W639 2009-
- Lost all key support type
 W166, 197, 212, 218, 246
 W212 (old with ELV)

6.3. Functions

Mode: OBD and IR adaptor, mode use for communicate with EIS

Chassis: Select chassis number, you can detect it with auto detect in EIS Tools **Data Acquisition**:

Press "Data Acquisition", it will continue with following steps automatically

- 1. Insert working key to ignition, waiting 15 seconds
- 2. Insert working key to device IR reader, verify key and car
- 3. Data acquisition
- 4. Insert working key to ignition, waiting 30 seconds
- 5. Insert working key to device IR reader, wait end...
- 6. Save acquisition data

Upload Data: Upload saved acquisition data to server for calculate password. Attention: Once success calculate password for one SSID, the server will not accept calculate the acquisition data with same SSID in 2 hours. **After 2 hours, acquisition data with same SSID upload to server will start with a new task**

Query result: Query server calculation result. The password will fill in key password area automatically after success calculation. Use "Copy" copy password to clipboard

Auto reflash: Program will auto re-flash server result until there's no task for this device. You can start data acquisition once more while auto reflash starting

Stop acquisite after success: If you are run data acquisition while auto reflash running, program will stop the acquisition progress when find correct password

6.4. About query result status

Query result support query calculation result in 24 hours, others don't support Query result will display Time, SSID, Status, Filename (name when upload to server) Status has the following types:

- 1. Queuing: number x, require about y minutes, means your task need y minutes
- 2. Processing: requires 1 minutes, means your task need 1 minute to finish
- 3. Password: xxxxxxxxxx (Free), means success find password, "Free" show this task is calculated for free or this task already success calculated before
- 4. Discard: Once you success calculate the password, in 2 hours, the upload acquisition data with same SSID will discard
- 5. Already upload: means the server already have this file in queuing
- 6. Pay for password calculation before upload: means your device doesn't have authorize for calculation. Contact your dealer and pay for password calculation
- 7. Failed: means this task failed to get password, you can run data acquisition again. Failed task is always free



7. Prepare Key File

Prepare key file means prepare the key file which you will write to new key (online)

- Step 1: Load EIS file with password. The file can auto detected by VVDI-MB TOOL Support VVDI-MB type and old Motorola EEPROM dump file If the loaded EIS don't contain key password, paste your password with "Paste" After load file key position show blue means it is used After load file key position show green means it is unused After load file key position show gray means it is disabled
- Step 2: Press "Prepare Key File". This function need online, about 20 seconds It will prepare the key file after success find in server After prepare key file, key position show green means success After prepare key file, key position show red means failed

🜌 VVDI – IB TOOL V	2.0.0 Remaining Sync	hronizatio	on Time:	28 day	s	🛛	
Options Special Function Process Wizard Update Online							
(a)	Step 1	File type	VVDI	-MB type	e		
Read Write Key	Load EIS file with	SSID	08B	3B90B3			
	password	Password	8016380	CD08E1	D75 Paste		
EIS Tools	Support motorola EEPROM dump	Key number	Key	y 1	~		
100		Key hash	F304BB4	4F2DEF6	5E1	Load EIS file	
Password Calculation							
Prepare Key File	Step 2 Select key position for key file	☑ Select all	🗹 Key 2	•	✓ v051 ✓ v041		
a == 1	Select key file format		✓ Key 3 ✓ Key 4	•	✓ v011		
ESL Tools	Press button "Prepare		Key 5	٠			
a the second sec	Key File"		Key 6	•			
			Key 7	•		Prepare Key File	
Renew ECU/Gearbox			Key 8	•			
	<u>L</u>					100%	
C:\W246\VVDIMB_EIS_OB	ID_08BB90B3_pass.bin						



8. ESL Tools

ESL Tools can read/write/renew ESL via OBD(K-Line). Adaptor not support now

Options Special Function Process Wizard Update Online Image: Construction ESL Basic Information ESL P/N 204 545 81 32 Imitialized Mode OBD Adaptor Read Write Key ESL S/N 3018231230421101 Imitialized Mode OBD Adaptor Image: Construction ESL S/N 3018231230421101 Imitialized Mode OBD Adaptor Image: Construction ESL S/N 3018231230421101 Imitialized Mode OBD Adaptor Image: Construction ESL Key Information Image: Construction Image: Construction Mode OBD Adaptor Image: Construction ESL Key Information Image: Construction SSID Save ESL data Save ESL data Image: Construction Special key 2AE1A3D486F427E9 Image: Construction Image: Co	😴 VVDI - HB TOOL V2.0.5 Remaining Synchronization Time: 28 days								
Read Write Key ESL P/N 204 545 81 32 Initialized Mode OBD Adaptor Read Write Key ESL S/N 3018231230421101 TP Cleared Mode OBD Adaptor HW 1408 SW F0 Personalized W204, W207, W212 VINABCDEF12345678 Write Activated Read ESL data EIS Tools ESL Key Information SID Save ESL data Fase Pass. 000000000000 Get Initialized Load ESL data Password Calculation Special key 2AE1A3D486F427E9 Load ESL data Prepare Key File Key 1 0AE82786D1A355A1 Load VVDI-MB EIS data Key 3 98218E6730252E0A Write Auto clear TP and personalized Key 4 842346E1DE9E6CD4 Renew ESL Clear TP	Options Special Function Process Wizard Update Online								
Read Write Key ESL S/N 3018231230421101 Implementation Chassis Allow user HW 1408 SW F0 Personalized W204, W207, W212 Implementation EIS Tools ESL Key Information Mrite Activated Read ESL data Read ESL data Password Calculation Special key 2AE1A3D486F427E9 SSID Save ESL data Load ESL data Prepare Key File Key 1 0AE82786D1A355A1 Load ESL data Load ESL data Load ESL data ESL Tools Key 4 842346E10E9E6CD4 Write Auto clear TP and personalized Write ESL Tools Key 5 18C67B32E230B88B Ken 2SL Clear TP Clear TP		ESL Basic Information							
Read Write Key ECL 5/1 DOUBLE FILSO		ESL P/N 204 545 81 32	🗹 Initialized	Mode OBD OAdaptor					
Image: Non-ABCDEF12345678 Image: Non-ABCDEF12345678 Image: Non-ABCDEF12345678 Image: Non-ABCDEF12345678 EIS Tools ESL Key Information ESL Key Information Read ESL data Key Pass. 0000000000000 Get Get Get Password Calculation Special key 2AE1A3D486F427E9 Load ESL data Non-ABCDEF12345671 Key 1 0AE82786D1A355A1 Load ESL data Prepare Key File Key 2 6D28FAF6BFB04DCA Write Key 3 98218E673D252E0A Write Auto clear TP and personalized ESL Tools Key 5 18C67B32E230BB8B Renew ESL Clear TP	Read Write Key	ESL S/N 3018231230421101	🗹 TP Cleared	Chassis Allow user					
EIS Tools ESL Key Information Read ESL data EST Tools ESL Key Information SSID Password Calculation Special key 2AE1A3D486F427E9 SSID Password Calculation Special key 2AE1A3D486F427E9 Load ESL data Key 1 0AE82786D1A355A1 Load ESL data Prepare Key File Key 2 6D28FAF6BFB04DCA Key 3 98218E673D252E0A Write Key 4 842346E1DE9E6 CD4 Auto clear TP and personalized ESL Tools Key 5 18C67B32E230BB8B Key 6 05FEDFC9A23ADF80 Renew ESL Clear TP		HW 1408 SW F0	Personalized	W204, W207, W212 🗸					
EIS Tools ESL Key Information Key Pass. 000000000000 Password Calculation Special key Special key 2AE1A3D486F427E9 Key 1 0AE82786D1A355A1 Prepare Key File Key 2 Key 3 98218E673D252E0A Key 4 842346E1DE9E6CD4 ESL Tools Key 5 Key 6 05FEDFC9A23ADF80	and the second s	VINABCDEF12345678 Write	Activated	Read ESL data					
Ney Pass. 000000000000000000000000000000000000	EIS Tools	ESL Key Information							
Password Calculation Special key 2AE1A3D486F427E9 Load ESL data Key 1 0AE82786D1A355A1 Load VVDI-MB EIS data Prepare Key File Key 2 6D28FAF6BFB04DCA Write Key 3 98218E673D252E0A Write Key 4 842346E1DE9E6 CD4 Auto clear TP and personalized ESL Tools Key 5 18C67B32E230BB8B Renew ESL Clear TP	203	Key Pass. 00000000000000 Paste	SSID	Save ESL data					
Special Key 2AL 1A3D4001427E3 Load ESL data Key 1 0AE82786D1A355A1 Load VVDI-MB EIS data Prepare Key File Key 2 6D28FAF6BFB04DCA Write Key 3 98218E673D252E0A Write Key 4 842346E1DE9E6CD4 Auto clear TP and personalized ESL Tools Key 5 18C67B32E230BB8B Renew ESL Clear TP	A Ste	Erase Pass. 00000000000000 Get		J					
No Code Load VVDI-MB EIS data Prepare Key File Key 2 6D28FAF6BFB04DCA Write Key 3 98218E673D252E0A Write Key 4 842346E1DE9E6CD4 Auto clear TP and personalized ESL Tools Key 5 18C67B32E230BB8B Renew ESL Clear TP	Password Calculation	Special key 2AE1A3D486F427E9		Load ESL data					
Key 3 98218E673D252E0A Write Key 4 842346E1DE9E6CD4 Auto clear TP and personalized ESL Tools Key 5 18C67B32E230BB8B Key 6 05FEDFC9A23ADF80 Renew ESL		Key 1 0AE82786D1A355A1		Load VVDI-MB EIS data					
Key 4 842346E1DE9E6CD4 Auto clear TP and personalized ESL Tools Key 5 18C67B32E230BB8B Renew ESL Key 6 05FEDFC9A23ADF80 Clear TP	Prepare Key File	Key 2 6D28FAF6BFB04DCA							
ESL Tools Key 5 18C67B32E230BB8B Key 6 05FEDFC9A23ADF80 Renew ESL Clear TP	1	Key 3 98218E673D252E0A		Write					
Key 6 05FEDFC9A23ADF80 Renew ESL Clear TP		Key 4 842346E1DE9E6CD4		Auto clear TP and personalized					
	ESL Tools	Key 5 18C67B32E230BB8B							
		Key 6 05FEDFC9A23ADF80		Renew ESL Clear TP					
		Key 7 F742DADE4C446677							
Renew ECU/Gearbox Key 8 7B6B1537AB166C6B Check ESL damage	Renew ECU/Gearbox	Key 8 7B6B1537AB166C6B		Check ESL damage					
	<u> </u>			100%					
ESL status: Closed	ESL status: Closed								

8.1. Functions

- 1. **Mode**: Now only support OBD (K-Line). If ESL was on car, you need connect the K-Line(find from device OBD head) to ESL separately
- 2. Chassis: ESL type
- 3. Allow user: If select this option, allow input key track, password, VIN manually
- 4. Read ESL data: Read basic information and key information from ESL
- 5. Save ESL data: Save the read ESL data
- 6. Load ESL data: Load ESL data read by VVDI-MB TOOL
- 7. Load VVDI-MB EIS data: Load VVDI-MB type EIS data
- 8. Write: Write the key information (shown in window) to ESL
- 9. Auto clear TP and personalized:

If you select this option, it will close transport protection and personalized ESL automatically while write data. Attention: Correct key password and EIS SSID should placed with this option

- 10. **Renew ESL**: Input correct erase password, renew 2nd hand ESL to a new one
- 11. Check ESL damage: Most W204 ESL will damage with lock status. You can test it
- 12. **Clear TP**: Close transport protection in new ESL. The ESL without transport protection closed doesn't support write data



8.2. ESL Basic Information

ESL P/N:	ESL part number, the front 3 characters is the main type, example: W204
ESL S/N:	ESL serial number
HW:	ESL hardware version
SW:	ESL software version
VIN:	VIN stored in ESL. Attention: only last 14 characters
Write VIN:	Support write VIN to ESL without activated status
Initialized:	Selected means ESL was already initialized
TP Cleared:	Selected means TP was cleared. You can't write data to ESL without TP
	cleared
Personalize	d: Selected means already written car information, insert working key will activate ESL automatically
Activated:	Selected means this ESL already have working key. You can't write data to EIS with activated status

8.3. ESL Key Information

Key Password: Key password use for EIS to recognize working key. It is also stored in ESL

Paste key password: You can paste your password here directly

Erase Password: Renew activated ESL to new one

Get erase password: First read ESL, then press button "Get", get erase password onlineSpecial Key:A special key stored in ESL. Normally it is same with EIS special keySSID:You can't read this from ESL. When you write ESL, it need this valueKey 1 – Key 8:Key track (hash) for every key. Normally it is same with EIS key track

9. Renew ECU/Gearbox

This function support renew, write VIN, personalization operation for module ECU, Gearbox, ISM etc

🜌 VVDI – IB TOOL V	72.0.7 Remaining Synchronization Time: 30 days	
Options Special Functio	on Process Wizard Update Online	
Options Special Function Read Write Key EIS Tools Password Calculation	Module Information Function VIN: WDB2110542A900220 Module Gearbox P/N: 033 545 73 32 Module Gearbox S/N: 0084485510 Read Initialized: Yes Save File TP Cleared: Yes Save File Personalized: Yes Load File Key 1 : F4B5ED2AAE21A3BF Key 2 : E0144C48307A897C Key 3 : 91E73FD4BD9CDDC6	▼ //ite
Prepare Key File	Key 4 : 27A9A30254171CBE Key 5 : 6170FA8EC80891F3	Get
Renew ECU/Gearbox	Advanced function	100%
Reading data success.		

9.1. Functions

- 1. Module: Support ECU, Gearbox, ISM etc
- 2. **Read**: Read key information, unit status and other diagnostic information. Require connect unit with CAN separately
- 3. Save File...: Save the read data to file
- 4. Load File ...: Load the saved file
- 5. Write VIN: Write VIN to unit
- 6. Get Erase Password: Get erase password online after success read module information
- 7. **Renew**: Input correct erase password, renew 2nd hand unit to a new one. Require connect unit with CAN separately
- 8. **Personalization**: Personalize unit to new car. Requires module placed on car
- 9. **Advanced function**: Only gearbox has this function. Support renew gearbox without erase password, see chapter 9.2

9.2. Advanced Functions

Support Read/Write gearbox special EEPROM. Support set unit status while write data. That means you can renew gearbox without erase password

Advanced function	
EEPROM	
47 45 41 52 42 4F 58 45 45 50 00 00 00 00 00 00	Read
5C 00 00 00 00 00 00 00 00 00 00 00 00 00	
00 00 03 00 04 02 00 00 00 00 00 00 00 00 00 00 00 00	
30 7A 89 7C 91 E7 3F D4 BD 9C DD C6 27 A9 A3 02	Save File
54 17 1C BE 61 70 FA 8E C8 08 91 F3 93 BD 7B 22	
12 47 DA 77 3B 68 6A 41 17 B6 4E 73 A8 A1 14 EC	
55 41 54 E8 8A C9 1D 59 51 CD FC 3F 00 00 00 00 00 00 00 00 00 00 00 00 00	Load File
Set unit status	Write
✓ Initialized ✓ TP Cleared	
Personalized Activated	Exit

- 1. Read: Read module special EEPROM
- 2. Save File ...: Save the read EEPROM file
- 3. Load File ...: Load the saved EEPROM file
- 4. Write: Write EEPROM to unit, it will set the selected status to module
- Set unit status: Set unit status, you can set status to unit by write once Set Activated: Will set Initialized, TP Cleared, Personalized, Activated status Set Personalized: Will set Initialized, TP Cleared, Personalized status; not set

Activated status

Set TP Cleared: Will set Initialized, TP Cleared status; not set Personalized, Activated status

Set Initialized: Will set Initialized status; not set Cleared, Personalized, Activated status

10. Process Wizard

Here will provide whole progress for some special function. Example replace EIS and replace ESL etc (Under developing, it will be released soon!)

11. Update Online

11.1. Update Firmware

- The program will read the newest software version from server automatically
- Update firmware steps:
 - 1) Connect VVDI MB TOOL to PC with USB cable
 - 2) Choose VVDI MB TOOL firmware version from Firmware List



- 3) Press button Update Online, wait the progress end
- 4) If failed to get firmware list or get something like "communicate with server error!" while update your device, close antivirus and firewall programs, try again. Change your internet provider once failed again
- 5) DON'T shutdown your PC or disconnect USB cable while update device

🌌 VVDI – 🖩 TOOL V2.0.0	Remaining Synchronization	Time: 27 days	
Options Special Function Process W:	izard Update Online		
		Update Steps 1. Connect VVDI-MB TOOL to 2. Choose firmware version 3. Press button "Update Onlin 	ne" to start N!!! rewall software, try
Firmware List		Device Information	
1 2.0.0 MB1 Beta		▼	
V2.0.1 (2015-11-17) * UI modify v2.0.0 (2015-11-16) * MB1 V2.0.0		Device Information	Update Online
Completed.			0%



Update Online Tool will connect to server automatically and download the newest firmware information. You can press reflash picture button if there's no display. After you get information success, will display current support firmware list, the software support by specify firmware and the mainly include update information

Device Information

After connect VVDI-MB TOOL to PC and install USB drivers, Press button Device Information, will show you VVDI-MB TOOL Serial Number, current firmware version and



hardware version etc

• Update Online

After connect VVDI-MB TOOL to PC and install USB drivers, choose you expect firmware version from firmware list, Press button Update Online, wait progress finish (about 3 minutes) (Require internet)

11.2. Update software

- This function require internet support
- Use "Menu ->Update Online->Software Update" to obtain VVDI-MB TOOL latest software version, the software version require firmware version etc. Press Download Link will download the latest software
- If there's no display for software version, shutdown your firewall and antivirus programs, try again



Software Update		×
Korse *	Latest software version : V2.0.0 Require firmware : V2.0.0	
Automatic Key Cutting Machine 了解更多	Download Link 1	

11.3. Latest Update Information

- This function require internet support
- Use "Menu->Update Online->Latest Update Information" to obtain VVDI-MB TOOL latest update information

11.4. History Update Information

Use "Menu->Update Online->History Update Information" to obtain VVDI-MB TOOL history update information

12. Case Description

12.1. W246 EIS with BGA (79) keys, add new key via OBD

- 1. Insert working key to device IR reader, Press "Identification key", check working key version
 - ♦ If key with BE version, you can read password via IR
 - If key with v51, v57 version, you can read password via NEC adaptor, or you can use password calculation
 - ♦ Here key version is 79, belong to BGA key. We use password calculation for key



😿 VVDI – IB TOOL V	2.0.0 Rema	aining Synchronization Time: 28 days
Options Special Function	n Process Wizard l	Update Online
	Key Information —	Function
	SSID	08BB90B3 Mode O IR O NEC Adaptor
Read Write Key	Counter	240E36 Type Identification key
	Remain times	149302
and the second s	Use times	47305 Identification key
EIS Tools	Key number	1
1303	Status	14EC Used Read BE key password
Password Calculation	Version	79
	Mark values	830A240101FF Save Key file
	Key Password	Сору
Prepare Key File	Key EEPROM	Load Key file
	00 00 00 00 00	0 00 00 00 00 00 00 00 00 00 00 00 00 0
ESL Tools		
Renew ECU/Gearbox	00 00 00 00 00	0 00 00 00 00 00 00 00 00 00 00 00 00 0
(***************		100%
Reading data success.		

password

- 2. Connect device OBD line to car. Select **OBD** mode, chassis select AutoDetect (CAN)
 - Press Read EIS data. Chassis will turn to specify item after success read
 - ◆ Follow steps 1->2->3->4 in picture and save EIS data
 - ♦ It will save 2 files, VVDI-MB type and HC05 type
 - ◆ There's default file name when save EIS data. You'd better keep it

VVDI – MB TOOL User Manual

😿 VVDI – 💵 TOOL V	2.0.0	Remaining Synchron	nizati	on Time: 28 day	75	
Options Special Function Process Wizard Update Online						
	EIS Basic Ir	EIS Basic Information EIS Function				
	SSID	08BB90B3		🗹 Initialized 🖊 🔶	Mode 💿 OBD	○ IR
Read Write Key	EIS P/N	246 905 99 00]	✓ TP Cleared	Chassis	Allow user
	КМ	12800]	🗹 Persona 🔁 e 🛶 🛶	W166, 197, 212, 218,	246 👻
	VIN		Write	Activated	Read EIS dat	
EIS Tools	EIS Key Inf	ormation]
20	Key Pass.	000000000000000000000000000000000000000	Paste	Previous used key Key 3	Save EIS dat	
	Erase Pass.	000000000000000000000000000000000000000	Get	Last used key		
Password Calculation	Special key	413492478C280525]	Key 1	Load EIS dat	
			Used -	Disabled		•
	Key 1	F304BB4F2DEF65E1				
Prepare Key File	Key 2	556A97B69480572D			Write EIS dat	3
1.	Кеу З	61B570A285381EF6			Renew EIS	
	Key 4	30E3243E4DF17B58			Kellew Elb	
ESL Tools	Key 5	D108719486687467			Clear TP	
473	Key 6	FB48A71F765C03F8				
	Key 7	AFA76BD53342DA8E			Personalize W204	ESL
Renew ECU/Gearbox	Key 8	7BEFC8C44BD8DEEE				
						100%
Reading data success.						

Save As						? 🛛
Savejn:	🚞 W246		~	3 🕫	• 🖽 🥙	
My Recent Documents						
Desktop						
My Documents						
My Computer						
My Computer	File <u>n</u> ame:	WDIMB_EIS_OBD	_08889083		*	<u>S</u> ave
My Network	Save as <u>t</u> ype:	EEPROM (*.bin)			*	Cancel

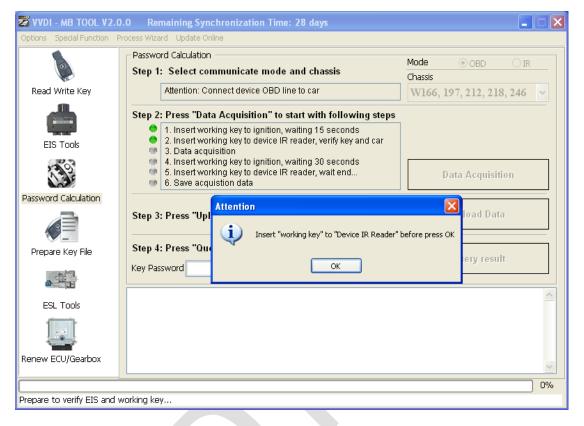
Save As						? 🔀
Save in:	🗀 W246		~	G 🦻	جي 🥙	
My Recent Documents	VVDIMB_EIS_O	BD_08BB90B3				
Desktop						
My Documents						
My Computer						
ng comparer	File name:	EIS_OBD_088B90B3			*	Save
	Save as type:	EEPROM (*.bin)			*	Cancel
My Network						

- 3. Enter Password Calculation, calculate key password
 - ◆ Select OBD mode, chassis select W166, 197, 212, 218, 246
 - ◆ Press "Data Acquisition", progress with following steps
 - Insert "working key" to "EIS" before press OK; only insert working key to EIS, don't switch ignition ON

2 VVDI - MB TOOL V2.0.	0 Remaining Synchronization Time: 28 days	X
Options Special Function Pro	ocess Wizard Update Online	
	Password Calculation	-
Read Write Key	Attention: Connect device OBD line to car W166, 197, 212, 218, 246	
EIS Tools	Step 2: Press "Data Acquisition" to start with following steps I.Insert working key to ignition, waiting 15 seconds I.Insert working key to device IR reader, verify key and car J.Data acquisition	-
	 4. Insert working key to ignition, waiting 30 seconds 5. Insert working key to device IR reader, wait end 6. Save acquisition data 	
Password Calculation	Step 3: Press "Upload Data Upload Data Upload Data	
Prepare Key File	Step 4: Press "Query Key Password]
ESL Tools		
Renew ECU/Gearbox		~
L	U	70



- ♦ Waiting 15 seconds
- Insert "working key" to "Device IR Reader" before press OK; take off working key from EIS and insert to device IR Reader, then press OK



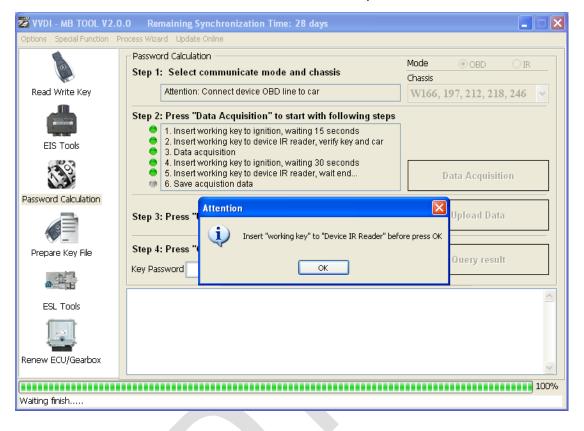
🜌 VVDI - MB TOOL V2.0.	.0 Remaining Synchronization Time: 28 days	
Options Special Function Pro	ocess Wizard Update Online	
	Password Calculation Mode OBD II Step 1: Select communicate mode and chassis Chassis Chassis	<u> </u>
Read Write Key	Attention: Connect device OBD line to car W166, 197, 212, 218, 246	~
EIS Tools	Step 2: Press "Data Acquisition" to start with following steps 1. Insert working key to ignition, waiting 15 seconds 2. Insert working key to device IR reader, verify key and car 3. Data acquisition 3. Data acquisition	
100 m	 4. Insert working key to ignition, waiting 30 seconds 5. Insert working key to device IR reader, wait end 6. Save acquisition data 	
Password Calculation		
	Step 3: Press "Upload Data" to send acquistion data	
Prepare Key File	Step 4: Press "Query result" to get result Auto reflash Key Password Copy Stop acquisite	
a the	after success	
ESL Tools		
Renew ECU/Gearbox		~
		71%
Processing data acquistion	used time: 02 min 30 sec, left time: 01 min 09 sec	

◆ Data acquisition progress, just wait it finish. The left time will show on the bottom

♦ After 100%, Insert "working key" to "EIS" before press OK; only insert working key to EIS, don't switch ignition ON

🛿 VVDI - MB TOOL V2.0	.0 Remaining Synchronization Time: 28 days
Options Special Function Pr	rocess Wizard Update Online
	Password Calculation Mode OBD IR Step 1: Select communicate mode and chassis Chassis Chassis
Read Write Key	Attention: Connect device OBD line to car W166, 197, 212, 218, 246 🗸
EIS Tools	Step 2: Press "Data Acquisition" to start with following steps 1. Insert working key to ignition, waiting 15 seconds 2. Insert working key to device IR reader, verify key and car 3. Data acquisition
199	 4. Insert working key to ignition, waiting 30 seconds 5. Insert working key to device IR reader, wait end 6. Save acquisition data
Password Calculation	Step 3: Press "Up Attention Upload Data Upload Data
Prepare Key File	Step 4: Press "Qu Key Password OK Query result
ESL Tools	
Renew ECU/Gearbox	
	100%
Processing data acquistion.	used time: 03 min 36 sec, left time: 00 min 00 sec

- ♦ Waiting 30 seconds
- Insert "working key" to "Device IR Reader" before press OK; take off working key from EIS and insert to device IR Reader, then press OK



 After save acquisition data you will get next window. Please keep the default file name when save acquisition data

VVDI - MB TOOL V2.0.	.0 Remaining Synchronization Time: 28 days
Options Special Function Pr	ocess Wizard Update Online
	Password Calculation Mode OBD IR Step 1: Select communicate mode and chassis Chassis Chassis
Read Write Key	Attention: Connect device OBD line to car W166, 197, 212, 218, 246 🗸
EIS Tools Password Calculation Prepare Key File	Step 2: Press "Data Acquisition" to start with following steps 1. Insert working key to ignition, waiting 15 seconds 2. Insert working key to device IR reader, verify key and car 3. Data acquisition 4. Insert working key to device IR reader, verify key and car 3. Data acquisition 4. Insert working key to device IR reader, verify key and car 5. Data acquisition 4. Insert working key to be leavilian. Unoting 20 coendo Attention Acquisition finished, upload the saved data with "Upload Data" for password oad Data OK Step 4
ESL Tools	Key Password Copy Stop acquisite after success
Renew ECU/Gearbox	
Acquistion finished, upload	the saved data with "Upload Data" for password

Press Upload Data to upload saved acquisition data to server

😼 VVDI - MB TOOL	V2.0.0 Rem	naining Synchro	nization Time: 28 days		
Options Special Funct	ion Process Wizar	d Update Online			
	Passwor	d Calculation —		Mode	
	Open				2 🛛
Read Write Key	Look in:	🗀 W246		🖌 🔇 🌶 📂 🛄-	218, 246 🐱
EIS Tools	My Recent	C VM_OBD_088B			
Password Calculation	Documents Documents Desktop				isition
Prepare Key File	My Documents				Data
a - 12	My Computer				
ESL Tools		File name:	VM_*_08BB90B3_*.dat	*	Open
	My Network	Files of type:	config (*.dat)	→	Cancel
Renew ECU/Gearbo	(~
					100%

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Press Query result to get result, you can select "Auto reflash", it will query server result automatically, it need about 1 minute

🜌 VVDI – 💵 TOOL V2	. 0. 0							
Options Special Function Process Wizard Update Online								
	Password Calculation	Mode OBD OIR						
	Step 1: Select communicate mode and chassis	Chassis						
Read Write Key	Attention: Connect device OBD line to car	W166, 197, 212, 218, 246 🗸						
	Step 2: Press "Data Acquisition" to start with following steps							
EIS Tools	 1. Insert working key to ignition, waiting 15 seconds 2. Insert working key to device IR reader, verify key and car 3. Data acquisition 							
N ^O	 4. Insert working key to ignition, waiting 30 seconds 5. Insert working key to device IR reader, wait end 6. Save acquistion data 	Data Acquisition						
Password Calculation								
	Step 3: Press "Upload Data" to send acquistion data	Upload Data						
Prepare Key File	Step 4: Press "Query result" to get result Auto reflash Key Password Copy Stop acquisite	Query result						
a	after success							
ESL Tools	Time SSID Status 01:19:07 - 08BB90B3 - Processing: require about 1 minutes -	Filename All Statements Filename - VM_OBD_08BB90B3_1.dat						
Renew ECU/Gearbox		~						
		0%						
L								

♦ After calculate success, key password will display at key password area automatically, press "Copy" copy the password to clipboard

🜌 VVDI - MB TOOL V2.0	.0 Remaining Synchronization Time: 28 days
Options Special Function Pr	rocess Wizard Update Online
	Password Calculation Mode OBD IR Step 1: Select communicate mode and chassis Chassis Chassis
Read Write Key	Attention: Connect device OBD line to car W166, 197, 212, 218, 246
EIS Tools	Step 2: Press "Data Acquisition" to start with following steps 1. Insert working key to ignition, waiting 15 seconds 2. Insert working key to device IR reader, verify key and car 3. Data acquisition 3. Data acquisition
Password Calculation	 4. Insert working key to ignition, waiting 30 seconds 5. Insert working key to device IR reader, wait end 6. Save acquisition data
	Step 3: Press "Upload Data" to send acquistion data Upload Data
Prepare Key File	Step 4: Press "Query result" to get result Auto reflash Key Password 8016380CD08E1D75 Copy Stop acquisite after success Auto reflash Query result
ESL Tools	Time SSID Status Filename 01:19:07 - 088B90B3 - Password:8016380CD08E1D75 (Free) - VM_OBD_088B90B3_1.dat
Renew ECU/Gearbox	
	100%
Find correct password! Don	't require data acquistion, use the password in key password area

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- 4. Save EIS data with password
 - Enter **EIS Tools** again
 - Read EIS data
 - Use "**Paste**" paste the password to key password area
 - ♦ Then save EIS data again
 - ♦ Steps: 1->2->3

🜌 VVDI – IB TOOL V	72.0.0	Remaining Synchron	nizati	on Time: 28 day	7 S		
Options Special Function	on Process W	izard Update Online					
	EIS Basic In	formation			EIS Functi	on	
2	SSID	08BB90B3		✓ Initialized	Mode	OBD	◯ IR
Read Write Key	EIS P/N	246 905 99 00]	TP Cleared	Chassis		Allow user
	КМ	12800]	Personalized	W166, 1	97, 212, 218,	246 👻
and the second second	VIN		Write	Activated		Read EIS dat	_
EIS Tools	EIS Key Inf	formation				Read EIS dat	a
2003	Key Pass.	8016380CD08E1D75	Paste	Brovious sed key Key 3		Save EIS dat	_
	Erase Pass.	00000000000000000	Get	Last used key		Save EIS dat	d
Password Calculation	Special key	413492478C280525]	Key 1		Load EIS dat	a
			Used	Disabled			
	Key 1	F304BB4F2DEF65E1				una ere da	
Prepare Key File	Key 2	556A97B69480572D				Write EIS dat	d
Letter St.	Key 3	61B570A285381EF6				Renew EIS	
	Key 4	30E3243E4DF17B58				ICHEW ED	
ESL Tools	Key 5	D108719486687467				Clear TP	
	Key 6	FB48A71F765C03F8					
	Key 7	AFA76BD53342DA8E			Р	ersonalize W204	1 ESL
Renew ECU/Gearbox	Key 8	7BEFC8C44BD8DEEE					
100%							
Key password was paste s	uccessfully.						

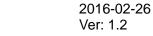
5. Enter Prepare Key File

- Press Load EIS file load EIS data with password
- The file path will be shown at bottom
- ◆ VVDI-MB TOOL will auto detect load file type, here is VVDI-MB type
- SSID and key password was shown

🌌 VVDI – 💵 TOOL V	2.0.0 Remaining Sync	chronizatio	on Time:	28 day	s	
Options Special Functio	on Process Wizard Update Online					
	Step 1	File type	VVDI	-MB type	e	
Read Write Key	Load EIS file with	SSID	08E	3B90B3		
	password	Password	8016380	CD08E1	D75 Paste	
EIS Tools	Support motorola EEPROM dump	Key number	Key	y 1	~	
1000 C	P	Key hash	F304BB4	4F2DEF6	65E1	Load EIS file
Password Calculation						
Prepare Key File	Step 2 Select key position for	✓ Select all	✔ Key 1 ✔ Key 2	•	✓ v051 ✓ v041	
	key file Select key file format		✔ Key 3 ✔ Key 4	•	▼v011	
ESL Tools	Press button "Prepare		Key 5	٠		
	Key File"		Key 6	•		
			Key 7	٠		Prepare Key File
Renew ECU/Gearbox			Key 8	•		
100%						
C:\W246\VVDIMB_EIS_OBD_08BB90B3_pass.bin						

- Select key position and format for key file, Press Prepare Key File (online)
- After server find success, select where you want to save the key file, press save directly

Select postio	on to save key file		? 🛛
Save in: 🚞	W246	🔽 🕝 🦻	⊳ 🖽
VM_OBD_0 VVDIMB_EI)8BB90B3_pass		
File name:	Press Save directly	*	Save
Save as type:	Key File(*.*)	*	Cancel



- 6. Enter Read Write Key. If you want Keyless Go, please select NEC adaptor
 - We make a BE key.
 - ◆ Input BE key to device IR reader, select IR mode and BE key
 - Press Identification key
 - ◆ Load Key file, we load key 4
 - Press Write
 - ♦ Steps:1->2->3->4->5

😿 VVDI – IB TOOL V	72. 0. 0 Ren	aining Synchronizati	on Time: 28 da	ays 📃 🗆 🔀
Options Special Function	on Process Wizard	Update Online		
	– Key Information – SSID		1 🔶	Function Hode IR O NEC Adaptor
Read Write Key	Counter		2 🔶	Type BE key
	Remain times Use times		3 🔶	Identification key
EIS Tools	Key number			
12.02	Status	21DF Unuse		Read BE key password
Password Calculation	Version Mark values	BE FFFFFFF730C	Write	Save Key file
	Key Password		Сору	
Prepare Key File		C D0 8E 1D 75 0B BB 90		Load Key file
	F5 06 E7 81 A	.7 32 35 4E 5B 7E 16 CD .9 D4 F9 02 16 54 8E EC .C 2E 80 CE 5A 3D 51 01	DF B3287 FB	Write
ESL Tools	79 F0 2E 1F A	6 DD AA 2E 72 1E D9 31 A 65 71 92 36 43 46 28	BA 7C 5B 5A	
	FF FF FF 58 7	ΣB OD D6 78 02 7F FF FF 'B F1 4D 3E 24 E3 30 7F 'F FF FF FF F9 24 A8 B2	FF 00 00 02	Renew
Renew ECU/Gearbox		F FF FF FF 73 OC FF FF		
				100%
C:\W246\key4_0BBB90B3	_051.bin			

😿 VVDI – IB TOOL V	72. 0. 0 Ren	aining Synchronizati	on Time: 28 d	days 🔲 🗖 🛛 🔀		
Options Special Functio	on Process Wizard	Update Online				
	Key Information -			Function		
	SSID	0BBB90B3		Mode IR NEC Adaptor		
Read Write Key	Counter	2F1F7C		Type BE key		
	Remain times	196604				
	Use times	3		Identification key		
EIS Tools	Key number	4				
100	Status	04FC Unuse		Read BE key password		
Password Calculation	Version	BE				
	Mark values	FFFFFFFF730C	Write	Save Key file		
	Key Password		Сору			
Prepare Key File	Key EEPROM			Load Key file		
THE R. L.)C D0 8E 1D 75 0B BB 90 A7 32 35 4E 5B 7E 16 CD				
● ^{→→} 32	F5 06 E7 81 A	49 D4 F9 02 16 54 8E EC	DF B3 87 FB	Write		
ESL Tools		LC 2E 80 CE 5A 3D 51 01)6 DD AA 2E 72 1E D9 31				
		A 65 71 92 36 43 46 28				
		CB OD D6 78 02 7F FF FF 7B F1 4D 3E 24 E3 30 7F		Renew		
Renew ECU/Gearbox		FF FF FF FF F9 24 A8 B2		Kellew		
		FF FF FF FF 73 OC FF FF	FF FF U4 FC			
	100%					
Reading data success.						

Press Identification key again after write key file. You can see key is prepared success

- 7. Insert new key to EIS, the EIS will learn the new key
 - ♦ First the red light will ON , then OFF, means key learn success
 - ◆ Read EIS data once more, you can find key 4 was selected

🜌 VVDI - IB TOOL V	72.0.0	Remaining Synchron	nizati	on Time: 28 day	ys		
Options Special Function	on Process W	izard Update Online					
	- EIS Basic Ir	formation	_	EIS Function			
0	SSID	08BB90B3		🗹 Initialized	Mode	OBD	◯ IR
Read Write Key	EIS P/N	246 905 99 00]	TP Cleared	Chassis		Allow user
	КМ	12800		Personalized	W166, 1	97, 212, 218,	246 🗸
	VIN		Write	Activated		Read EIS dat	
EIS Tools	EIS Key Inf	ormation		L			
io ar	Key Pass.	000000000000000000000000000000000000000	Paste	Previous used key Key 1		Cours ETC data	
L.J.F	Erase Pass.	000000000000000000000000000000000000000	Get	Last used key		Save EIS dat	a
Password Calculation	Special key	413492478C280525		Key 4		Load EIS dat	a
			Used -	Disabled			
	Key 1	F304BB4F2DEF65E1				Write EIS dat	
Prepare Key File	Key 2	556A97B69480572D				White ETP dat	d
	Key 3	61B570A285381EF6				Renew EIS	
	Key 4	BA28464336927165				IXCIICW LLD	
ESL Tools	Key 5	D108719486687467				Clear TP	
	Key 6	FB48A71F765C03F8				Ciedi TP	
	Key 7	AFA76BD53342DA8E				ersonalize W204	ESI
Renew ECU/Gearbox	Key 8	7BEFC8C44BD8DEEE				6150110126 VV20	
100%							
Reading data success.							

8. Completed.

>	/1	
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