

Zed-FULL Mercedes-Benz Key Programming **User Manual**



ZFH-MB



**For reading key data
from car ignition**

EA KEY **(BZR115Z) 433MHZ**



**For:
All FBS3 vehicles**

EA KEY **(BZR116Z) 315MHZ**



**For:
All FBS3 vehicles**

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Zed-FULL Mercedes-Benz Kit Content

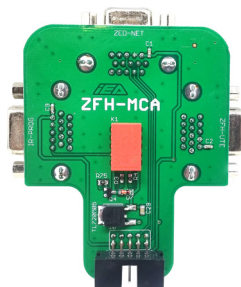
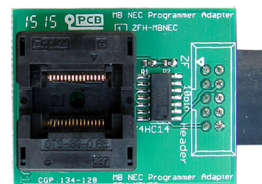


✓ **“ZFH-MB” KEY**

**“IR-PROG”
MODULE** ✓



**“ZFH-MBNEC”
PROGRAMMER ADAPTER WITH SOCKET** ✓



✓ **“ZFH-MCA” MULTI CONNECTION ADAPTER**

**“ZFH-C16”
ZFH-MCA CABLE** ✓



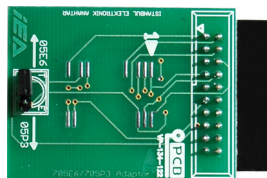
✓ **“ZFH-C17”
GATEWAY CONNECTION 2 PINS CABLE
(PINK + YELLOW)**



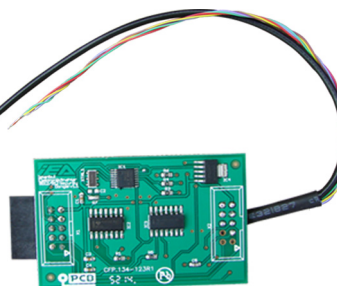
**“Zed-NET”
Wi-Fi MODULE** ✓



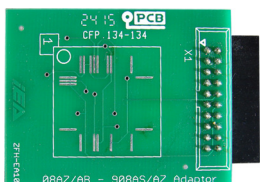
✓ **“ZFH-EA6”
28 PINS MCU PROGRAMMER
PCB ADAPTER SOIC28 (05E6/05P3)**



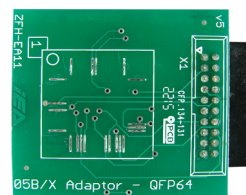
**“ZFH-EA7”
SECURITY MCU PROGRAMMER
ADAPTER (912/9S12/9S12X)** ✓



✓ **“ZFH-EA10”
64 PINS MCU PROGRAMMER
PCB ADAPTER (08AZ/AB-908AS/AZ)**



**“ZFH-EA11”
64 PINS MCU PROGRAMMER
PCB ADAPTER (QFP64 - 05B/X)** ✓

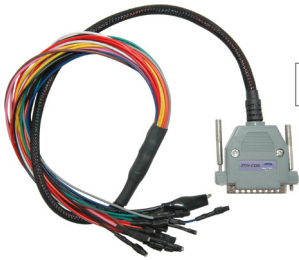


✓ **“ZFH-C08” MCU PROGRAMMER 20 PINS CABLE
(QFP64 08AZ/AB, 908AS/AZ)**



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Zed-FULL Mercedes-Benz Kit Content



☒ **“ZFH-C09”**
UNIVERSAL CABLE



“ZFH-C10” ☒
IR-PROG CONNECTION CABLE



☒ **“ZFH-C11”**
IR-PROG PC CONNECTION CABLE

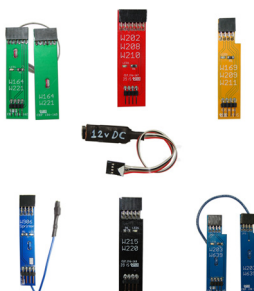


“ZFH-C15” ☒
ZFH-UTE CONNECTION CABLE



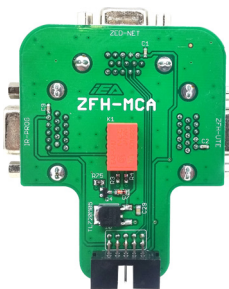
☒ **“ZFH-UTE”**
(UNIVERSAL TRANSPONDER EMULATOR)

“TOOL101” TWEEZER ☒



☒ **“ZFH-MB TEST KIT”**

Required additional adapters for Mercedes BGA/FBS3 key programming



✓ “ZFH-MCA” ADAPTER

“ZFH-C16”
ZFH-MCA CABLE ✓



✓ “Zed-NET”
Wi-Fi MODULE

“ZFH-UTE”
(UNIVERSAL TRANSPONDER EMULATOR) ✓



✓ “ZFH-C15”
ZFH-UTE CONNECTION CABLE

“ZFH-C09”
UNIVERSAL CABLE ✓



✓ “ZFH-C17”
GATEWAY CONNECTION 2 PINS CABLE
(PINK + YELLOW)

SAMPLE CONNECTION FOR “BGA-FBS3” SYSTEM ACCESSORIES



↑
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General details for Mercedes-Benz key programming

1- Many Types of W203, W209, W211, W215, W220 EZS/EIS Boxes

The version of working key is not important, even there is no working key, a new key can be programmed using ZFH-MB key easily with this feature.

2- If the working key has

*** If the key can be read with IR-PROG(BGA/FBS3 kit will be used)**

* NEC MCU with 51, 57 versions

* Motoroka MCU

* NEC MCU with EA or BE versions

in this case no need to remove EZS / EIS from the car.

3- You will be better instructed if you read all of the working keys at the beginning of the procedure.

4- If the working key has EA or BE versions, this is the easiest case to program a new key. Because in this case we do not need to remove neither EZS/EIS from car nor the NEC MCU located on working key. We can get all required data from car ignition using ZFH-MB and from working key by reading it with IR-PROG module.

5- You can read EZS/EIS modules with Zed-FULL programmer adapters easily.

6- PC SW is required just to send the EZS / EIS data which is read with another programmer

7- No need computer or internet connections to sniff data from car or to calculate key datas.

8- For Mercedes-Benz Key programming only IEA made "EA" version keys or "OEM (second hand)" keys can be used. These OEM keys must be erased with Zed-FULL adapters before use.

9- For each application only 1 new key can be programmed. 10- During key programming procedure if the working key is Motorola type, you may still use NEC based key (OEM or EA version) as a new key

10- Even the car EZS/EIS boxes cover or PCB seems same as with pictures on Zed-FULL. Still there might be some small differences so please before starting the procedure check the box carefully.

11- As long as the working key can be read with IR-PROG, Zed-FULL can program a new key for all Mercedes-Benz vehicles between 1998-2015 using Mercedes-Benz BGA/FBS3 kit.



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WORKING KEY ?

Yes (If it can be read with IR-PROG)

Use BGA/FBS3 Kit
Read working key with IR-PROG
If the can be read with IR-PROG,
select "SERVER" option to program a new key.

- 1- Connect ZFH-MCA, Zed-NET and IR-PROG to **Zed-FULL**.
- 2- Connect Zed-FULL to OBD2 port on vehicle.
- 3- Select "Add Key>SERVER" and select the option to continue
– Auto Detect(OBD) or Select System(ZFH-MB), (C09/ZFH-MBCA), (ZFH-UTE).

EA or BE Key
(No need to remove EZS/EIS from car)

- 1-First using ZFH-MB Key, sniff data from ignition.
- 2-Using IR-PROG module, read sniffed data from ZFH-MB and send it to Zed-FULL.
- 3-No need to remove anything from working key. Read working key with IR-PROG module
- 4-After getting sniffed info and working key info, new key data will be calculated to be written onto a new key.

All other version Keys
(Need to remove EZS/EIS from car)

All steps are same as lost key situation

Many Types of W203-W209-W211-W220 EZS/EIS Boxes
(No need to remove EZS/EIS from the car)

- 1- First get data from ignition using ZFH-MB Key
- 2- Use IR-Prog module to get data from ZFH-MB key
- 3- Now we are ready to program a new key.

Systems other than W203-W209-W211-W220

- 1- Check the class of the car from VIN number. (W220, W215 etc ...) (Sample : Wxx220xxxxxxxxxxxx - **W220**)
- 2- If the class is supported with Zed-FULL remove EZS/EIS from the car and open the box to read MCU located on EZS/EIS board
- 3- Read the MCU located on the EZS/EIS board with Zed-FULL reader adapters to get required data. If the MCU can not be read with one of Zed-FULL adapters, use another MCU programmer to read the required data, save it to computer and using Zed-FULL PC SW send it to Zed-FULL to continue further steps from Zed-FULL.
- 4- Received data either directly from Zed-FULL reader adapters or from PC SW, will be used to calculate the key data, and calculated data will be written on a new key to complete the procedure.

No (Lost key situation)

51, 57 version Key or Motorola Key
(No need to remove EZS/EIS from car)

- 1- First using ZFH-MB Key, sniff data from ignition.
- 2- Using IR-Prog module, read sniffed data from ZFH-MB and send it to Zed-FULL.
- 3- Remove the NEC or Motorola MCU from working key and read the info from that MCU using Zed-FULL reader adapters.
- 4-After getting sniffed info and working key info, new key data will be calculated to be written onto a new key.

Many Types of W203-W209-W211-W220 EZS/EIS Boxes
(No need to remove EZS/EIS from the car)

- 1- First get data from ignition using ZFH-MB Key
- 2- Use IR-Prog module to get data from ZFH-MB key
- 3- Read working key with IR-Prog module No need to remove MCU from working key.
- 4- Now we are ready to program a new key.

Mercedes-Benz BGA/FBS3 system "Add Key" application

SN: A16463EF Ver:1.1.77 Credits:1000 LIFS:23 days

MAIN MENU



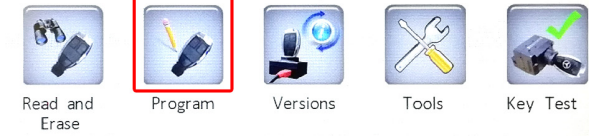
Key Remote Recycling OBD Application Eeprom MCU

MB IR-PROG Special Functions Pin Code Versions Settings

Select **"MB IR-PROG"** section on device screen

SN: A16463EF Ver:K.0.1.13 Credits:1000 LIFS:17 days

MAIN MENU MB IR-PROG



Read and Erase Program Versions Tools Key Test

Select **"Program"**

SN: A16463EF Ver:K.0.1.13 Credits:1000 LIFS:17 days

MAIN MENU MB IR-PROG PROGRAM ADD

*If there is a working key
Select this option.

***If you select working key position
it will no longer work as the new key
will be overwritten!

Press 'Continue' button to continue.

Options
Add Key
Lost Key

Exit Continue

Car has one working key, we will add a key
Select **"Add Key"**

SN: A16463EF Ver:K.0.1.13 Credits:1000 LIFS:17 days

MAIN MENU MB IR-PROG PROGRAM ADD

Connect IR-PROG to the Zed-FULL external port.

*Put the key to the IR-PROG as seen below
then press 'Read'.

*After reading all working keys press
'Continue'.

Number of keys read : 0

Options
Read (Use IR-PROG)
Read (Use NEC Adapter)
Read (Use MOT Adapter)

Read

All working keys must be read on this step
Select **"Read(IR-PROG)"** section.
Insert all working keys to **IR-PROG** one by one and
press **"Read"** button.
After reading all working keys, press **"Continue"** button.

SN: A16463EF Ver:K.0.1.13 Credits:1000 LIFS:17 days

MAIN MENU MB IR-PROG PROGRAM ADD



Generate a new key using working key and server connection.

*For this process, connect IR-PROG and Zed-NET
to Zed-FULL using ZFH-MCA.

Options
EZS/EIS
PC
ZFH MB *
SERVER (BGA/FBS3 Syst.)
ZFH-UTE (EA/BE Key)
ZFH-UTE

Exit Continue

Connect **ZFH-MCA** to **Zed-FULL**. Connect **IR-PROG**
and **Zed-NET** to **ZFH-MCA** adapter sockets.

Select **"SERVER"** on screen and press **"Continue"** button.

SN: A16463EF Ver:K.0.1.13 Credits:1000 LIFS:17 days

MAIN MENU MB IR-PROG PROGRAM ADD

1-Connect the ZED-FULL to Car using
OBD cable.

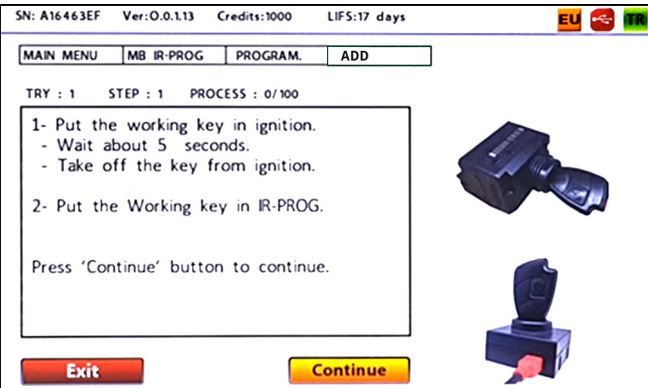
*Press 'Continue' button to continue.

Options
Auto-Detect System(OBD)
Select System(C09/ZFH-MBCA)
Select System(ZFH-MB)
Select System(ZFH-UTE)

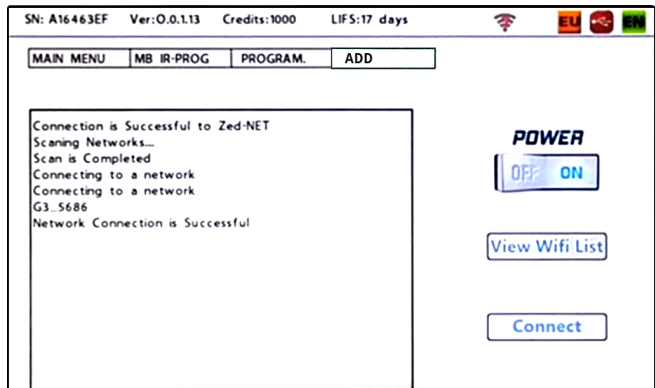
Exit Continue

* **Auto Detect (OBD)**: ESZ/EIS data will be extracted from
the car through OBD2 socket.
* **Select System(09/ZFH-MBCA)**: Remove EZS/EIS box
from the car and read data from EZS/EIS box using
ZFH-C09 cable or **ZFH-MBCA**.
* **Select System(ZFH-MB)**: EZS/EIS data will be extracted
using **ZFH-MB** sniffer from ignition.
* **Select System(ZFH-UTE)**: EZS/EIS data will be
extracted using **ZFH-UTE** sniffer from ignition.

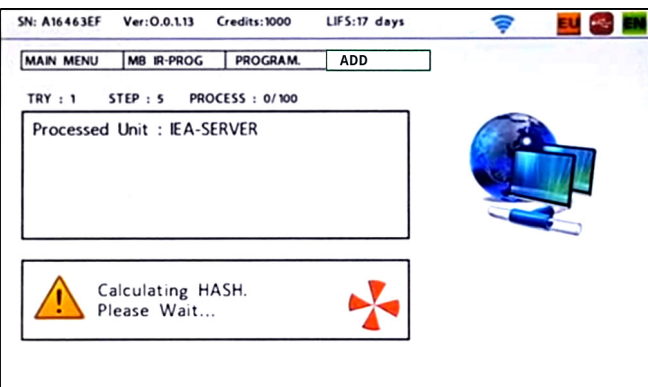
Mercedes-Benz BGA/FBS3 system "Add Key" application



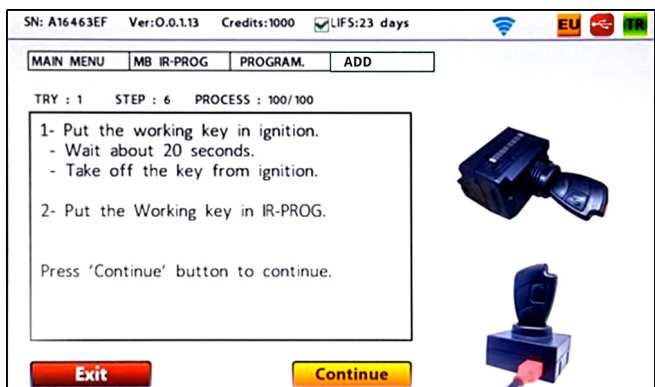
- * Insert working key to car ignition
 - * Wait 5 seconds and remove the key
 - * Insert working key to "IR-PROG" and press "Continue" button.
- Zed-FULL** may ask you to repeat these steps few times.



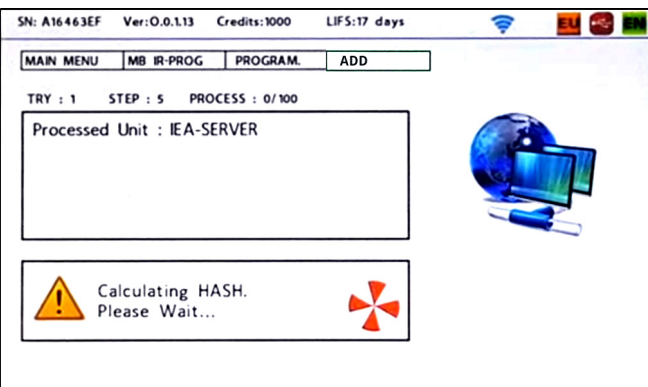
- Zed-FULL** must be connected to internet network via **Zed-NET**. Press "ON" button to activate **Zed-NET**, after that press on "Wifi List" to select network to be connected, enter password and press on "Connect" button.



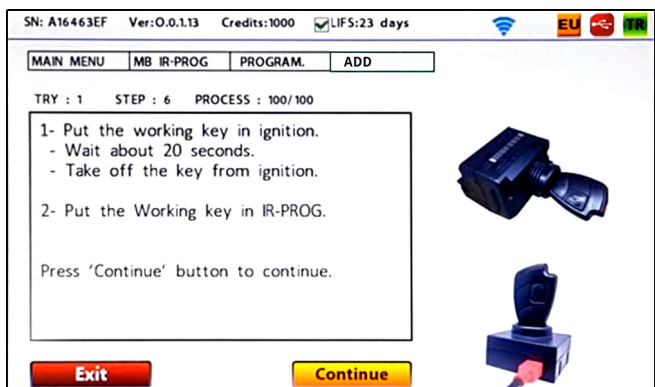
- Zed-FULL** is going to connect to "iEA-Server" for key calculation. This process may take up to 2 minutes.



- * Insert working key to ignition
- * Wait 20 seconds and remove key from ignition
- * Insert key to "IR-PROG" and press "Continue" button.

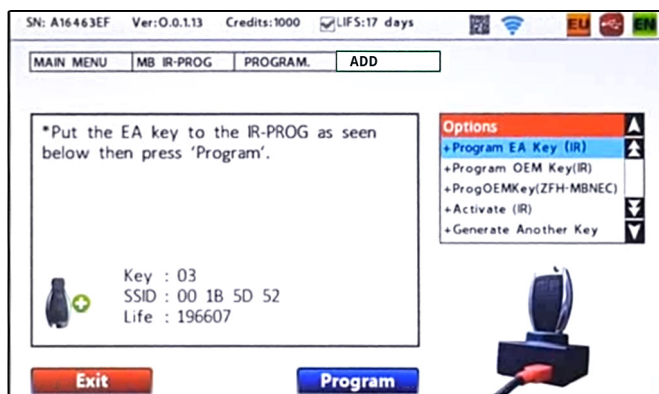


- Zed-FULL** will pass on to key programming step after "PASSWORD calculated" warning shown on screen.

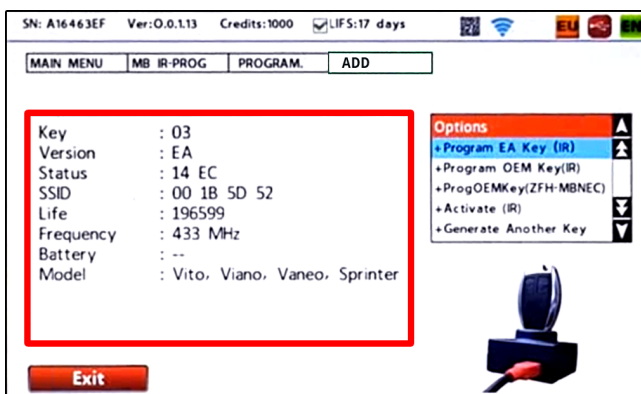


- * **Your Key:** Existing working keys
- * **Used:** Already key programmed slot. If all keys are lost, if you select any "Used" slot, this key number slot will be overwritten.
- * **Not Used:** Empty slot in memory

Mercedes-Benz BGA/FBS3 system “Add Key” application

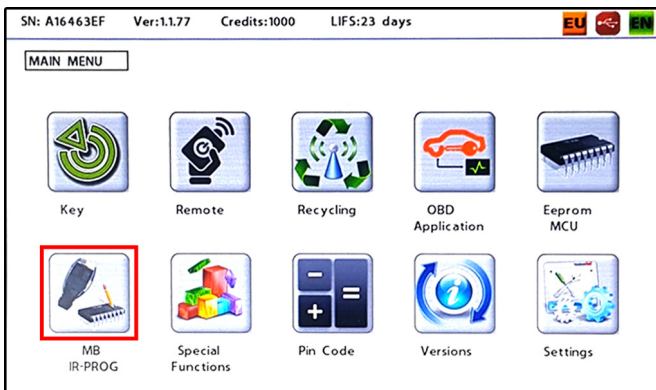


EA version key will be programmed.
Insert EA key to **IR-PROG**
Select **“Program EA Key (IR)”** and press on
“Program Key” button.

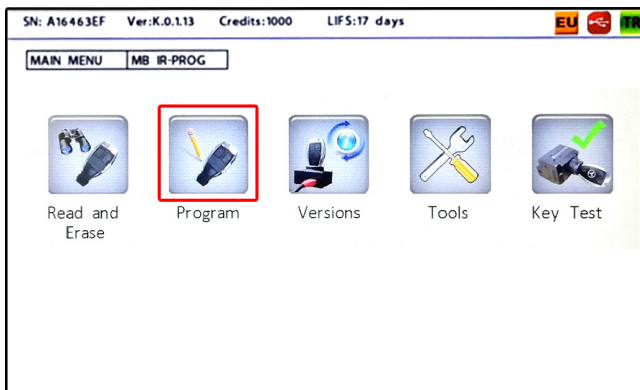


Key programming is completed.
You may check programmed key(s) info on
Zed-FULL screen.
Press **“Exit”** to complete process.

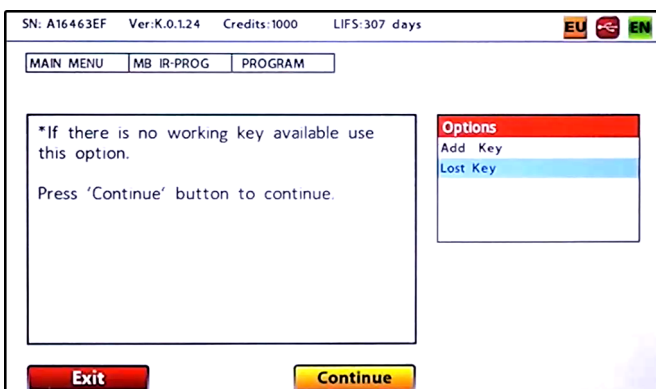
Mercedes-Benz BGA/FBS3 system “Lost Key” application



Select “MB IR-PROG” section on device screen

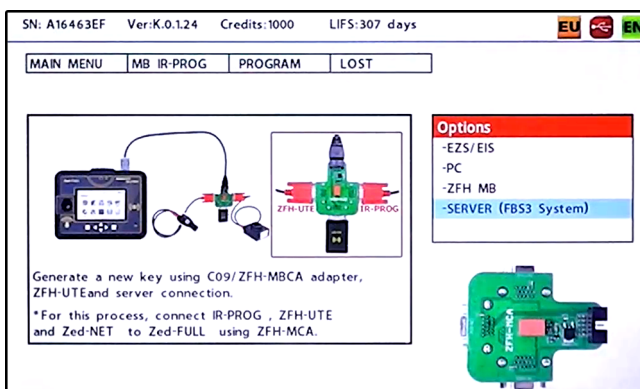


Select “Program”



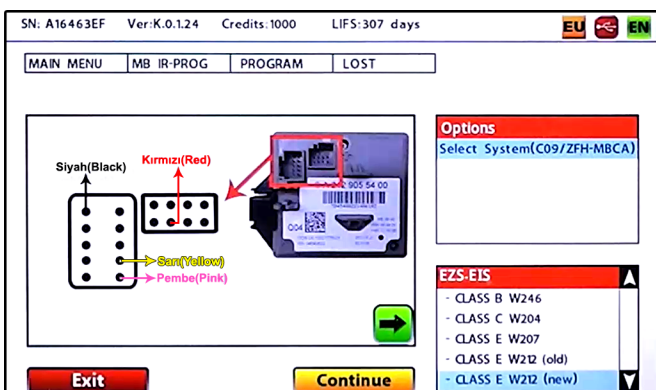
Working key does not exist.

Select “Lost Key”.



Connect **ZFH-MCA** to **Zed-FULL**. Connect **IR-PROG** and **Zed-NET** to **ZFH-MCA** adapter sockets.

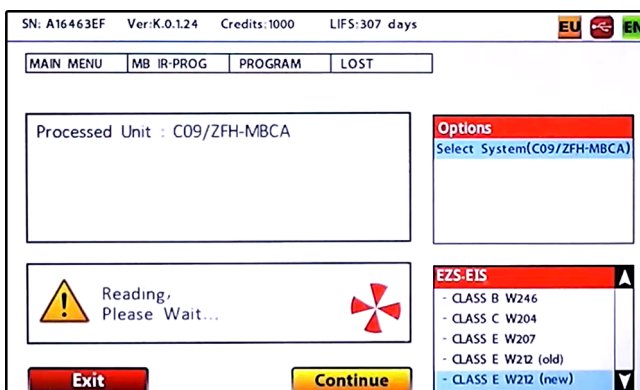
Select “SERVER” on screen and press “Continue” button.



Select System(C09/ZFH-MBCA)

* **ZFH-C09** :Data will be read from EZS/EIS unit using ZFH-C09 cable. EZS unit must be removed from the car.

* **ZFH-MBCA**: Data will be read from EZS/EIS unit. Connect “**ZFH-MBCA**” adapter to “**ZFH-MBC3**” and **Zed-FULL** “OBDDONGLE” port. EZS unit must be removed from the car.



Reading data from EZS/EIS may take up to 1 minute.

Mercedes-Benz BGA/FBS3 system "Lost Key" application

SN: A16463EF Ver:0.0.124 Credits:1000 LIFS:307 days

MAIN MENU MB IR-PROG PROGRAM LOST

SSID : 28 FC A7 99
PASSW :
MAGIC : C2 E9 01 F0 ED BA 7C 53
H0 + L : 8A 1B 6E 15 94 86 C8 E6
H1 + P : C7 53 F2 86 C9 89 10 C7
H2 + : 2B BE C9 AA 2A AB 81 3D
H3 - : 74 3B 50 23 A4 DA B1 B2
H4 - : 44 74 54 25 CE 7B 9A 81
H5 - : FB 6C 80 C3 C2 F3 50 E7
H6 - : AC 2B F7 7E 59 CA 42 88
H7 - : 95 56 5E 00 BF 0A B9 DA
VIN : WDD2120022A513480
EZS No : 2129055400

Options
Select_System(C09/ZFH-MBCA)

EZS-EIS
- CLASS B W246
- CLASS C W204
- CLASS E W207
- CLASS E W212 (old)
- CLASS E W212 (new)

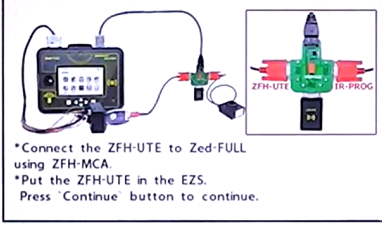
Exit Continue

Reading data from EZS/EIS completed.
VIN number, EZS/EIS number and some other info
is shown on **Zed-FULL** screen.

SN: A16463EF Ver:0.0.124 Credits:1000 LIFS:307 days

MAIN MENU MB IR-PROG PROGRAM LOST

TRY : 1 STEP : 1 PROCESS : 0/100



*Connect the ZFH-UTE to Zed-FULL using ZFH-MCA.
*Put the ZFH-UTE in the EZS.
Press 'Continue' button to continue.

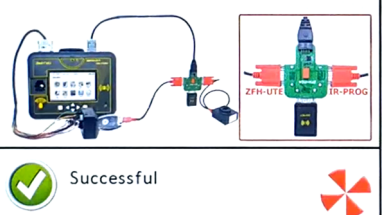
Exit Continue

ZFH-MBCA connections has already been done.
Now connect "**ZFH-UTE**" to EZS/EIS unit
and press "**Continue**" button.

SN: A16463EF Ver:0.0.117 Credits:1000 LIFS:435 days

MAIN MENU MB IR-PROG PROGRAM.

TRY : 1 STEP : 1 PROCESS : 0/100



Successful

Data reading through "**ZFH-UTE**" has been completed.
Zed-FULL will automatically proceed to next step.

SN: A16463EF Ver:0.0.117 Credits:1000 LIFS:435 days

MAIN MENU MB IR-PROG PROGRAM.

Arge-AP
192.168.158
Synchronisation is Successful
IP control is successful
Network Connection is Successful

POWER
OFF ON

View Wifi List

Connect

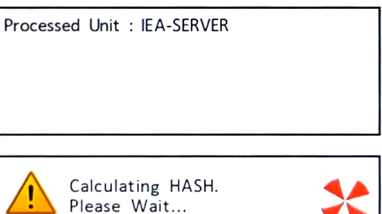
Zed-FULL must be connected to internet network via **Zed-NET**. Press "**ON**" button to activate **Zed-NET**,
after that press on "**Wifi List**" to select network to be
connected, enter pasword and press on "**Connect**" button.

SN: A16463EF Ver:0.0.117 Credits:1000 LIFS:435 days

MAIN MENU MB IR-PROG PROGRAM.

TRY : 1 STEP : 2 PROCESS : 0/100

Processed Unit : IEA-SERVER



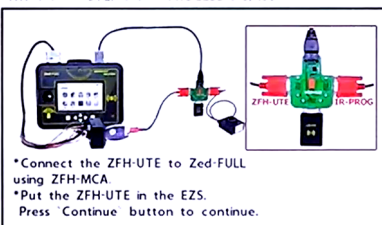
Calculating HASH.
Please Wait...

Zed-FULL is going to connect to "**iEA-Server**" for key
calculation. This process may take up to 2 minutes.

SN: A16463EF Ver:0.0.124 Credits:1000 LIFS:307 days

MAIN MENU MB IR-PROG PROGRAM LOST

TRY : 1 STEP : 1 PROCESS : 0/100

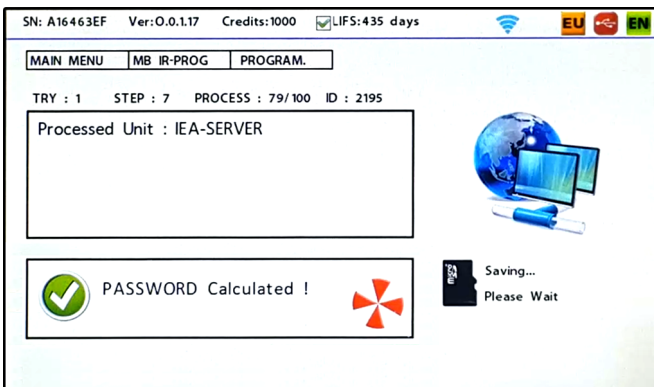


*Connect the ZFH-UTE to Zed-FULL using ZFH-MCA.
*Put the ZFH-UTE in the EZS.
Press 'Continue' button to continue.

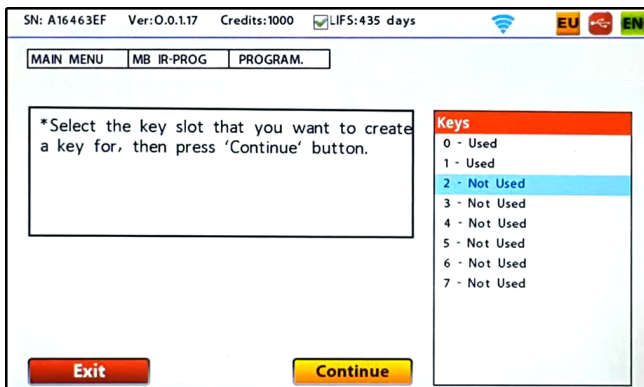
Exit Continue

ZFH-MBCA connections has already been done.
Now connect "**ZFH-UTE**" to EZS/EIS unit
and press "**Continue**" button.

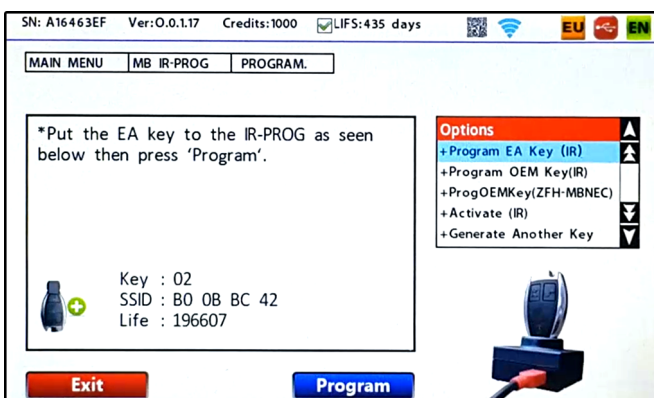
Mercedes-Benz BGA/FBS3 system “Lost Key” application



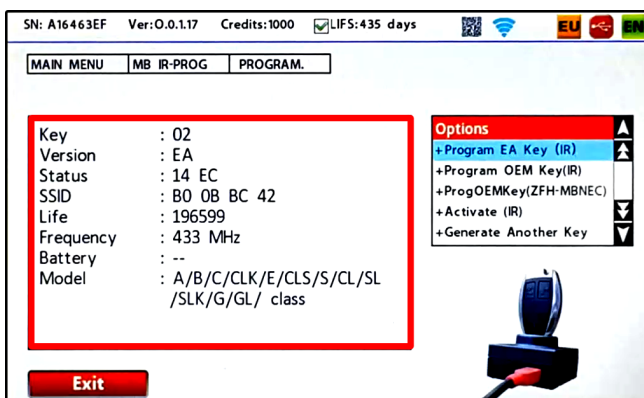
Zed-FULL will pass on to key programming step after “PASSWORD calculated” warning shown on screen.



* **Your Key:** Existing working keys
 * **Used:** Already key programmed slot. If all keys are lost, if you select any “Used” slot, this key number slot will be overwritten.
 * **Not Used:** Empty slot in memory

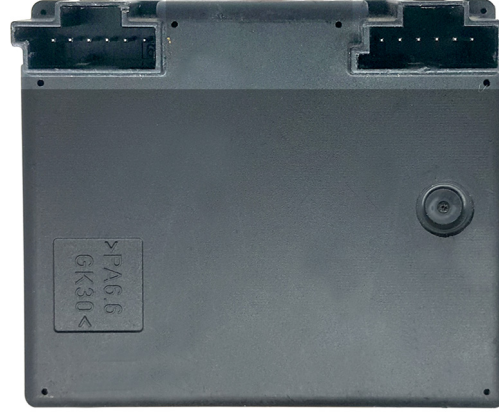


EA version key will be programmed.
 Insert EA key to **IR-PROG**
 Select “**Program EA Key (IR)**” and press on “**Program Key**” button.



Key programming is completed.
 You may check programmed key(s) info on **Zed-FULL** screen.
 Press “**Exit**” to complete process.

Mercedes-Benz "W164"(Old) EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

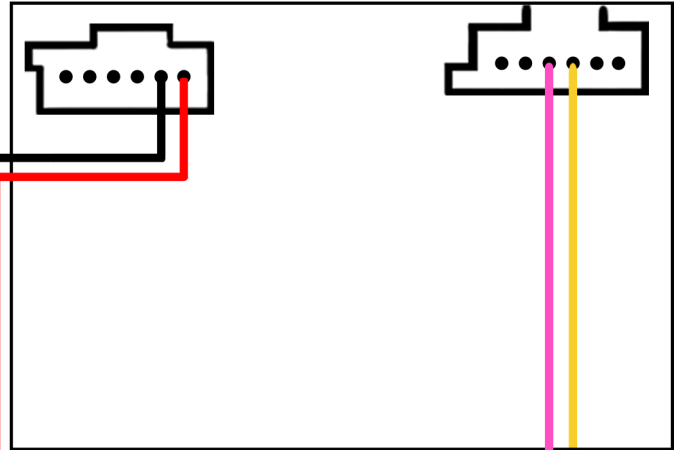
GND (Siyah / Black)

+12 V (Kırmızı / Red)

CAN-L (Pembe / Pink)

CAN-H (Sarı / Yellow)

EZS / EIS
W164 (Old)



ZFH-C17 CABLE

Gateway module socket

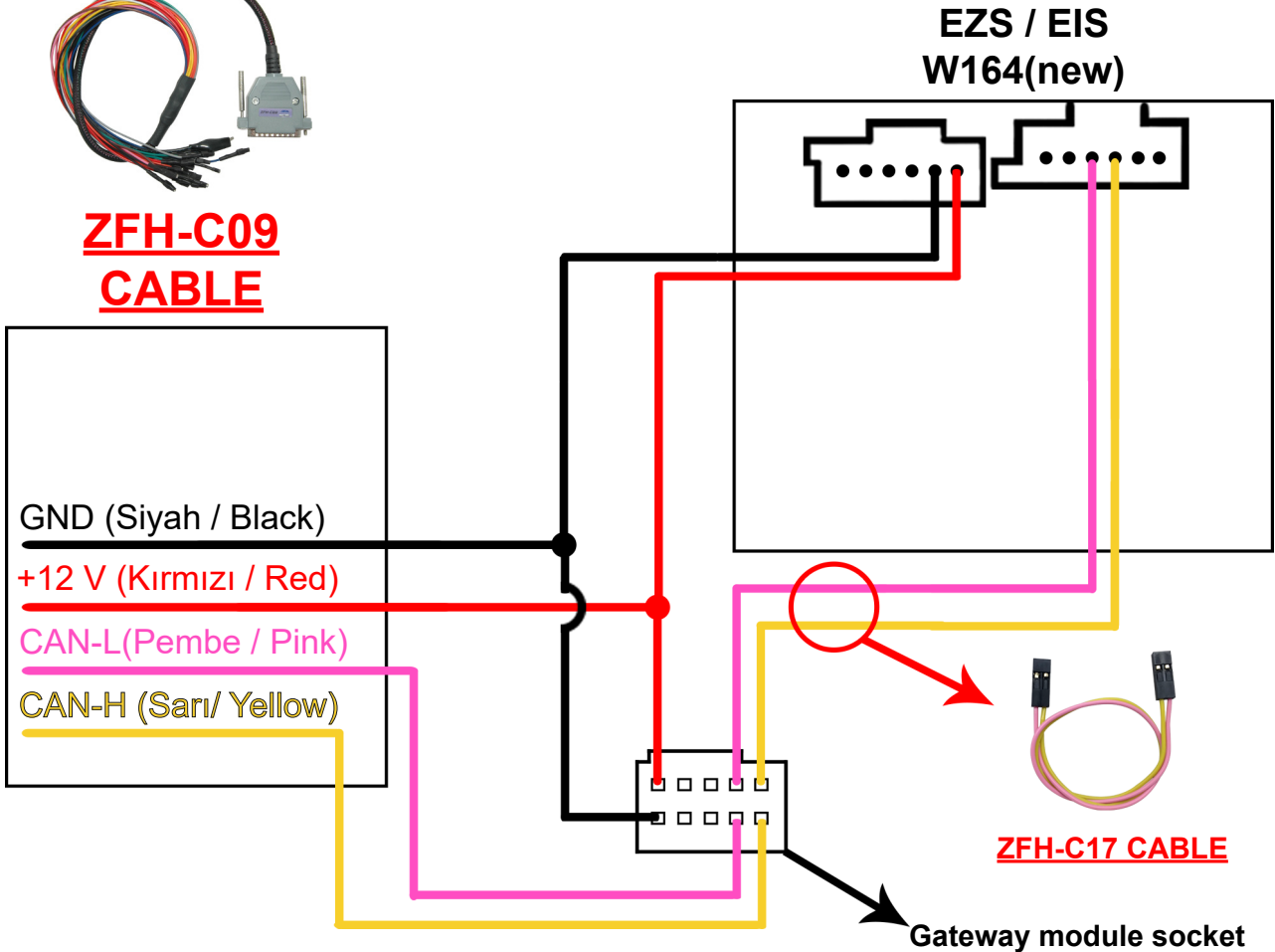
For this application, beside "ZFH-C09" cable, "ZFH-C17" and a "Gateway Module" are also required. Connect indicated "ZFH-C09" cable wires to the pins shown on "Gateway Module" and "EZS/EIS" box properly. If you do not have a "Gateway Module", to purchase please contact with your distributor for "MB-GWM" product.

Optional: This application can also be done with "ZFH-MBCA"+"ZFH-MBC2" adapters.

Mercedes-Benz "W164(New)" EZS / EIS ZFH-C09 UNIVERSAL CABLE



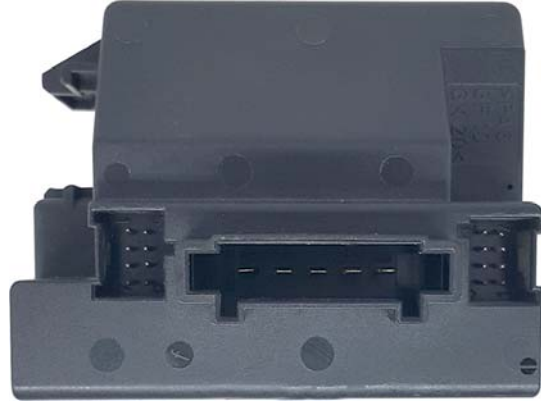
ZFH-C09
CABLE



For this application, beside "ZFH-C09" cable, "ZFH-C17" and a "Gateway Module" are also required. Connect indicated "ZFH-C09" cable wires to the pins shown on "Gateway Module" and "EZS/EIS" box properly. If you do not have a "Gateway Module", to purchase please contact with your distributor for "MB-GWM" product.

Optional: This application can also be done with "ZFH-MBCA"+"ZFH-MBC2" adapters.

Mercedes-Benz “W169, W209, W211” EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

K-Line (Yeşil / Green)

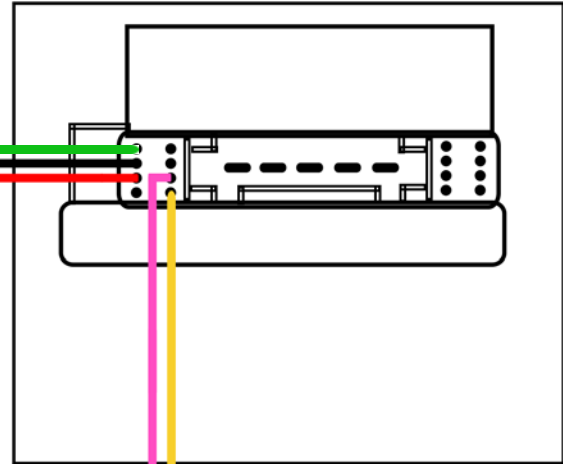
GND (Siyah / Black)

+12 V (Kırmızı / Red)

CAN-L (Pembe / Pink)

CAN-H (Sarı / Yellow)

EZS / EIS
W169, W209, W211



ZFH-C17 CABLE

Gateway module socket

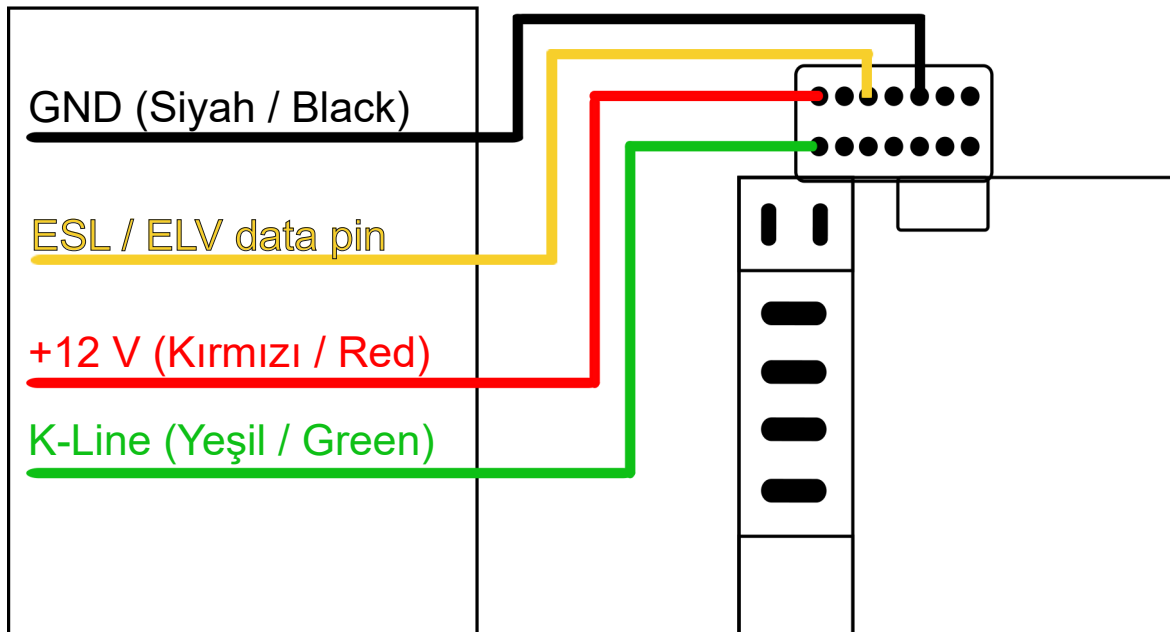
For this application, beside "ZFH-C09" cable, "ZFH-C17" and a "Gateway Module" are also required. Connect indicated "ZFH-C09" cable wires to the pins shown on "Gateway Module" and "EZS/EIS" box properly. If you do not have a "Gateway Module", to purchase please contact with your distributor for "MB-GWM" product.

Mercedes-Benz “W202, W208, W210” EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

**EZS / EIS
W202, W208, W210**



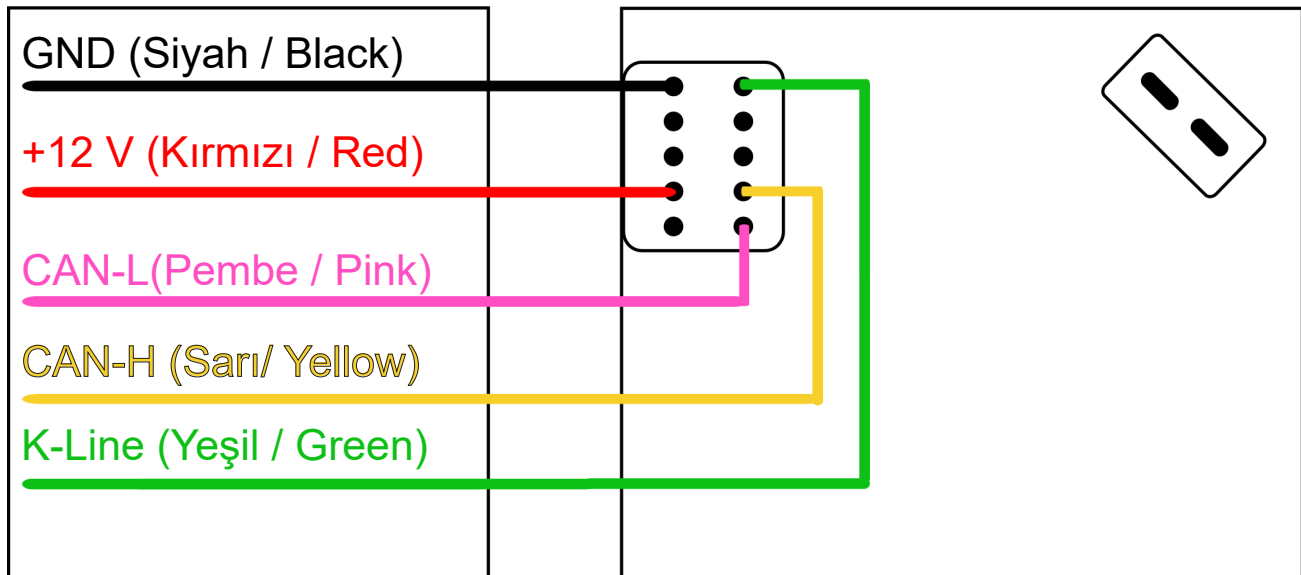
Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

Mercedes-Benz “W204, W207, W212(Old)” EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

EZS / EIS
W204, W207, W212(old)



Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

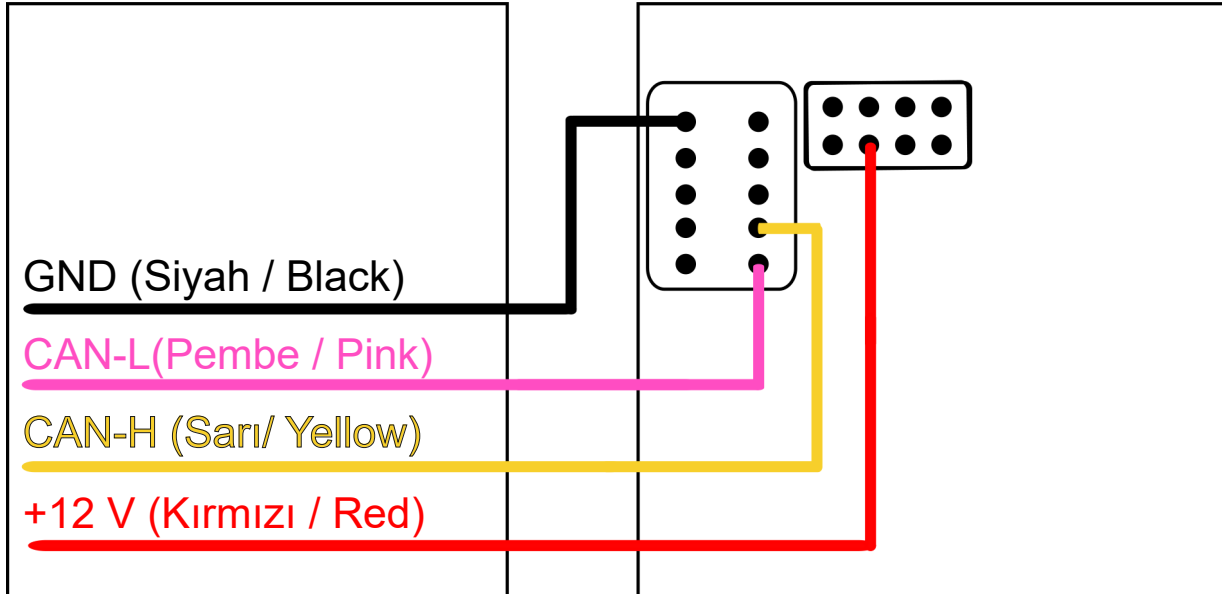
Optional: This application can also be done with "ZFH-MBCA"+"ZFH-MBC1" adapters.

Mercedes-Benz "W212(New)" EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

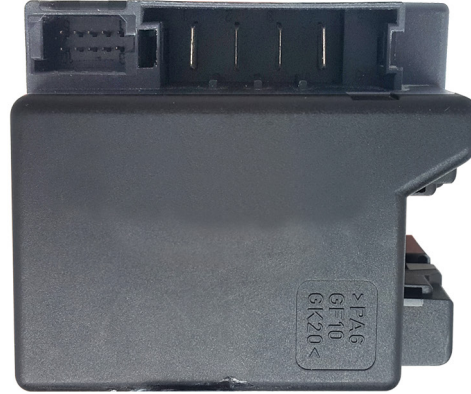
**EZS / EIS
W212(new)**



Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

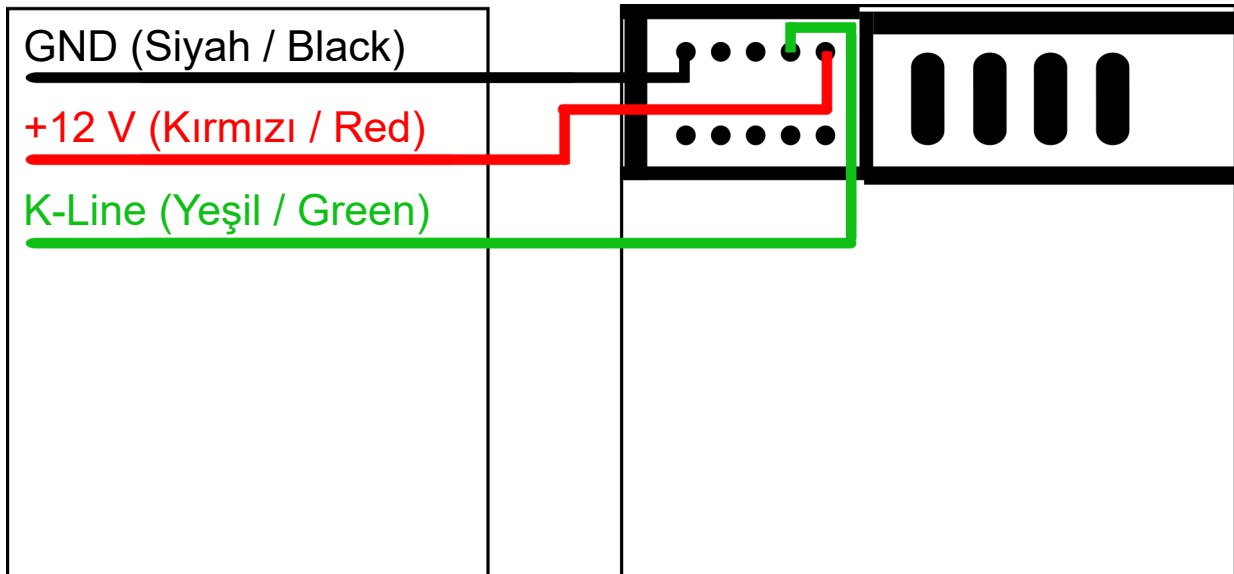
Optional: This application can also be done with "ZFH-MBCA"+"ZFH-MBC4" adapters.

Mercedes-Benz “W215, W220, W230” EZS / EIS ZFH-C09 UNIVERSAL CABLE



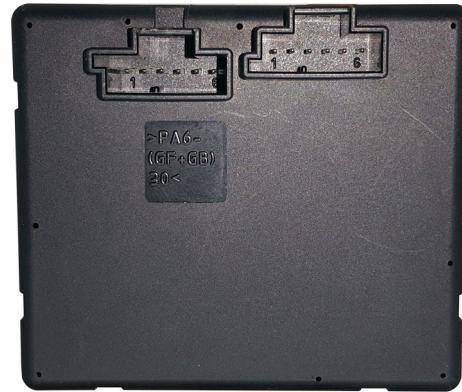
ZFH-C09 CABLE

**EZS / EIS
W215, W220, W230**



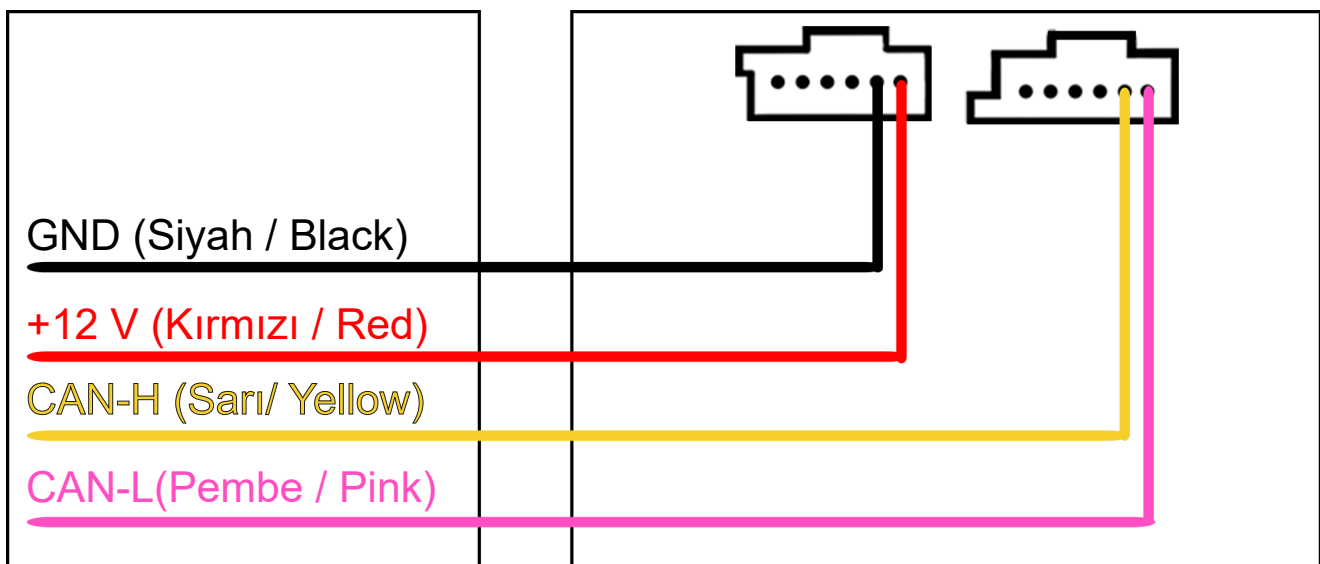
Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

Mercedes-Benz “W216, W221” EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

EZS / EIS
W216, W221



Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

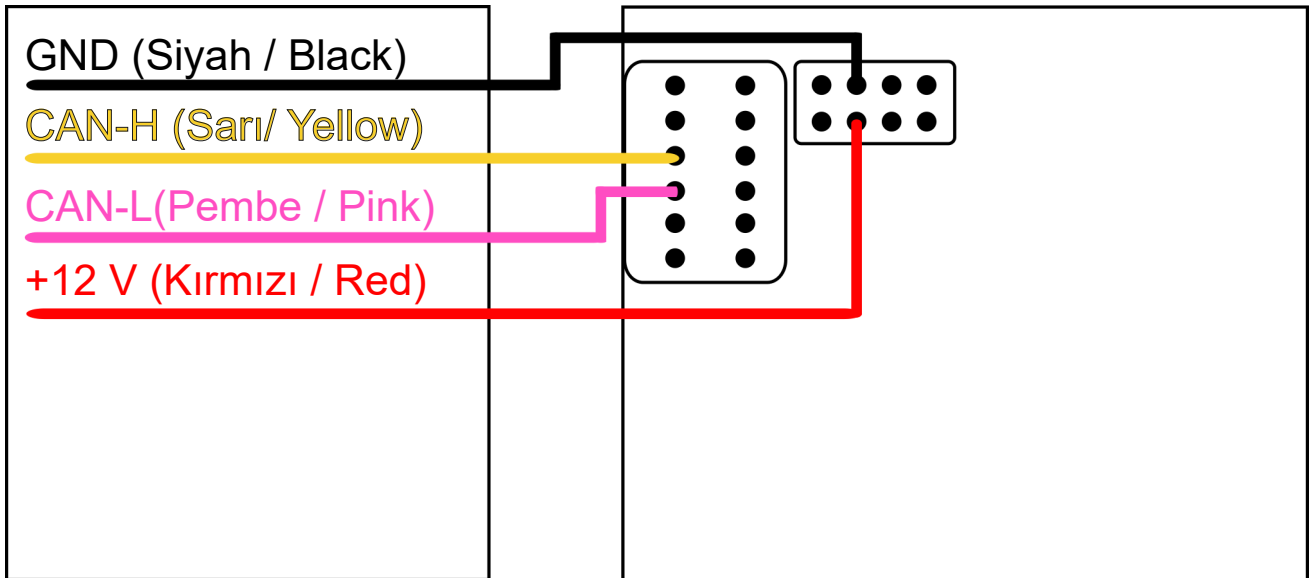
Optional: This application can also be done with "ZFH-MBCA"+"ZFH-MBC3" adapters.

Mercedes-Benz "W246, W166" EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

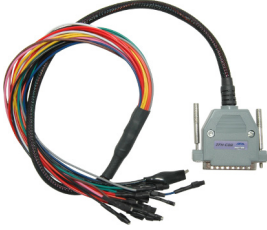
EZS / EIS
W246, W166



Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

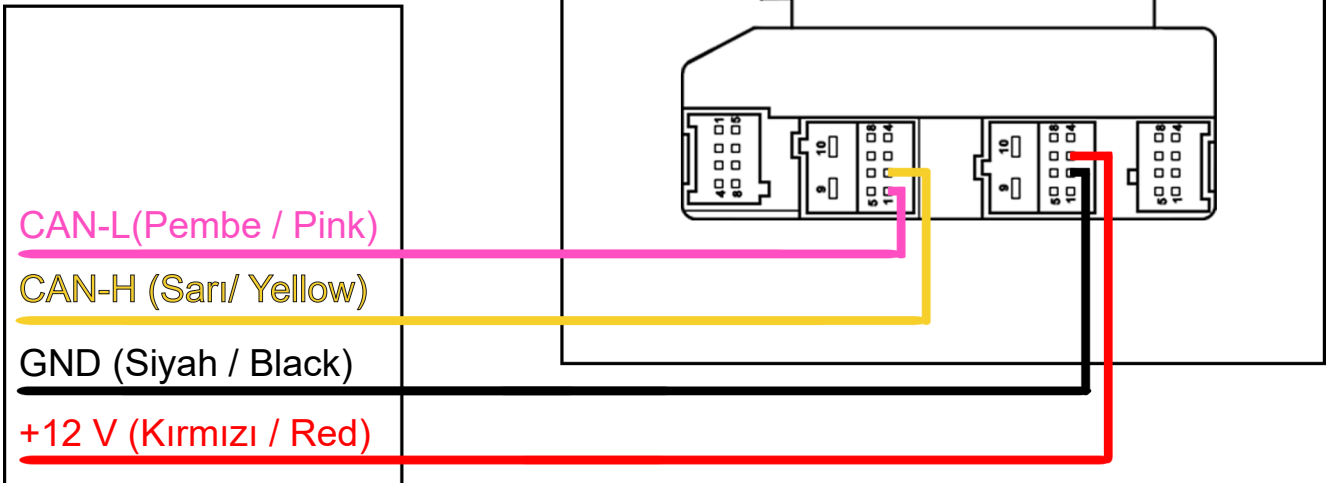
Optional: This application can also be done with "ZFH-MBCA"+"ZFH-MBC5" adapters.

Mercedes-Benz “W639 (CAN)” EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

EZS / EIS W639 (CAN)



Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

Mercedes-Benz “W639 (K-Line), W203” EZS / EIS ZFH-C09 UNIVERSAL CABLE



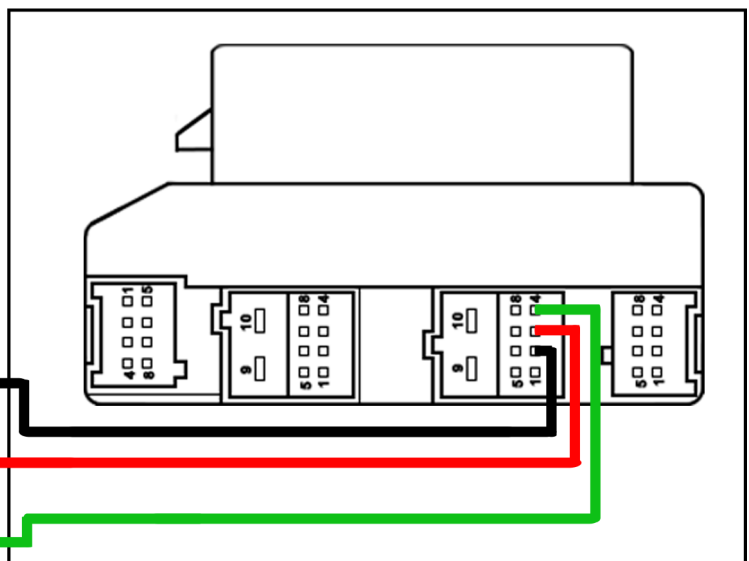
ZFH-C09 CABLE

**EZS / EIS
W639 (K-line), W203**

GND (Siyah / Black)

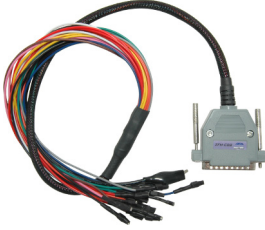
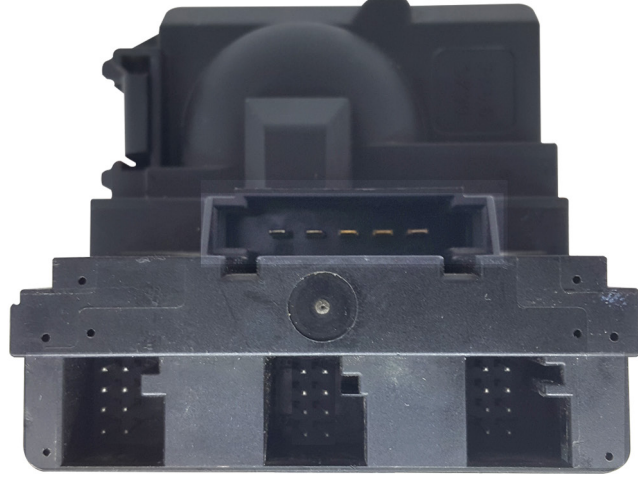
+12 V (Kırmızı / Red)

K-Line (Yeşil / Green)



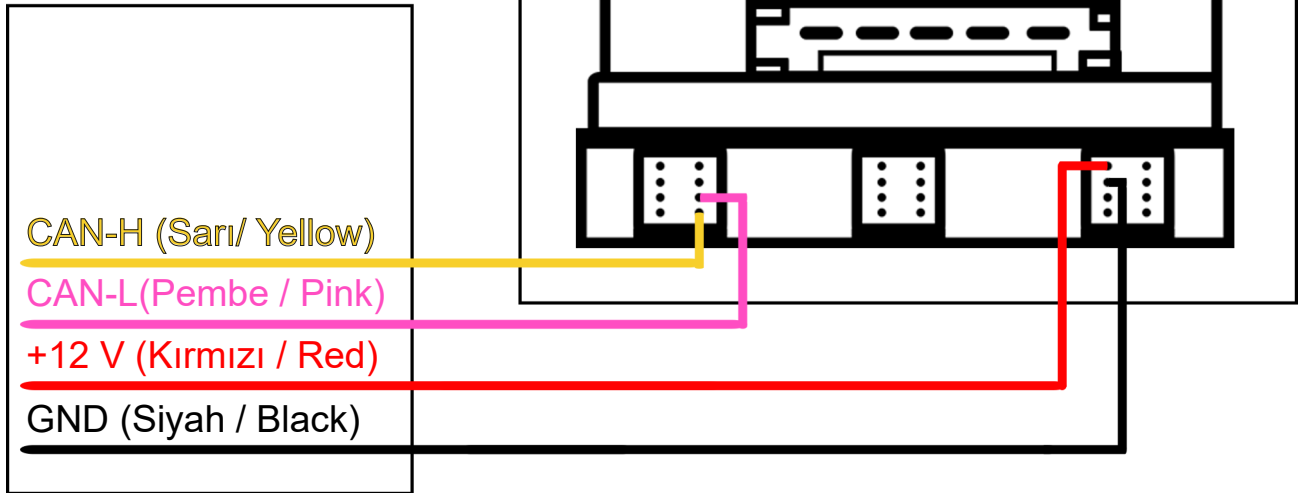
Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

Mercedes-Benz “W906” EZS / EIS ZFH-C09 UNIVERSAL CABLE



ZFH-C09 CABLE

**EZS / EIS
W906**



Connect indicated ZFH-C09 cable wires to the pins shown on EZS/EIS box properly.

ZFH-MBC1

For “W204, W207, W212(Old)” EZS/EIS



ZFH-MBCA



ZFH-MBC1



“W204, W207” EZS/EIS Connections



“W212(Old)” EZS/EIS Connections



ZFH-MBC2

For “W164, W251” EZS/EIS



“W164” EZS/EIS Connections



ZFH-MBC3

For “W216, W221” EZS/EIS



“W216” EZS/EIS Connections



ZFH-MBC4 For “W212(New)” EZS/EIS



“W212(New)” EZS/EIS Connections



ZFH-MBC5

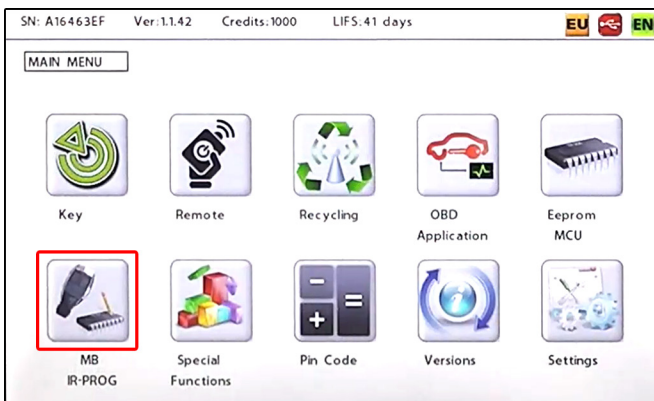
For “W246, W166” EZS/EIS



“W246” EZS/EIS Connections



Mercedes-Benz W203-W209-W211-W220 EZS/EIS Boxes (Types do not need remove EZS/EIS from the car)

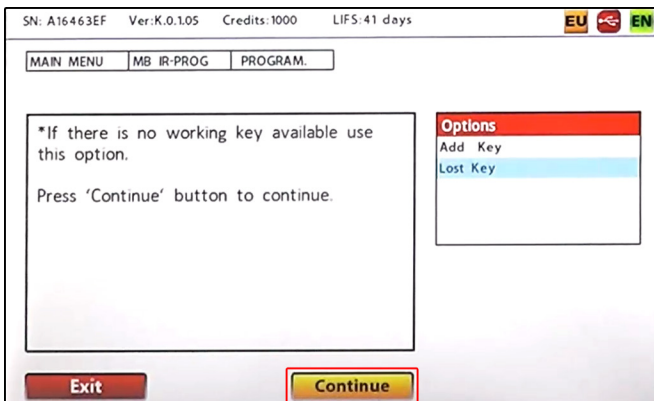


Zed-FULL main screen.

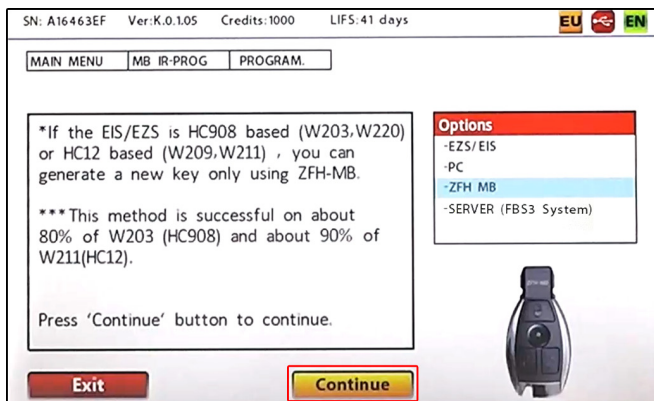
Select **"MB IR-PROG"** icon to start Mercedes-Benz application



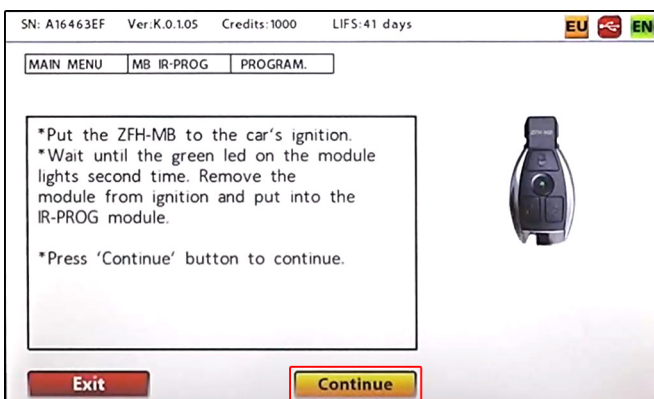
- 1- To read, identify or erase OEM keys.
- 2- To program a new key.
- 3- Version details.
- 4- Additional features for MB applications.
- 5- Key Test



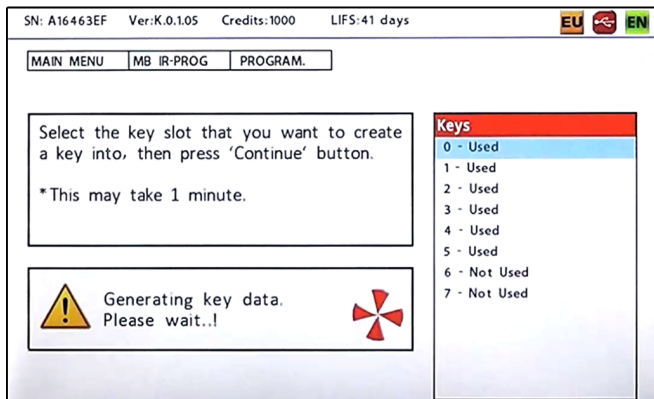
There are 2 different options under **"Program"** icon. For this document we will program a new key for **"Lost Key"** situation.



Select **"Lost Key / ZFH-MB"** then press Continue.

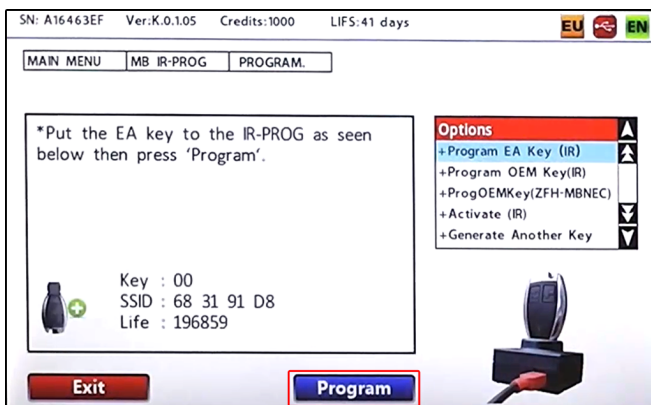


Insert **"ZFH-MB"** to ignition. Once all data is received from ignition, **green led** will flash.

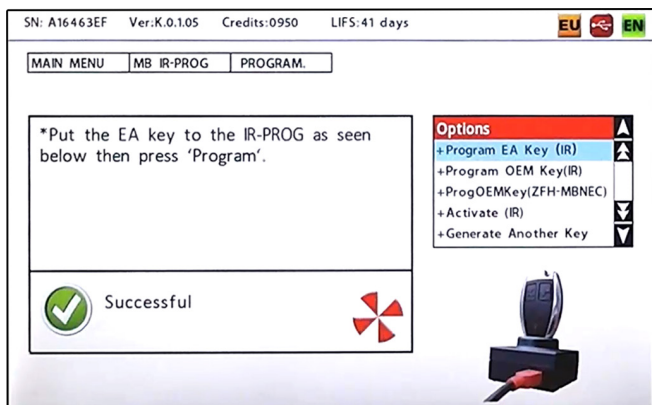


Reading data from EZS/EIS may take up to 1 minute.

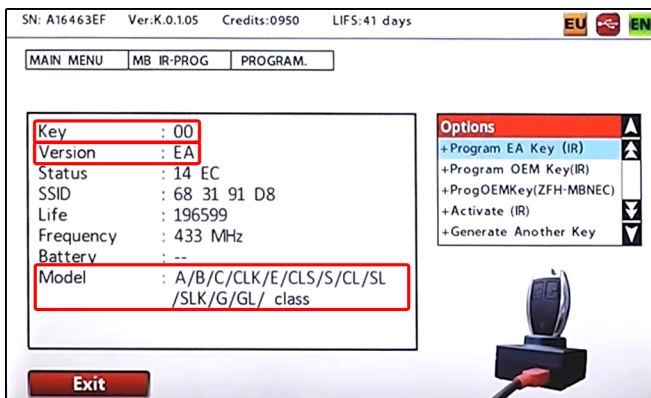
Mercedes-Benz W203-W209-W211-W220 EZS/EIS Boxes (Types do not need remove EZS/EIS from the car)



For this document we calculate **Key No: 00** and we program it on **EA version key**. So we can program **EA key** using **IR-PROG** module.



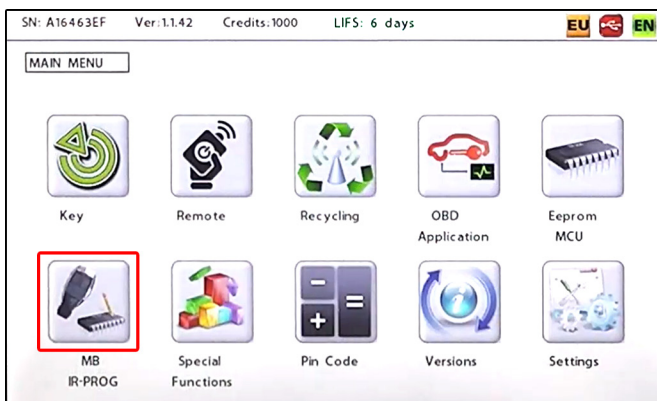
Key programming procedure is **Successful**.



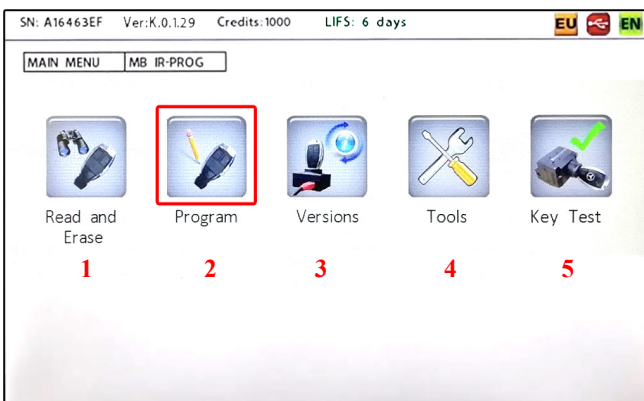
After key programming all new key data will be shown on Zed-FULL screen.

Key No: 00 is programmed and version of the new key is EA.

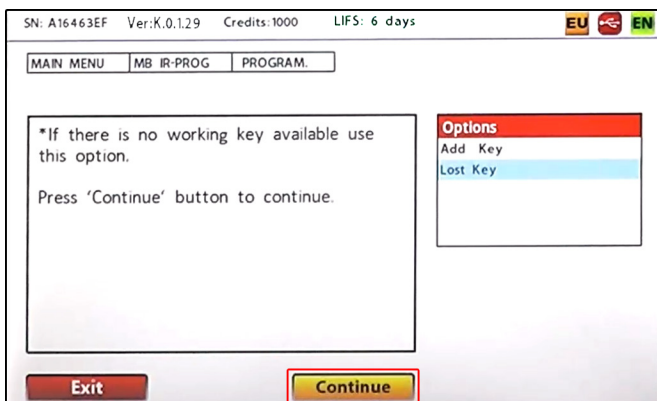
Key programming steps for lost key situation



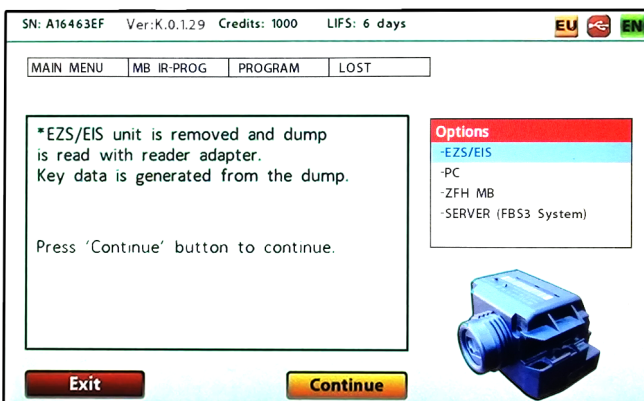
Zed-FULL main screen.



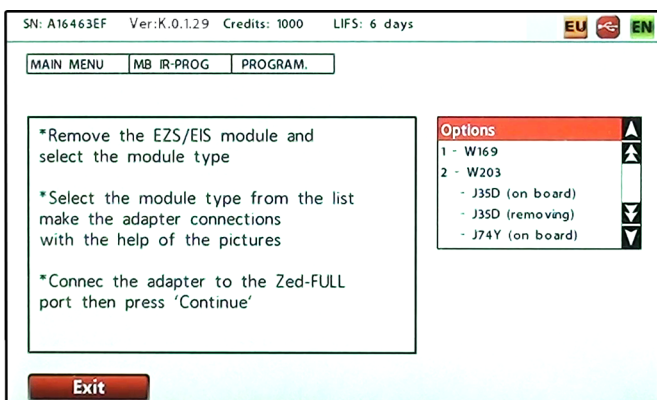
- 1- To read, identify or erase OEM keys.
- 2- To program a new key.
- 3- Version details.
- 4- Additional features for MB applications.
- 5- Key Test



There are 2 different options under "Program" icon. For this document we will program a new key for "Lost Key" situation.



In "Lost key" situation EZS/EIS must be removed from the car.

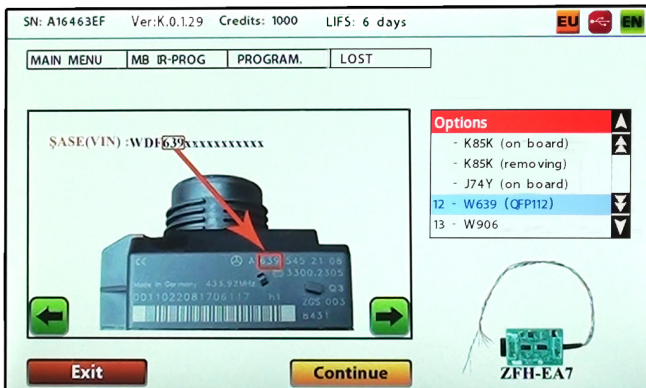


Select module type from the list. This module type is also written in VIN number and on the EZS / EIS module.

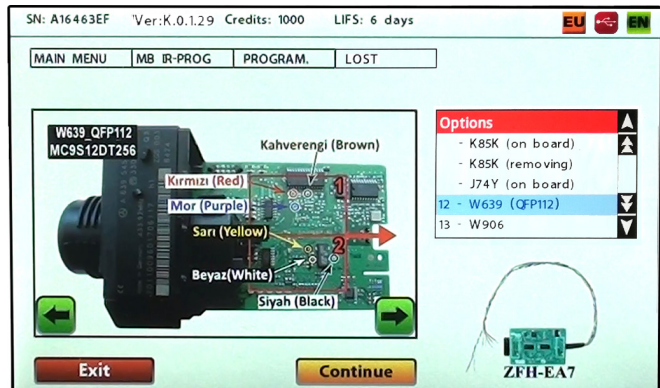


For this document we use W639 (QFP112) type , for this module the only way to read MCU is using ZFH-EA7 adapter.

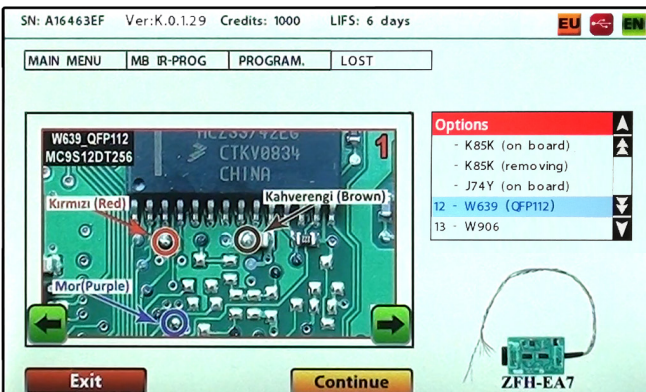
Key programming steps for lost key situation



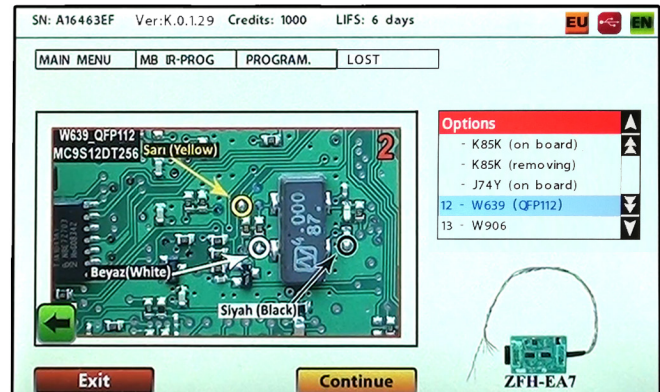
Type is also written on the module.



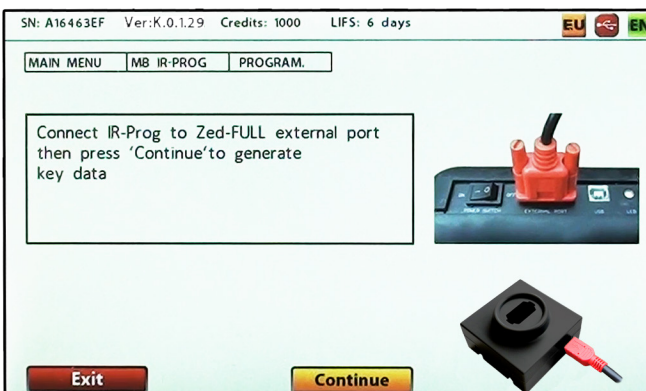
PCB picture of the module can be viewed using green arrows on Zed-FULL screen, PCB board divided into 2 parts to view more details.



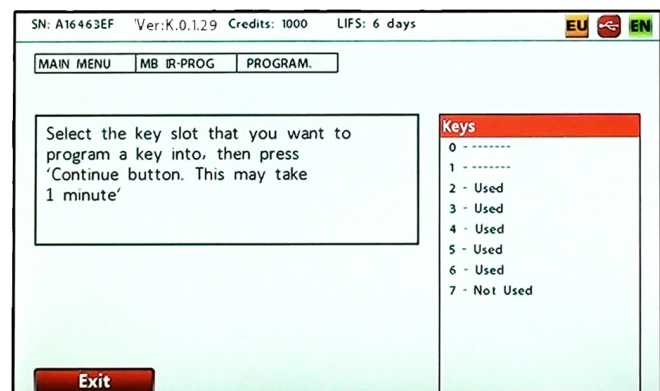
Part 1



Part 2



Follow the steps.



* ----- : This key number can not be programmed. Please select another key number.
 * **Used:** Already used key locations.
 * **Not Used:** Never used before. Either "Used" or "Not Used" key locations may be selected. Only 1 new key can be programmed at each calculation.

Key programming steps for lost key situation

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 5 days

MAIN MENU MB IR-PROG PROGRAM. LOST

*Put the EA key to the IR-Prog as seen below then press 'Program'.

Options

- +Program EA Key (IR)
- +Program OEM Key(IR)
- +ProgOEMKey(ZFH-MBNEC)
- +Activate (IR)
- +Generate Another Key

Key : 00
SSID : F8 35 DB 2A
Life : 196607

Exit Program

For this document we calculated Key No: 03 and we program it on EA version key.
So we can program EA key using IR-PROG module.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 5 days

MAIN MENU MB IR-PROG PROGRAM. LOST

*Put erased original key to the IR-Prog as seen below then press 'Program'.

Options

- +Program EA Key (IR)
- +Program OEM Key(IR)
- +ProgOEMKey(ZFH-MBNEC)
- +Activate (IR)
- +Generate Another Key

Key : 03
SSID : F8 35 DB 2A
Life : 196607

Exit Program



IR-PROG can also be used to program already erased OEM keys.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 5 days

MAIN MENU MB IR-PROG PROGRAM. LOST

Put erased original key to the NEC Adapter as seen below then press 'Program'.

Options

- +Program EA Key (IR)
- +Program OEM Key(IR)
- +ProgOEMKey(ZFH-MBNEC)
- +Activate (IR)
- +Generate Another Key

Key : 03
SSID : F8 35 DB 2A
Life : 196607

Exit Program

ZFH-MBNEC



If we want to program on OEM key which is not erased before we must remove the NEC processor from OEM key insert it into ZFH-MBNEC adapter, erase and program it respectively.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 5 days

MAIN MENU MB IR-PROG PROGRAM. LOST

Key : 03
Version : EA
Status : 04 FC
SSID : F8 35 DB 2A
Life : 133068
Frequency : 433 MHz
Type : NEC
Battery : --
Model : Vito, Viano, Vaneo, Sprinter
Extra Info : -- -- -- -- --

Options

- +Program EA Key (IR)
- +Program OEM Key(IR)
- +ProgOEMKey(ZFH-MBNEC)
- +Activate (IR)
- +Generate Another Key

Exit

At the end of programming procedure, Key No "03" is programmed and version of the key is EA.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 5 days

MAIN MENU MB IR-PROG PROGRAM. LOST

Key : 03
Version : EA
Status : 04 FC
SSID : F8 35 DB 2A
Life : 133068
Frequency : 433 MHz
Type : NEC
Battery : --
Model : Vito, Viano, Vaneo, Sprinter
Extra Info : -- -- -- -- --

Options

- Read (Use IR-PROG)
- Read (Use NEC Adapter)
- Read (Use MOT Adapter)
- Erase (Use NEC Adapter)

Exit

At the bottom of the list, without leaving the procedure you may read keys or erase OEM keys, if needed.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 5 days

MAIN MENU MB IR-PROG PROGRAM. LOST

Select the process from the list and follow the instructions.

***At the end of the list on the right you may see the connection schemes.

Key : 03
SSID : F8 35 DB 2A
Life : 133070

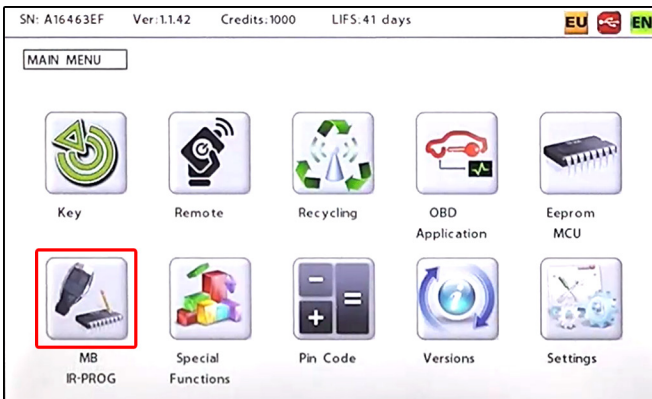
Options

- Mercedes-315 MHz
- Mercedes-434 MHz
- *IR-PROG Connection
- *Adapter Connection

Exit

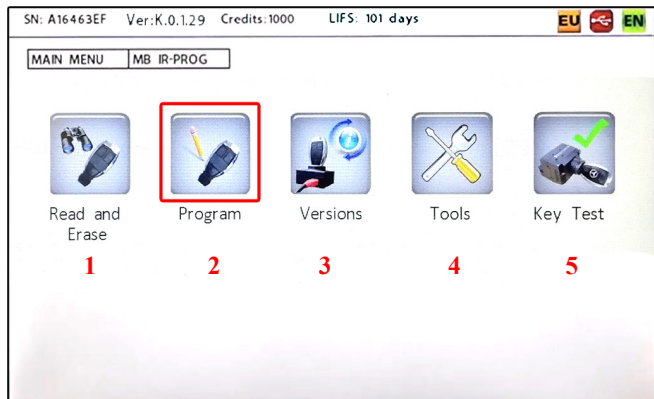
At the bottom of the list you may also see the IR-PROG or adapter connection details if needed.

Key programming steps for add key situation

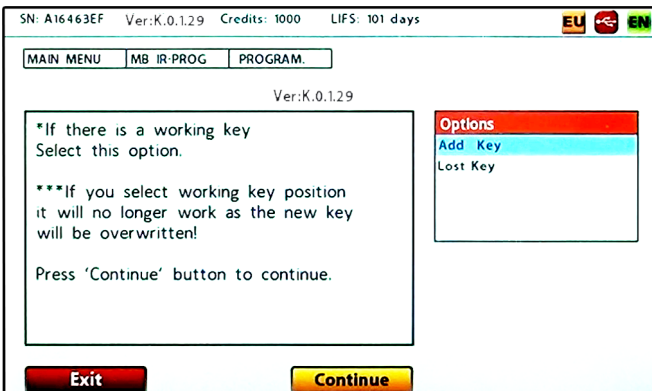


Zed-FULL main screen.

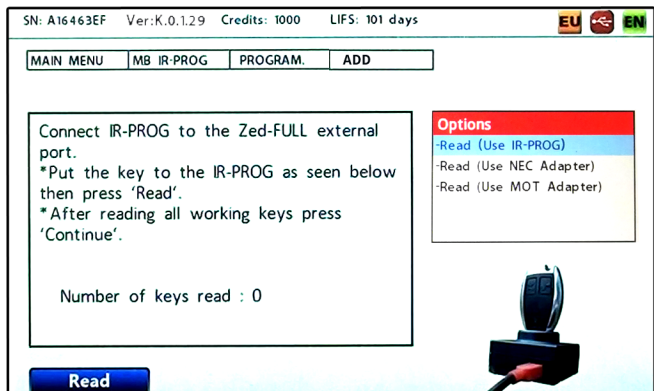
Select **"MB IR-PROG"** icon to start Mercedes-Benz application



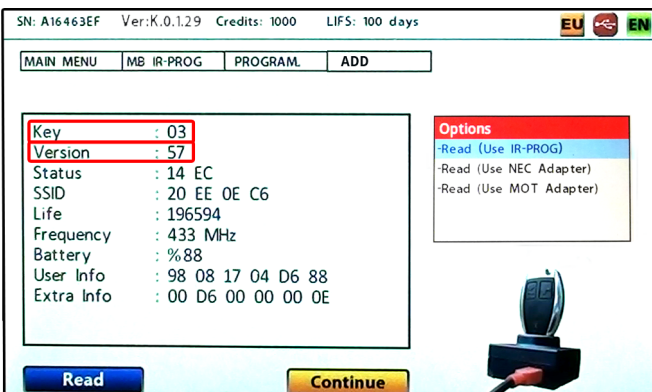
- 1- To read, identify or erase OEM keys.
- 2- To program a new key.
- 3- Version details.
- 4- Additional features for MB applications.
- 5- Key Test



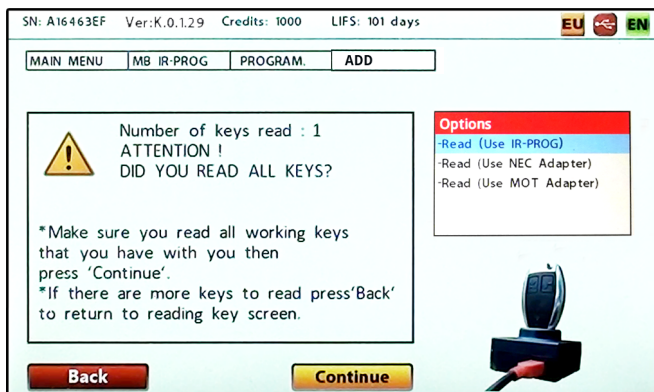
There are 2 different options under **"Program"** icon. For this document we will program a new key for **"Add Key"** situation.



Zed-FULL screen shows all details for each step.

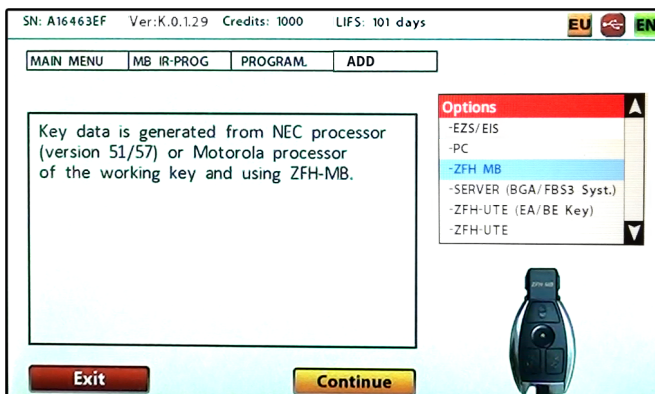


First working key is read by IR-PROG, this working key number is "03" and version is "57"

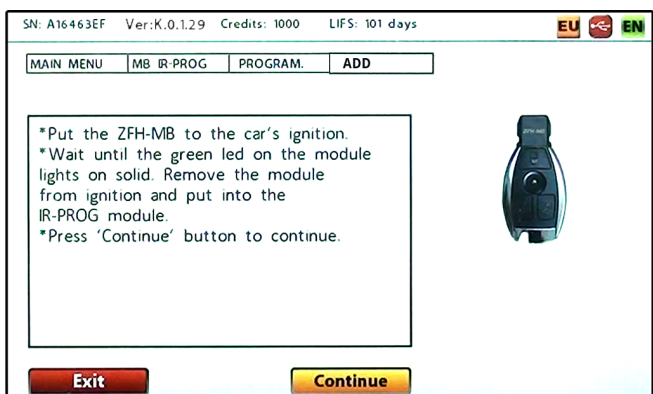


You will be better instructed if you read all of the working keys on this step. After reading all working keys press on **"Continue"** button to go to next step.

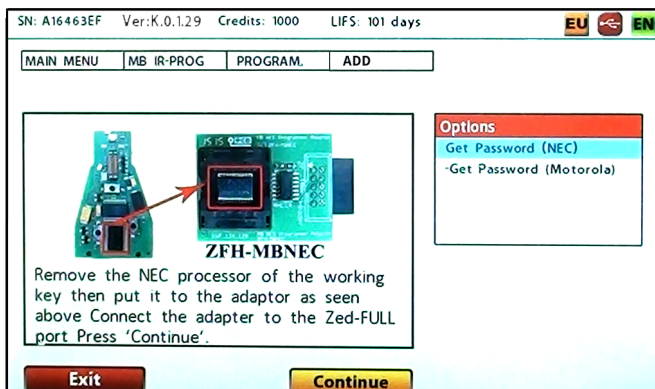
Key programming steps for add key situation



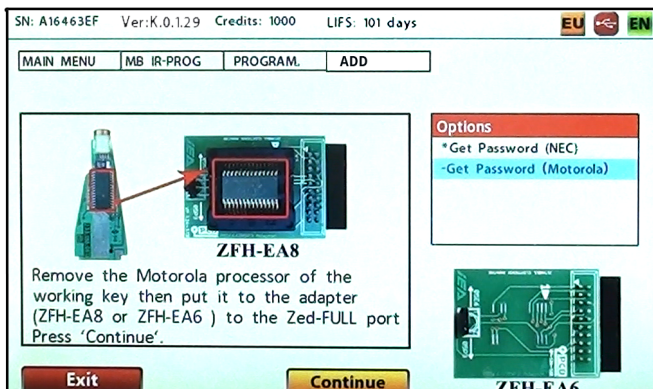
In “Add Key” situation if the working key is not Motorola key or the key version is not 51, 57, EA or BE in this case EZS/EIS must be removed from the car and procedure should be followed as “Lost Key” situation.



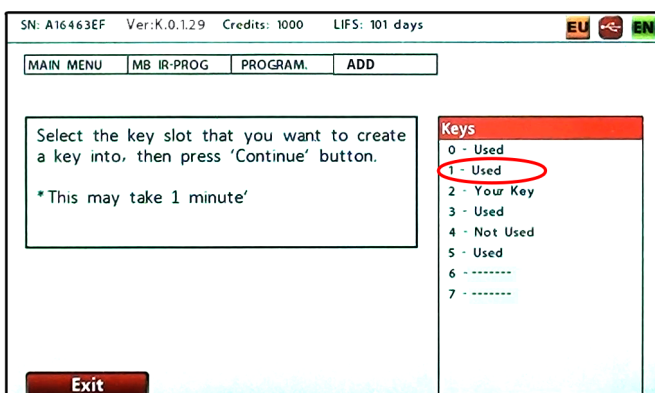
In “Add Key” situation if at least one of the working key is Motorola type or version is 51, 57, EA or BE, “ZFH-MB” option will be automatically shown on the list and we will continue our steps on this option.



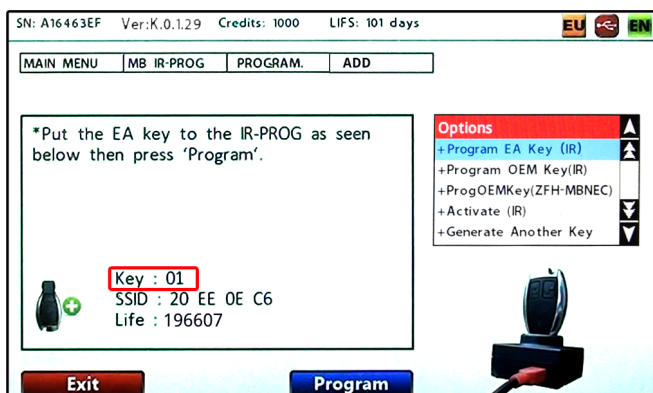
We will read the password from working key and for this document working key version is “57”. So, remove NEC processor from “57” version working key and insert it into ZFH-MB NEC adapter and connect it to Zed-FULL. If working key is Motorola MCU, use ZFH-EA8 adapter.



Zed-FULL screen shows all details for each step.



First working key is read by IR-PROG, this working key number is “03” and version is “57”



You will be better instructed if you read all of the working keys on this step. After reading all working keys press on “Continue” button to go to next step.

Key programming steps for add key situation

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 101 days

MAIN MENU MB IR-PROG PROGRAM. ADD

Put erased original key to the IR-PROG as seen below then press 'Program'.

Key : 01
SSID : 20 EE 0E C6
Life : 196607

Options
+Program EA Key (IR)
+Program OEM Key(IR)
+ProgOEMKey(ZFH-MBNEC)
+Activate (IR)
+Generate Another Key

Exit Program

OPTIONAL IR-PROG can also be used to program already erased OEM keys.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 101 days

MAIN MENU MB IR-PROG PROGRAM. ADD

Put erased original key to the NEC Adapter as seen below then press 'Program'.

Key : 01
SSID : 20 EE 0E C6
Life : 196607

Options
+Program EA Key (IR)
+Program OEM Key(IR)
+ProgOEMKey(ZFH-MBNEC)
+Activate (IR)
+Generate Another Key

Exit Program

OPTIONAL If we want to program an OEM key which has not been erased before, we must remove the NEC processor from OEM key, insert it into ZFH-MBNEC adapter, erase and program it respectively.

SN: A16463EF Ver:K.0.1.29 Kredi: 0950 LIFS: 101 gün

ANA MENU MB IR-PROG PROGRAMLA ADD

Key : 01
Version : EA
Status : 04 FC
SSID : 20 EE 0E C6
Life : 196605
Frequency : 433 MHz
Battery : --
Model : A/B/C/CLK/E/CLS/S/CL/SL /SLK/G/GL/ class

Options
+Program EA Key (IR)
+Program OEM Key(IR)
+ProgOEMKey(ZFH-MBNEC)
+Activate (IR)
+Generate Another Key

Çıkış

After key programming all new key data will be shown on Zed-FULL screen.
Key No: 01 is programmed and version of the new key is EA.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 101 days

MAIN MENU MB IR-PROG PROGRAM. ADD

*Select the procedure to read EZS from the list then press 'Continue'.

Key : 01
SSID : 20 EE 0E C6
Life : 196607

Options
+Program EA Key (IR)
+Program OEM Key(IR)
+ProgOEMKey(ZFH-MBNEC)
+Activate (IR)
+Generate Another Key

Exit Continue

If you want to program another key, press on "Generate Another Key" button.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 101 days

MAIN MENU MB IR-PROG PROGRAM. ADD

Connect IR-PROG to the Zed-FULL external port.
*Put the key to the IR-PROG as seen below then press 'Read'.
***At the end of the list on the right you may see the connection schemes.

Options
+Read (Use IR-PROG)
+Read (Use NEC Adapter)
+Read (Use MOT Adapter)

Exit Read

At the bottom of the list without leaving the procedure you may read keys or erase OEM keys if needed.

SN: A16463EF Ver:K.0.1.29 Credits: 1000 LIFS: 101 days

MAIN MENU MB IR-PROG PROGRAM. ADD

*Select the procedure to read EZS from the list then press 'Continue'.

Key : 01
SSID : 20 EE 0E C6
Life : 196720

Options
+Mercedes-315 MHz
+Mercedes-434 MHz
*IR-PROG Connection
*Adapter Connection

Exit

At the bottom of the list you may also see the IR-PROG or adapter connection details if needed.

OEM Mercedes-Benz Key Types

Motorola MCU



Motorola MCU



NEC MCU



NEC MCU



NEC MCU



NEC MCU



NEC MCU



BGA MCU

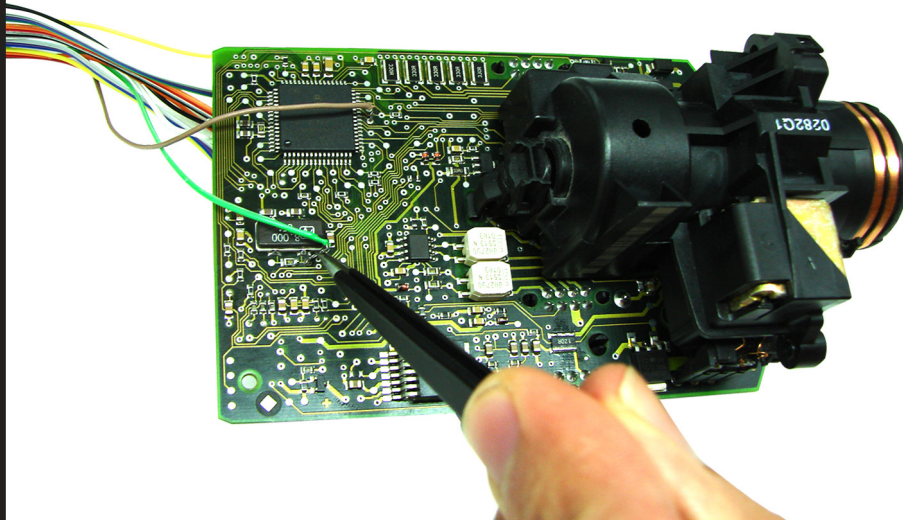


BGA MCU

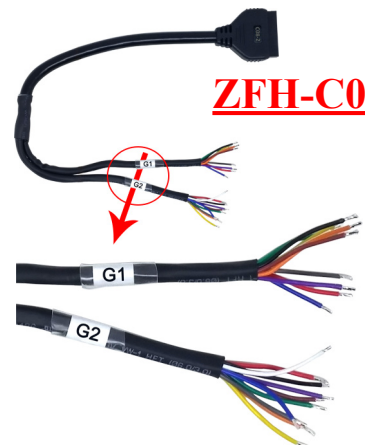
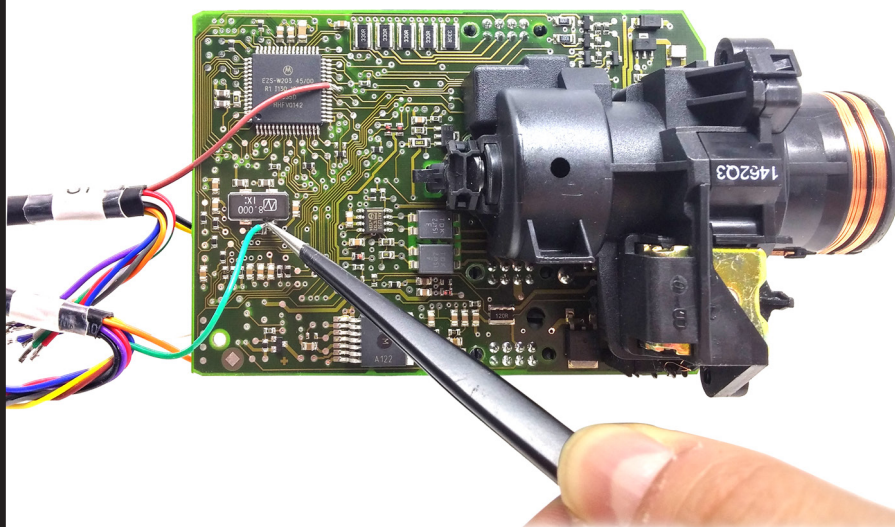


Mercedes-Benz C Class "W203" EZS / EIS MCU MASK NUMBER : 1J35D, 2J74Y, 4J74Y MCU READING TIPS

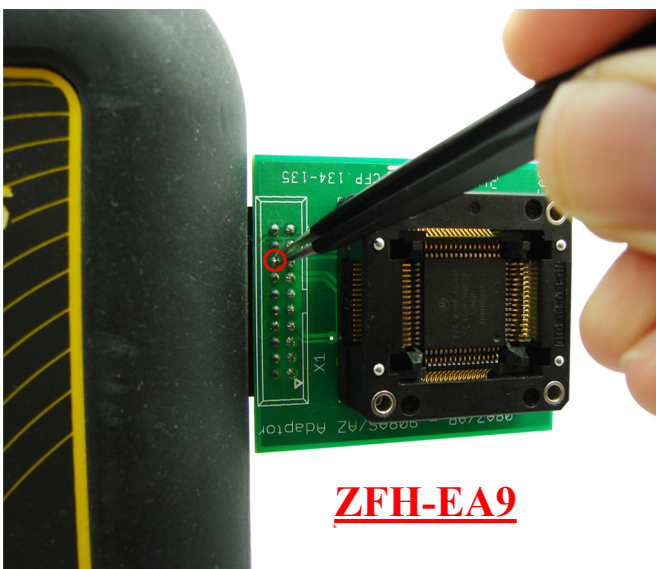
If you are facing any problem during “W203” EZS/EIS MCU reading with ZFH-C08 or ZFH-C08-2 cable, please touch the tweezer to green pin soldered point as shown on picture and try to read again.



ZFH-C08



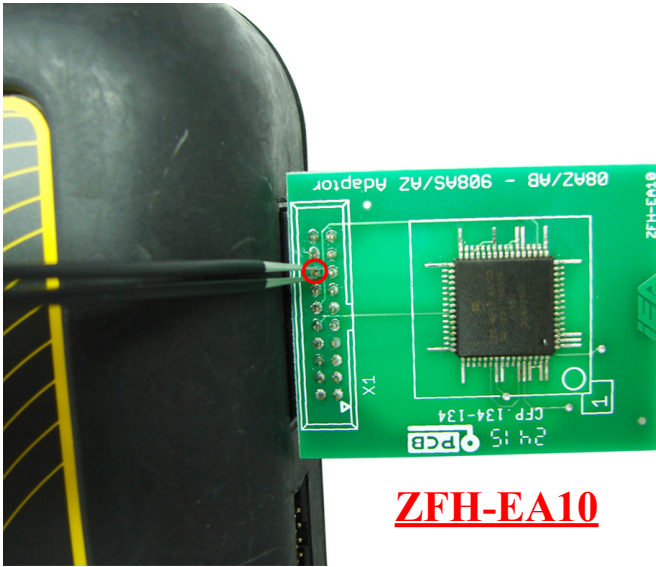
ZFH-C08-2



ZFH-EA9

If you are using “ZFH-EA9” please make the tweezer touch to marked pin as shown on the left picture and try to read again.

**Mercedes-Benz C Class "W203" EZS / EIS
MCU MASK NUMBER : 1J35D, 2J74Y, 4J74Y
MCU READING TIPS**



**If you are using “ZFH-EA10” please
make the tweezer touch to marked pin
as shown on the left picture and try
to read again.**

ZFH-EA10

**Mercedes-Benz C Series "W203" EZS / EIS
MCU MASK NUMBER : 1J35D, 2J74Y, 4J74Y
ZFH-C08 CABLE (20 Pin) / ZFH-C08-2 CABLE (20 Pin)**

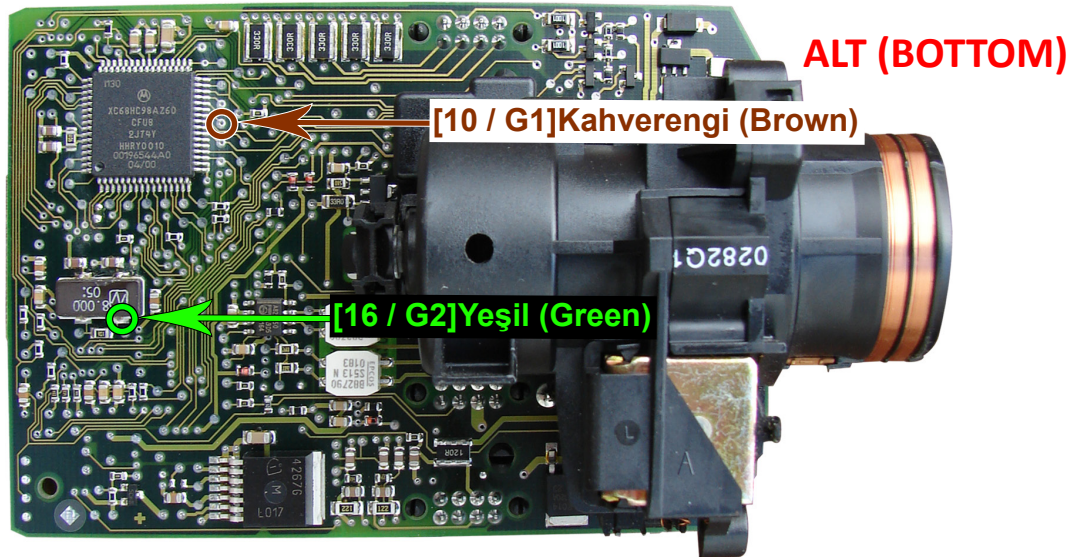
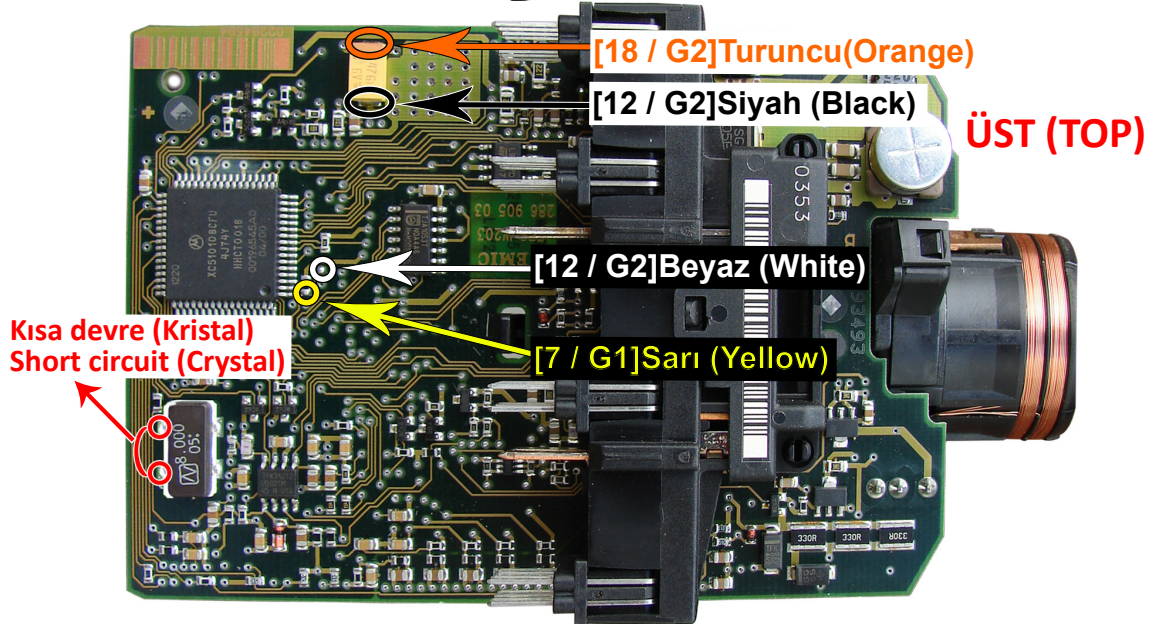
If you are facing any problem reading this MCU please also check page 38, 39



ZFH-C08



ZFH-C08-2



Solder the wires to the certain points as given on each picture to read MCU with Zed-FULL.

Example Description : [16 / G2]Yeşil (Green) means; If you use "ZFH-C08" Cable, "16th wire which is green" or if you use "ZFH-C08-2" Cable "Green cable on G2 marked group".

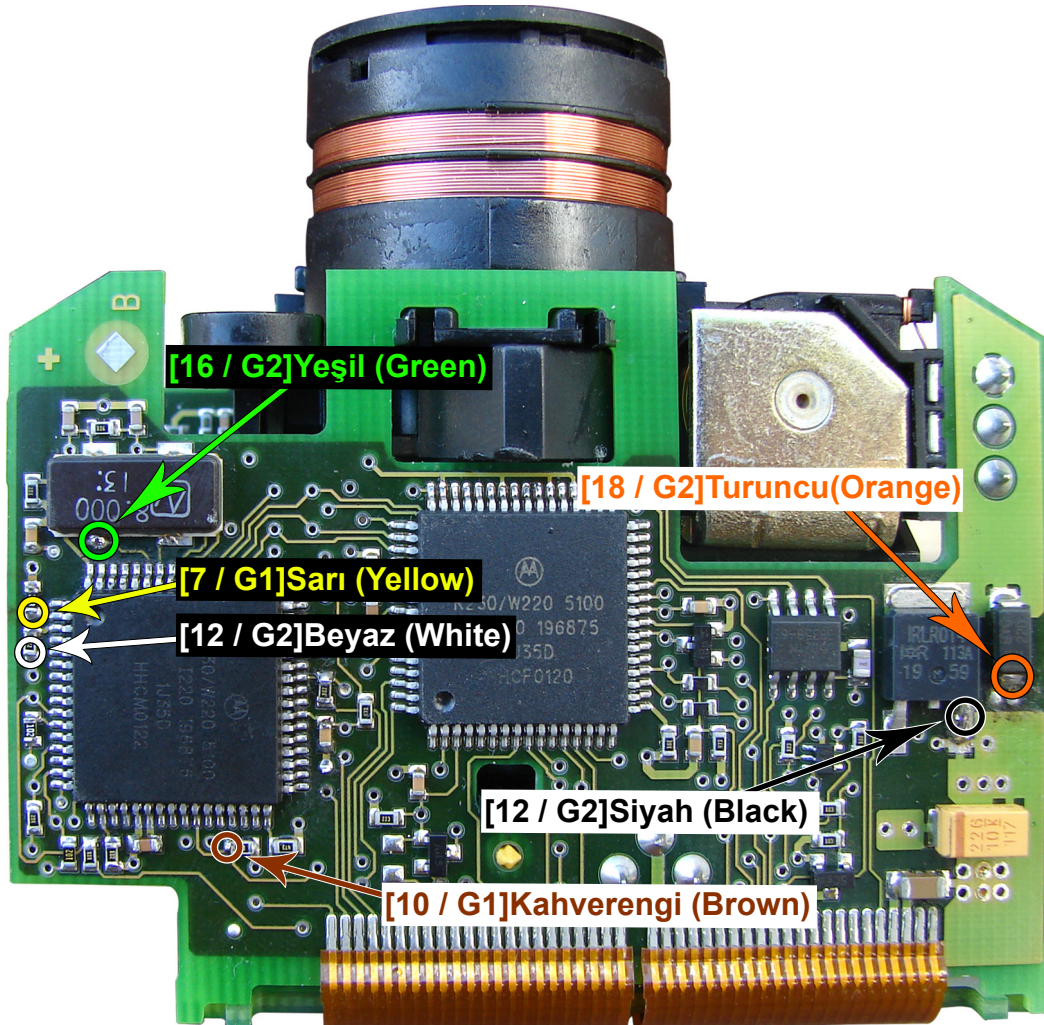
Mercedes-Benz E Class "W215-W220" EZS / EIS
MCU MASK NUMBER : 1J35D
ZFH-C08 CABLE (20 Pins) / ZFH-C08-2 CABLE (20 Pin)



ZFH-C08



ZFH-C08-2



Solder the wires to the certain points as given on each picture to read MCU with Zed-FULL.

Example Description : **[16 / G2]Yeşil (Green)** means; If you use "ZFH-C08" Cable, "16th wire which is green" or if you use "ZFH-C08-2" Cable "Green cable on G2 marked group".

Mercedes-Benz Vaneo, Viano, Vito Models "W639"

(QFP64) EZS / EIS

MASK NUMBER : 4J74Y, 2J74Y, 3K85K, 0L02M, 1L02M, 2M73Y

ZFH-C08 CABLE (20 Pins) / ZFH-C08-2 CABLE (20 Pin)



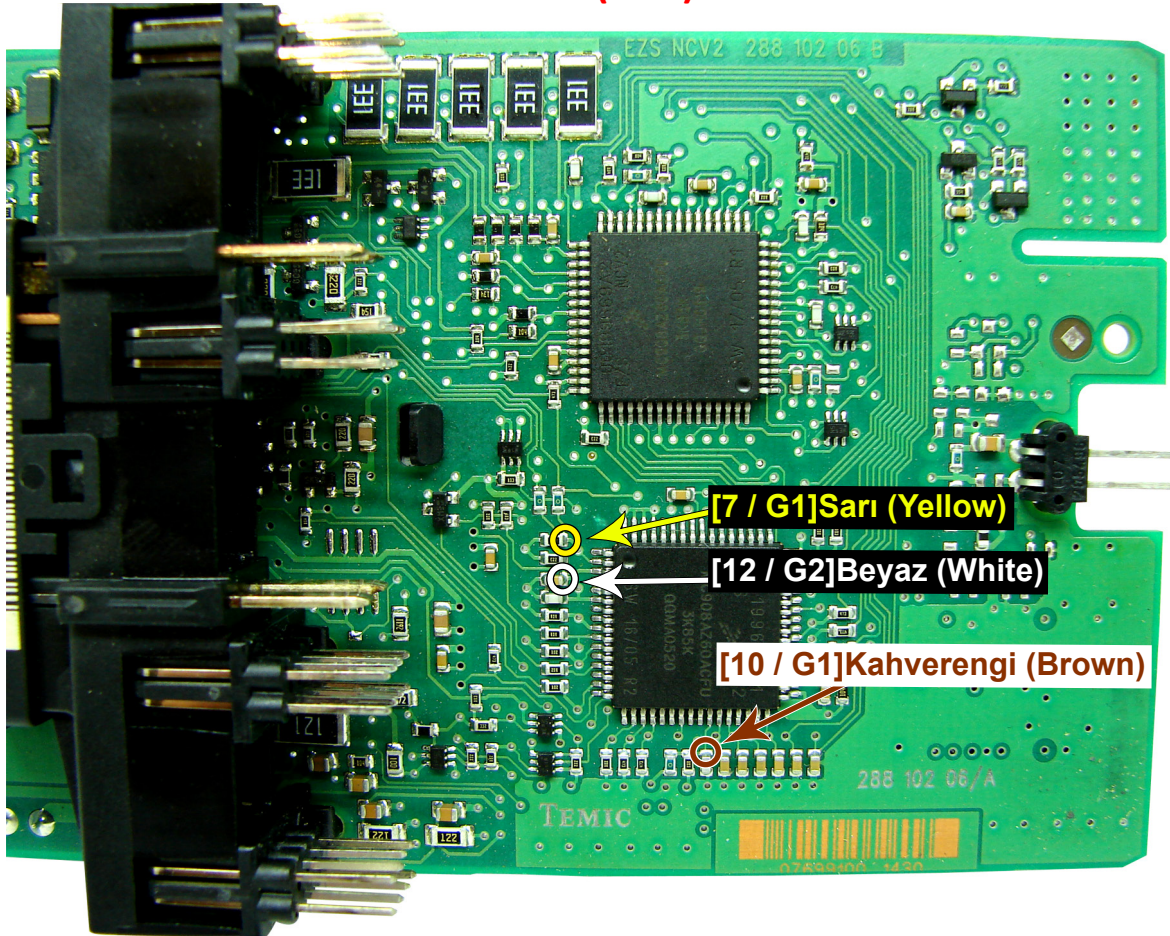
ZFH-C08



ZFH-C08-2



ÜST (TOP)



SEE THE NEXT PAGE FOR BOTTOM SIDE



Mercedes-Benz Vaneo, Viano, Vito Models "W639"
(QFP64) EZS / EIS

MASK NUMBER : 4J74Y, 2J74Y, 3K85K, 0L02M, 1L02M, 2M73Y
ZFH-C08 CABLE (20 Pins) / ZFH-C08-2 CABLE (20 Pin)

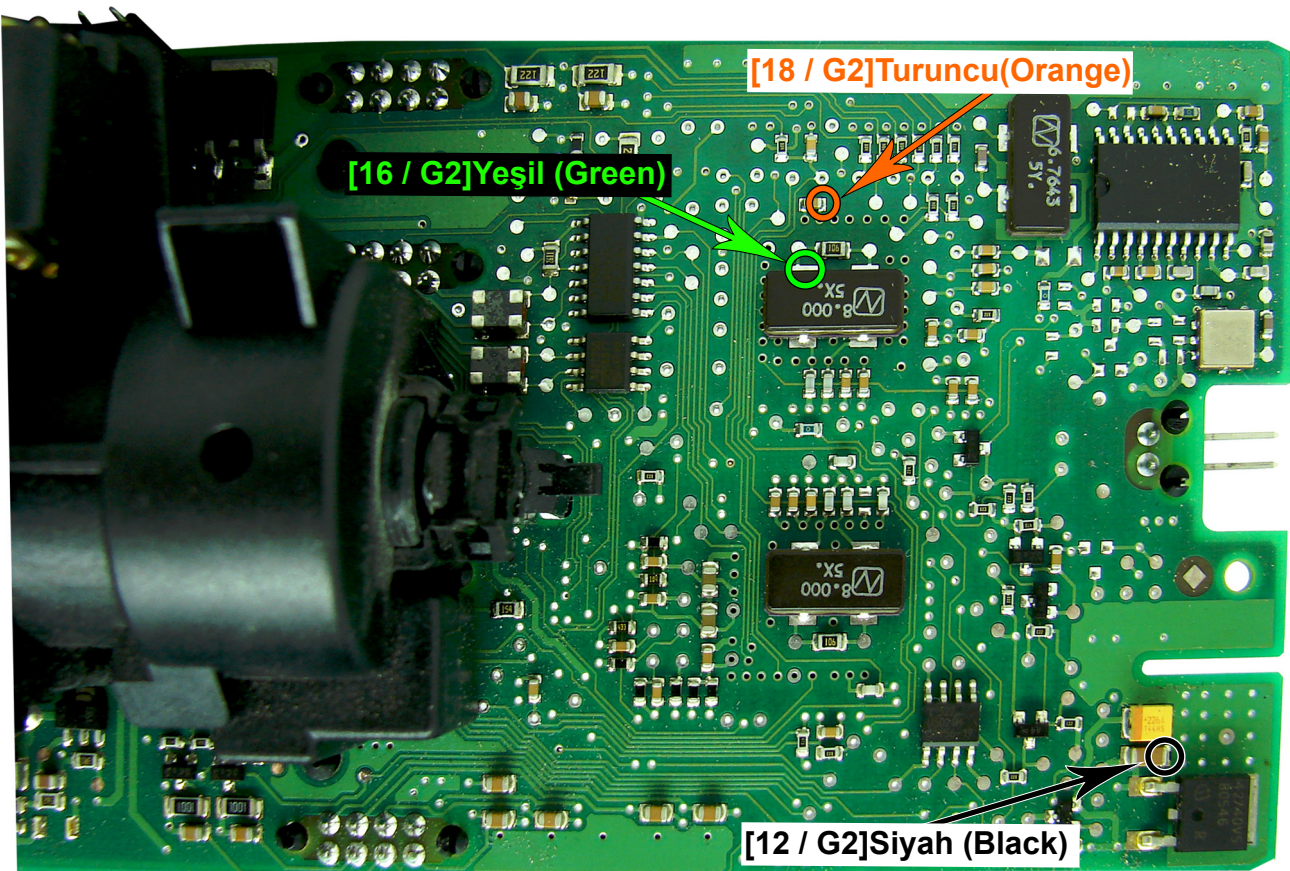


ZFH-C08



ZFH-C08-2

ALT (BOTTOM)

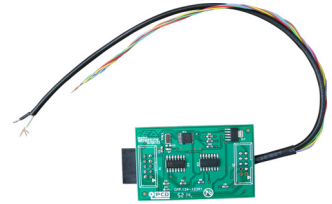


Solder the wires to the certain points as given on each picture to read MCU with Zed-FULL.

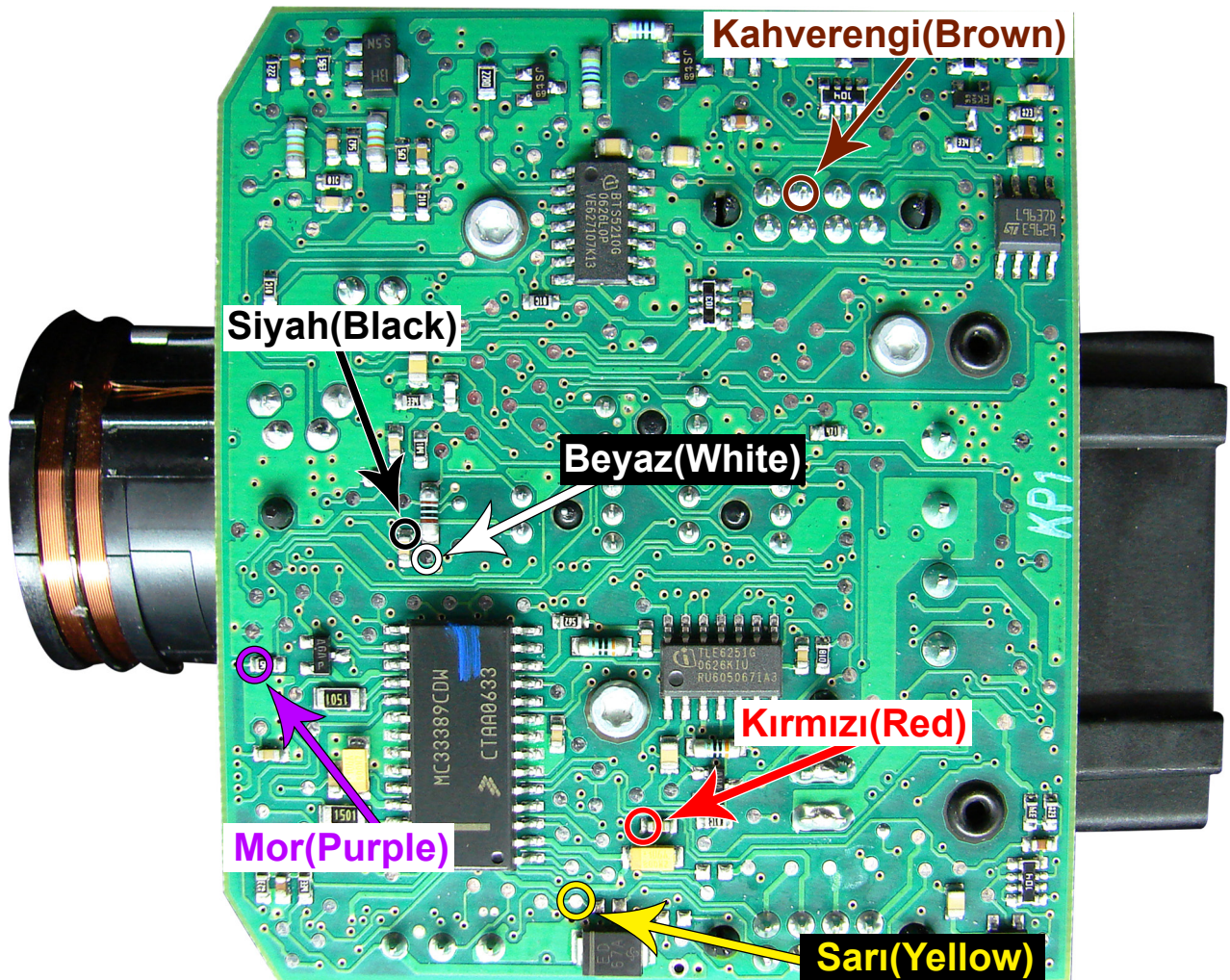
Example Description : [16 / G2]Yeşil (Green) means; If you use "ZFH-C08" Cable, "16th wire which is green" or if you use "ZFH-C08-2" Cable "Green cable on G2 marked group".

If you are getting read error with ZFH-C08 or ZFH-C08-2 while reading in circuit, remove and read the processor with adapter as shown in page 56

Mercedes-Benz A/B Classes "W169" EZS / EIS - TYPE 1 ZFH-EA7 - Security MCU Adapter

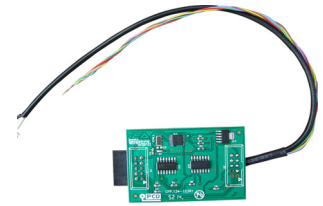


ZFH-EA7

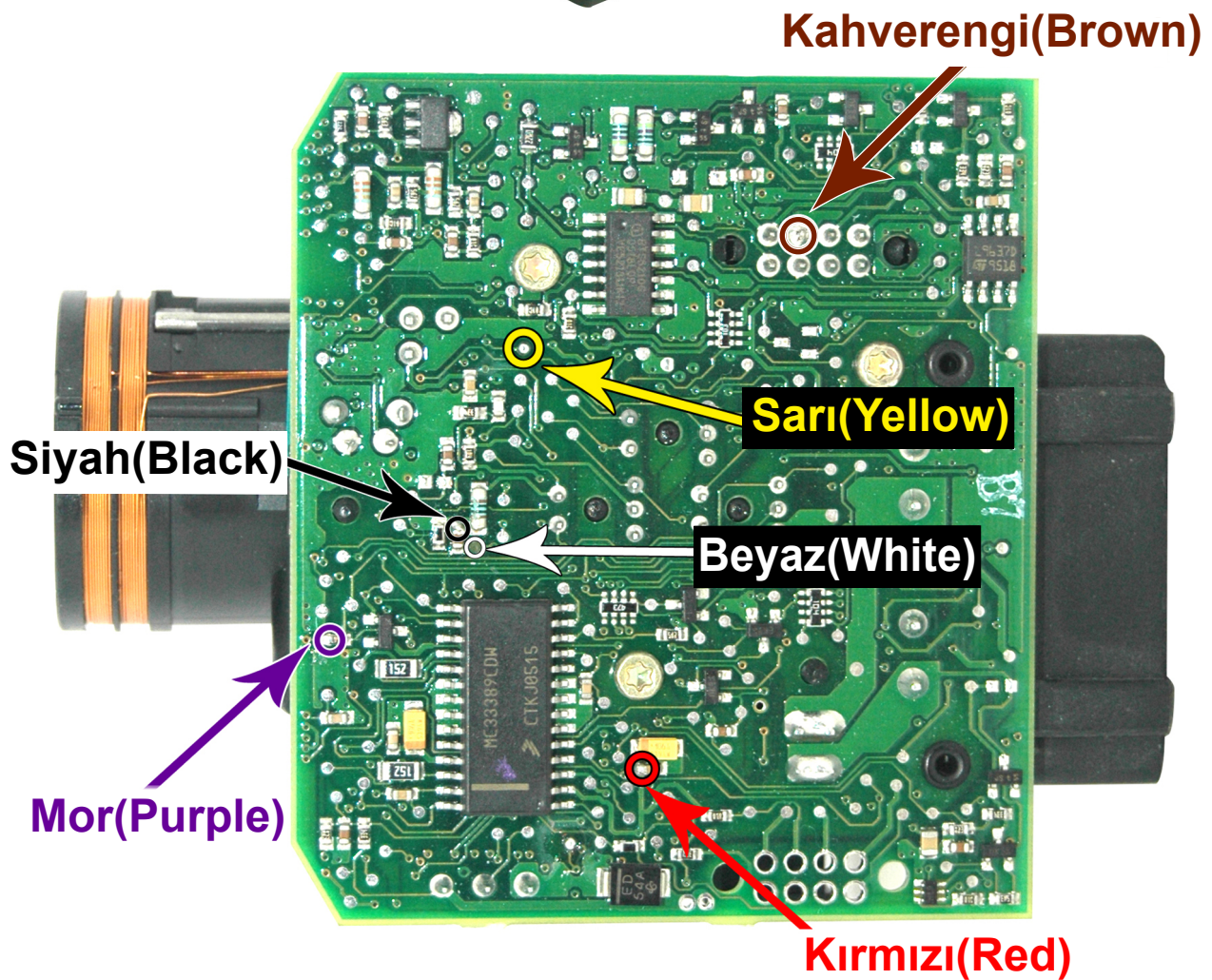


**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

Mercedes-Benz A/B Classes "W169" EZS / EIS - TYPE 2 ZFH-EA7 - Security MCU Adapter

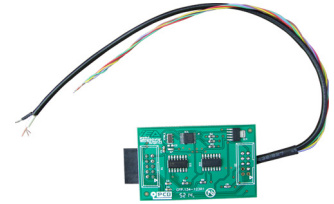


ZFH-EA7

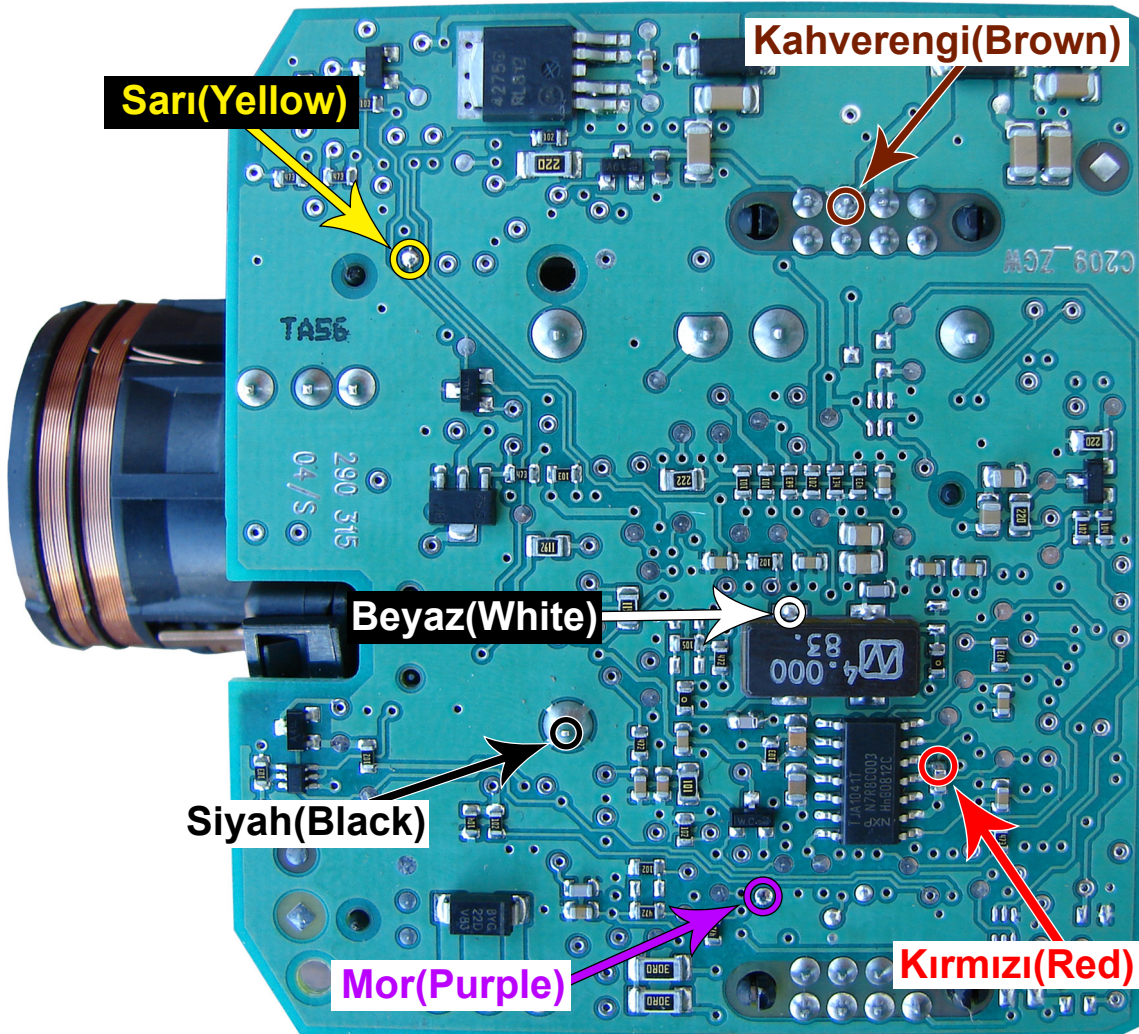


**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

Mercedes-Benz CLK Class "W209" EZS / EIS ZFH-EA7 - Security MCU Adapter

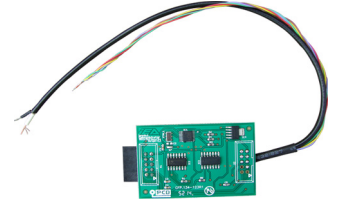


ZFH-EA7

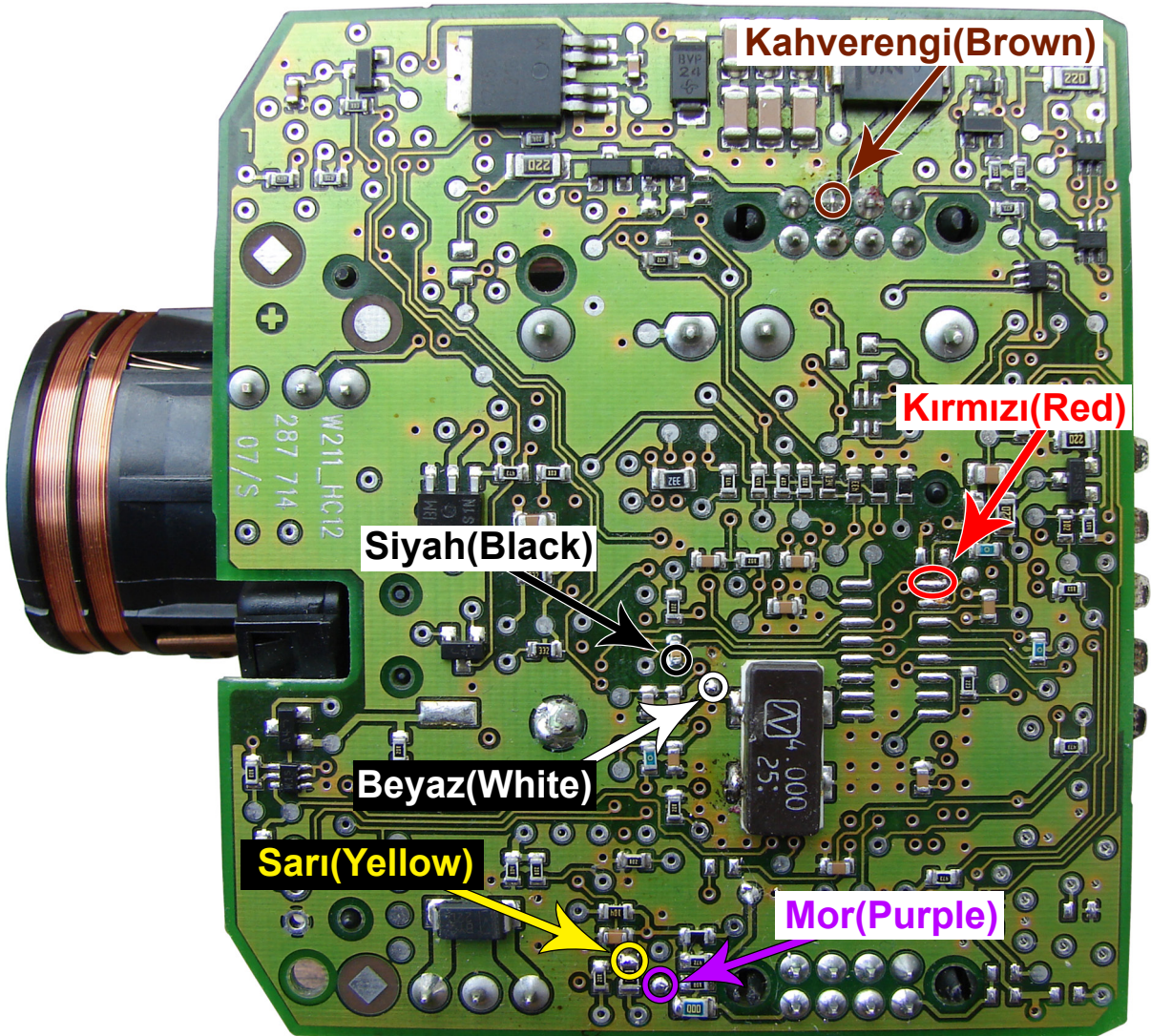


**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

Mercedes-Benz E Class "W211 HC12-07-S" EZS / EIS ZFH-EA7 - Security MCU Adapter

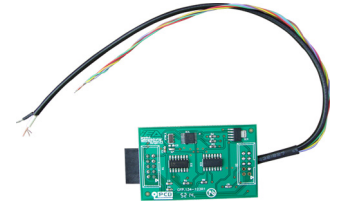


ZFH-EA7

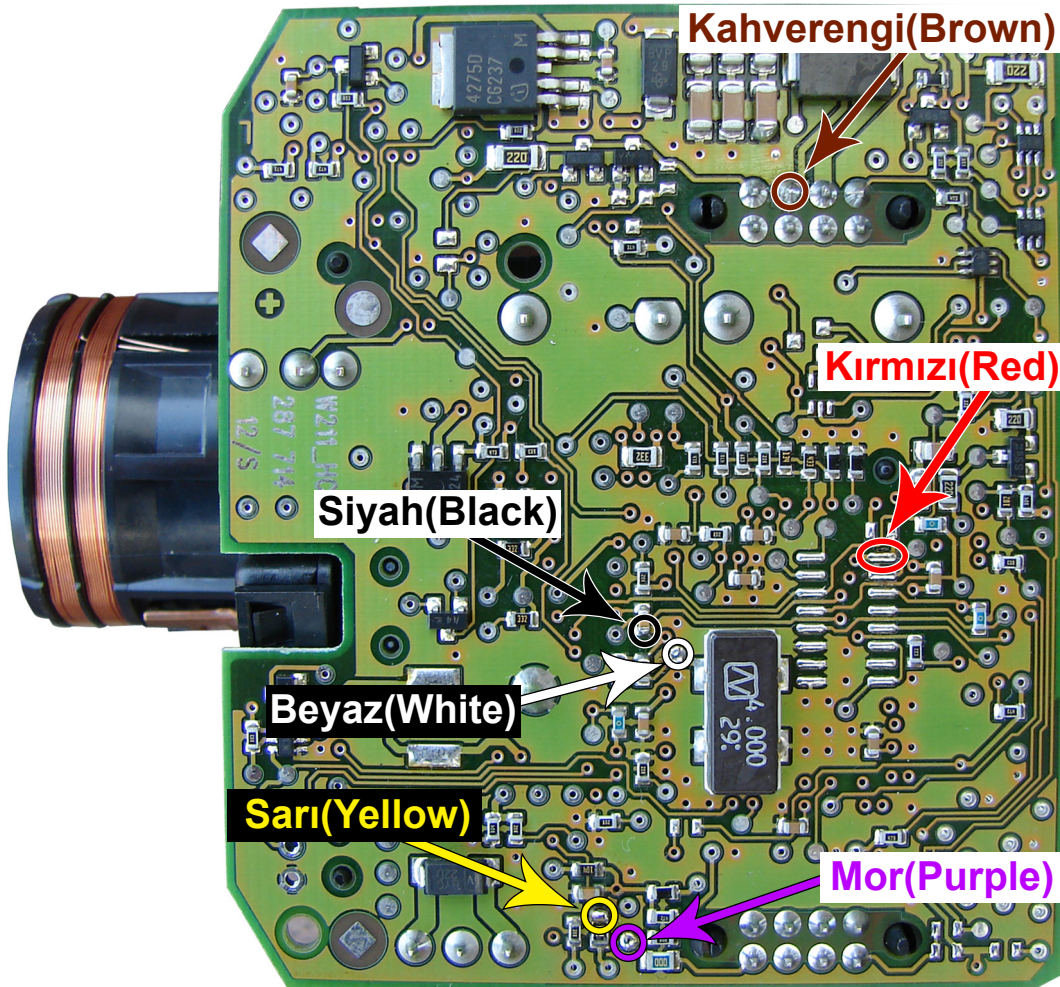


**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

Mercedes-Benz E Class "W211 HC12-12-S" EZS / EIS ZFH-EA7 - Security MCU Adapter

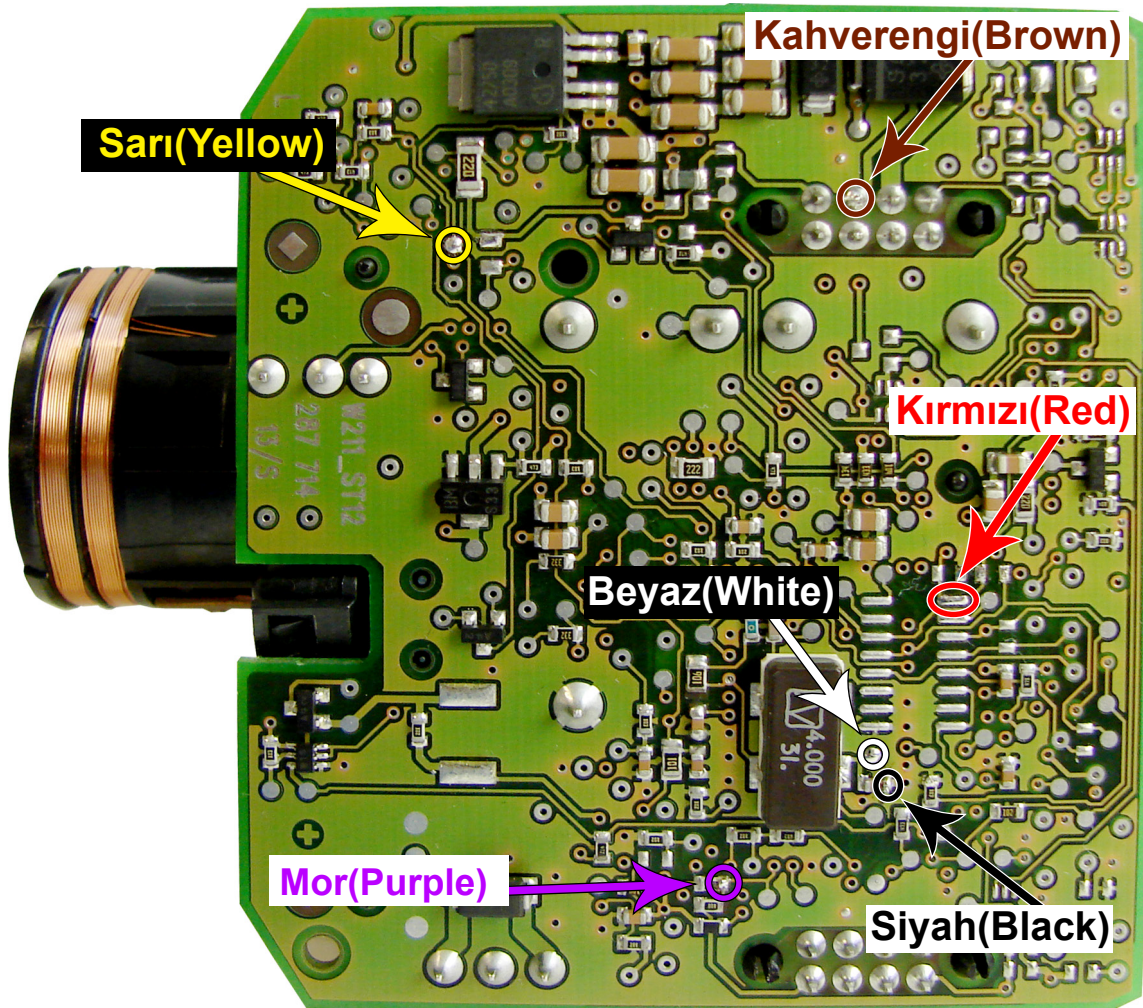
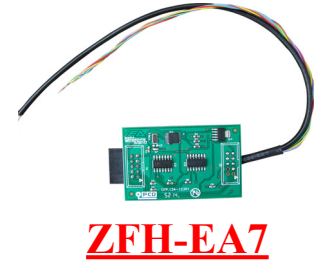


ZFH-EA7



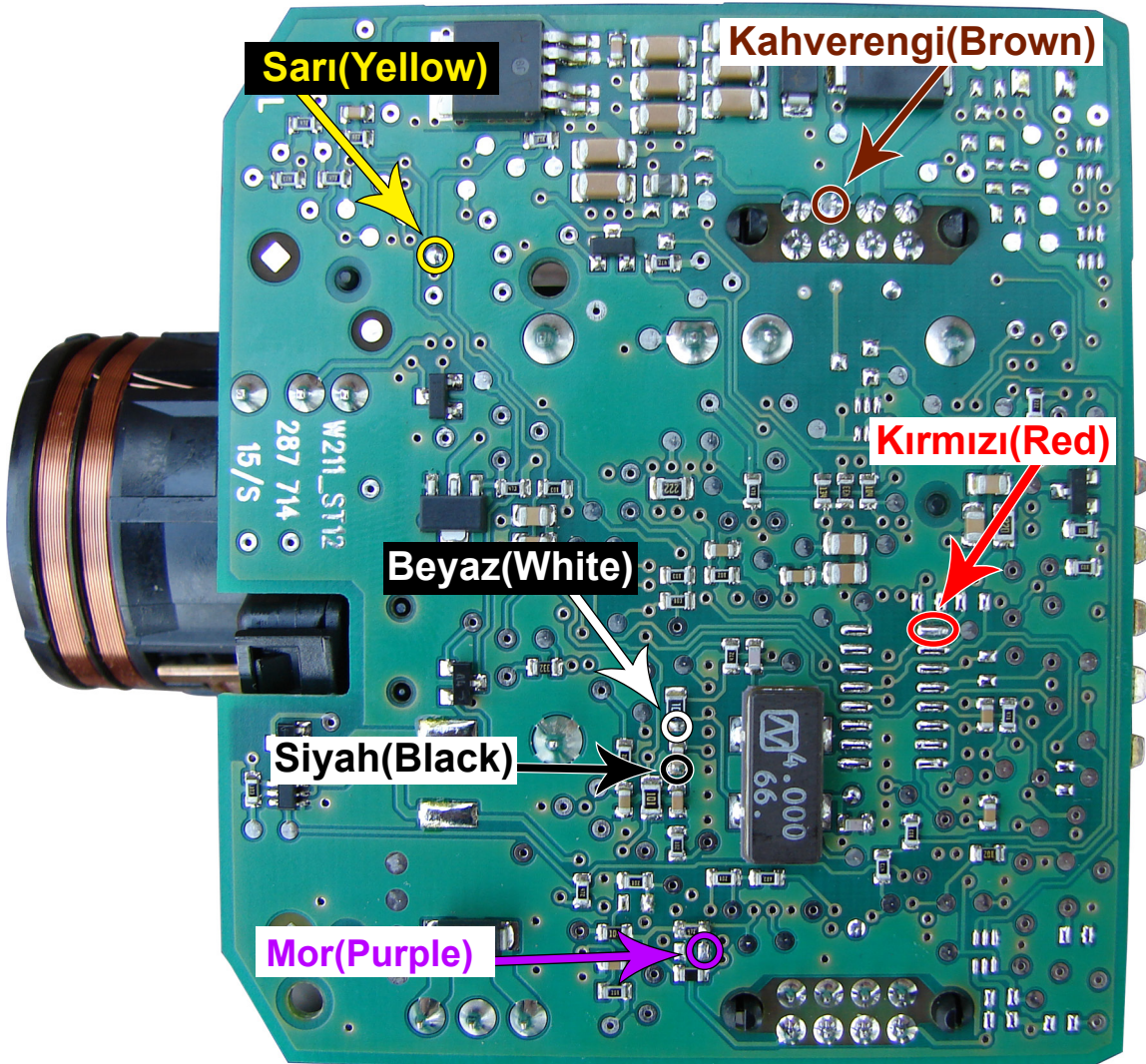
**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

Mercedes-Benz E Class "W211 ST12-13-S" EZS / EIS ZFH-EA7 - Security MCU Adapter



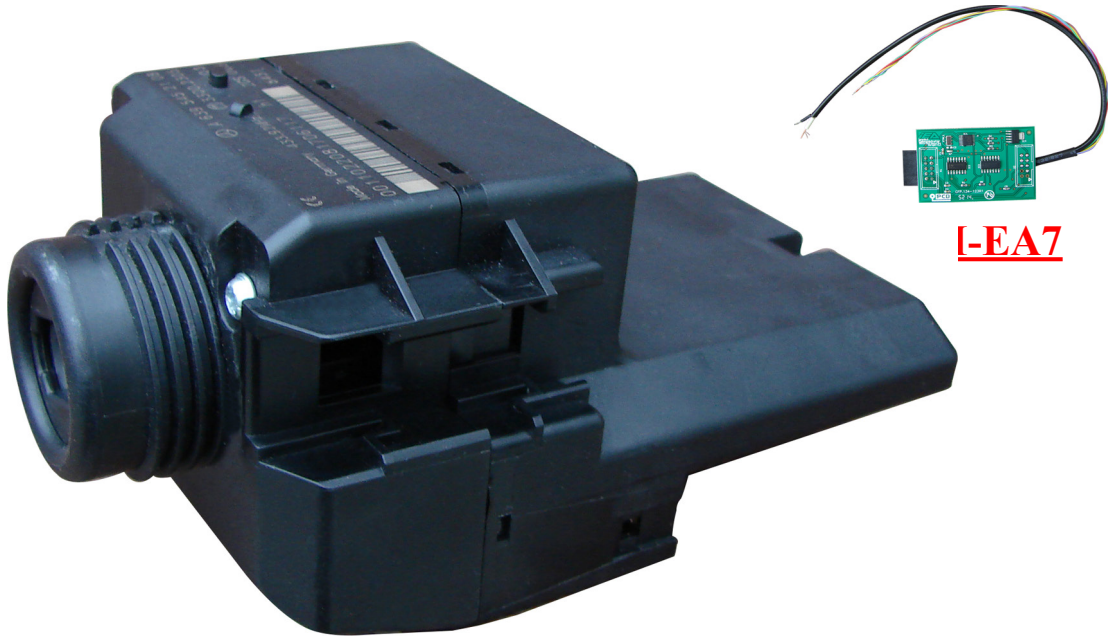
**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

Mercedes-Benz E Class "W211 ST12-15-S" EZS / EIS ZFH-EA7 - Security MCU Adapter

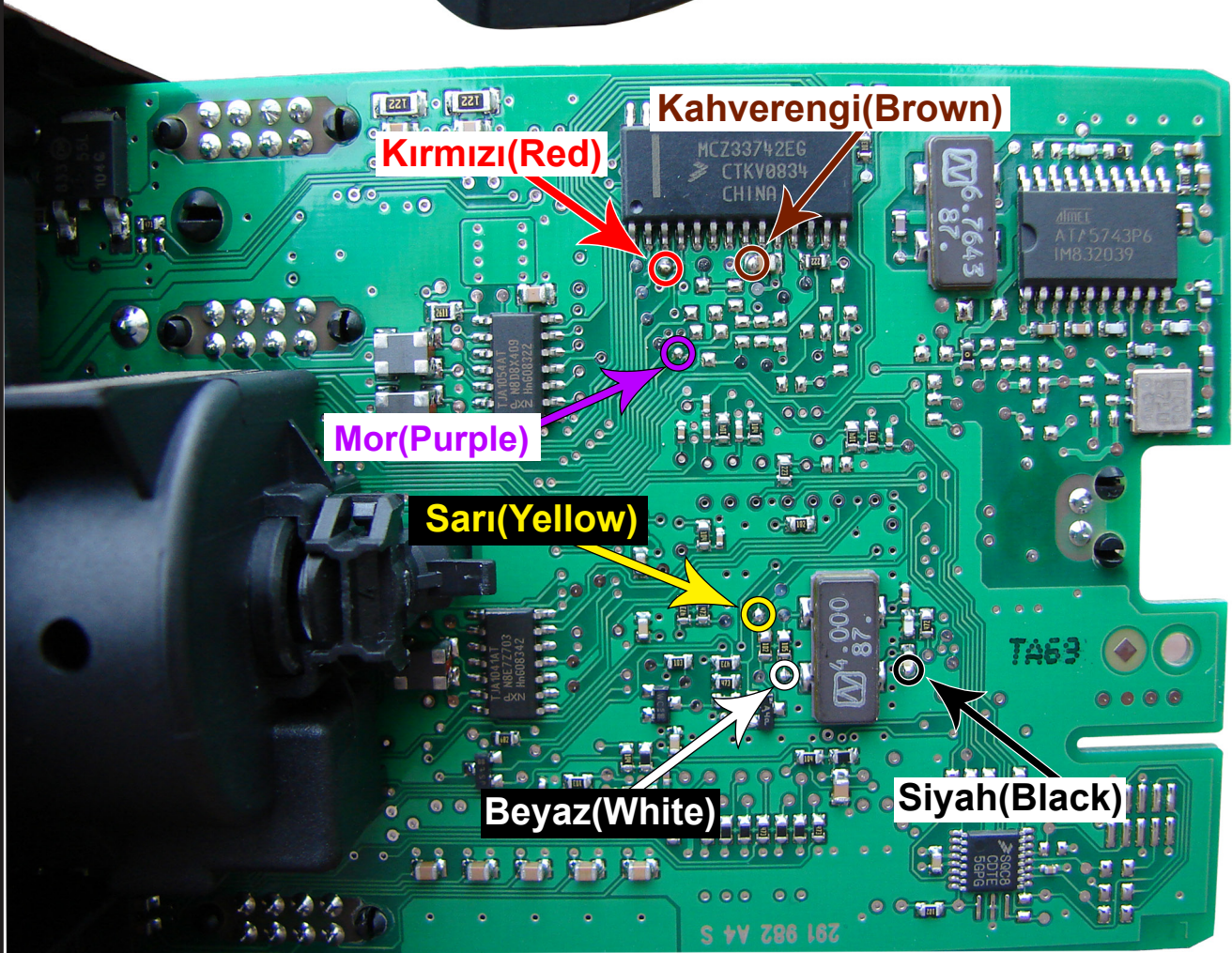


**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

Mercedes-Benz Vaneo, Viano, Vito Models "W639" (QFP112) EZS / EIS ZFH-EA7 - Security MCU Adapter



EZS / EIS ZFH-EA7

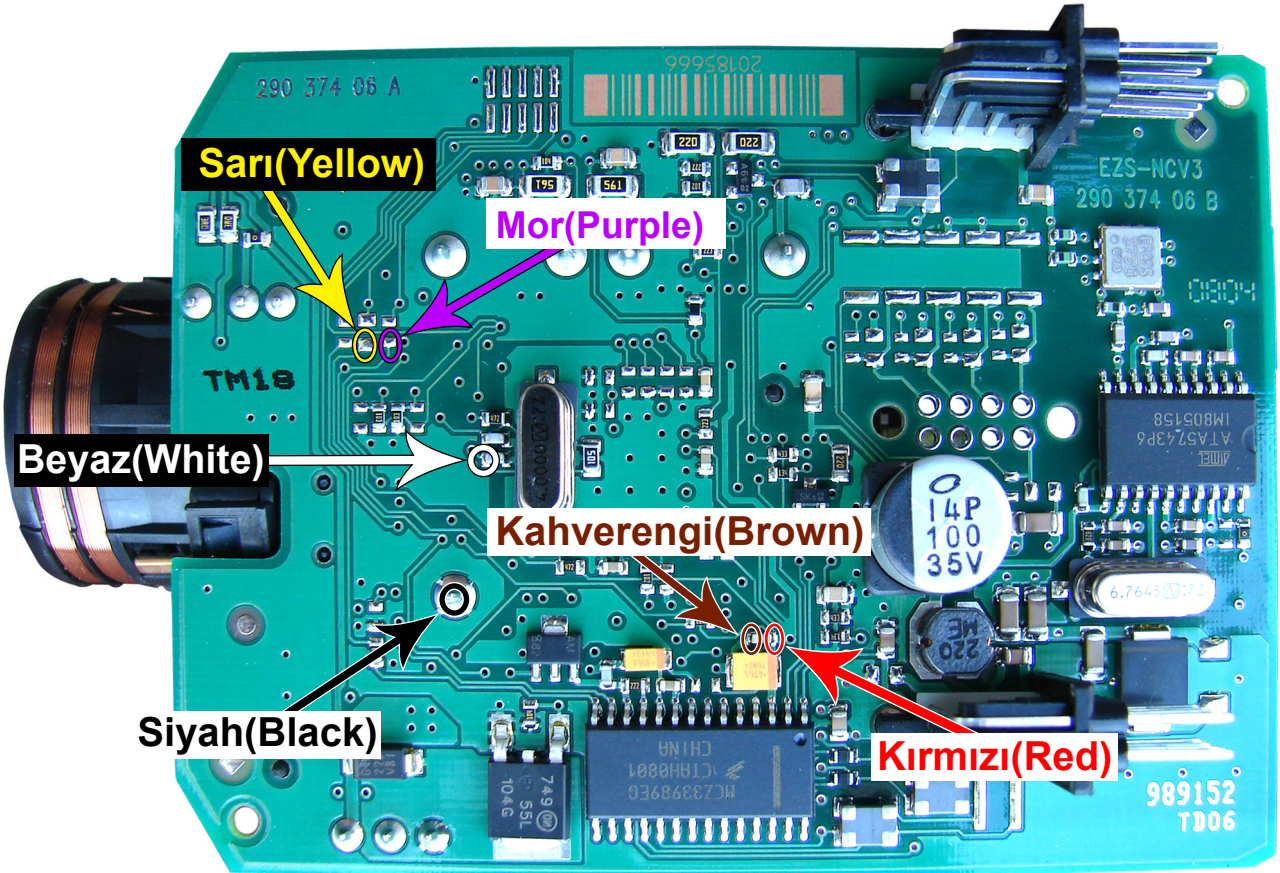


**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

Mercedes-Benz Sprinter Model "W906" EZS / EIS ZFH-EA7 - Security MCU Adapter



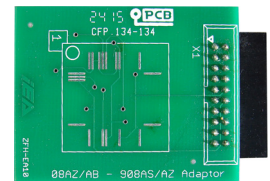
ZFH-EA7



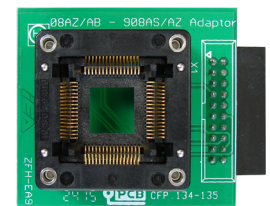
**Solder the wires to the certain points as given
on each picture to read MCU with Zed-FULL.**

**Mercedes-Benz C Class "W203" EZS / EIS
MCU MASK NUMBER : 1J35D
ZFH-EA9 / ZFH-EA10 - 64 Pins MCU Adapter (QFP64)**

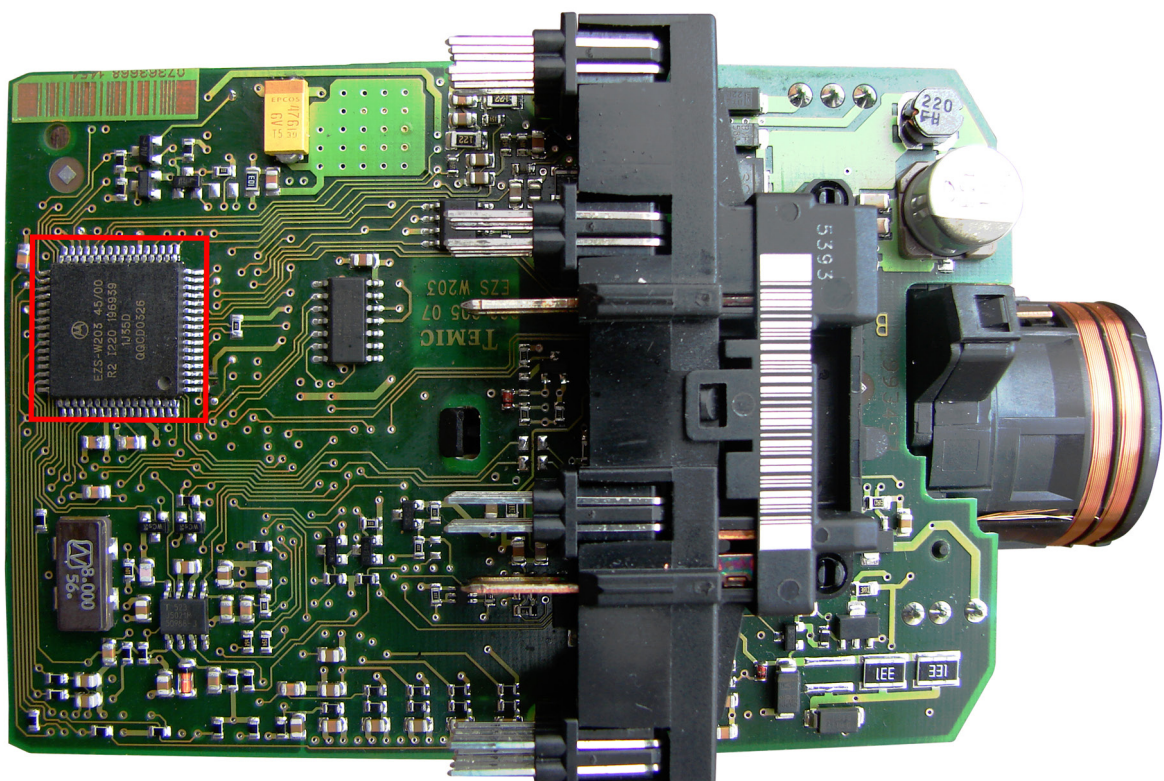
If you are facing any problem reading this MCU please also check page 38, 39



ZFH-EA10



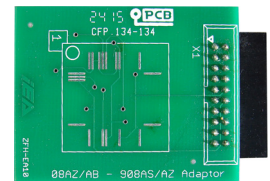
ZFH-EA9



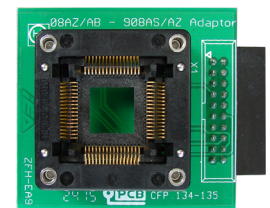
**Remove MCU from board and read it with Zed-FULL
using ZFH-EA9 or ZFH-EA10 adapters.**

**Mercedes-Benz C Class "W203" EZS / EIS
MCU MASK NUMBER : 2J74Y, 4J74Y
ZFH-EA9 / ZFH-EA10 - 64 Pins MCU Adapter (QFP64)**

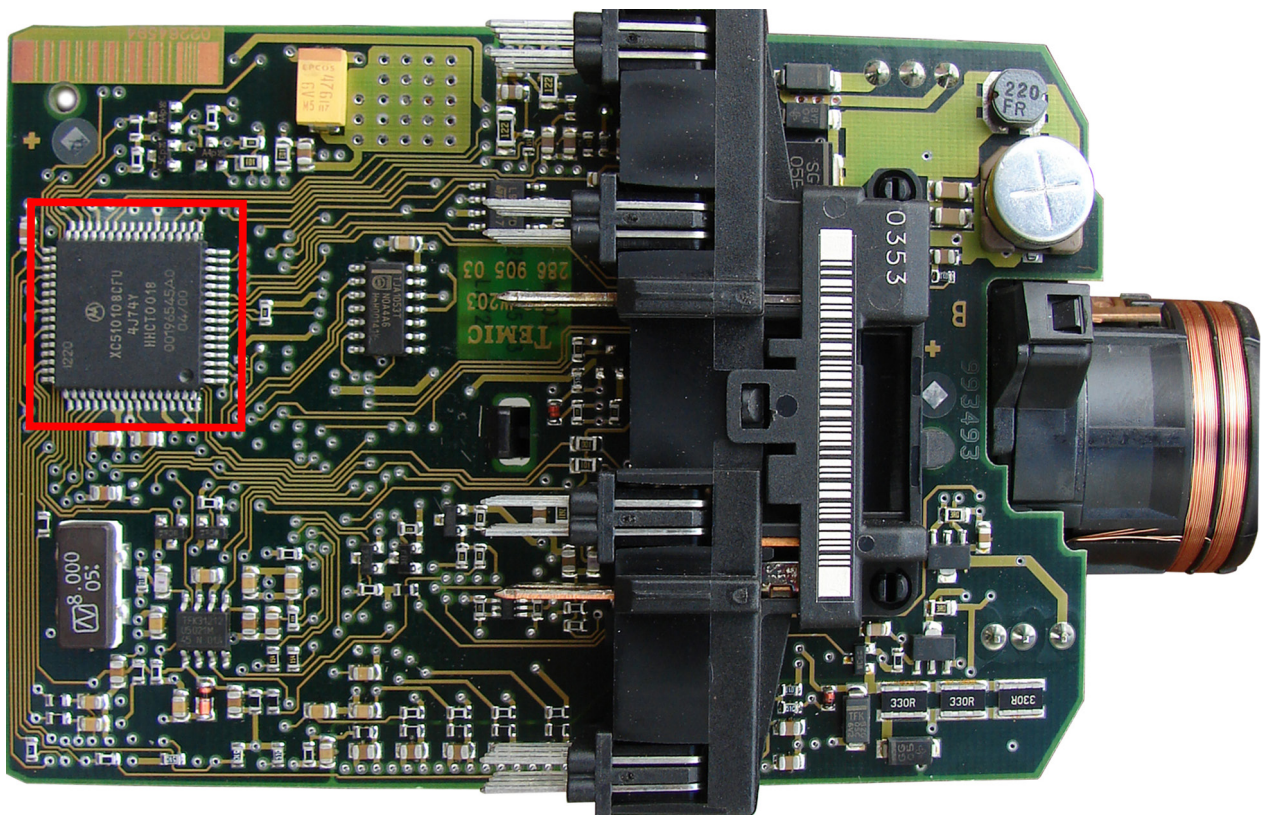
[If you are facing any problem reading this MCU please also check page 38, 39](#)



ZFH-EA10

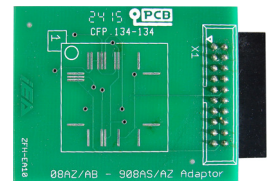


ZFH-EA9

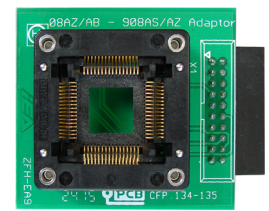


**Remove MCU from board and read it with Zed-FULL
using ZFH-EA9 or ZFH-EA10 adapters.**

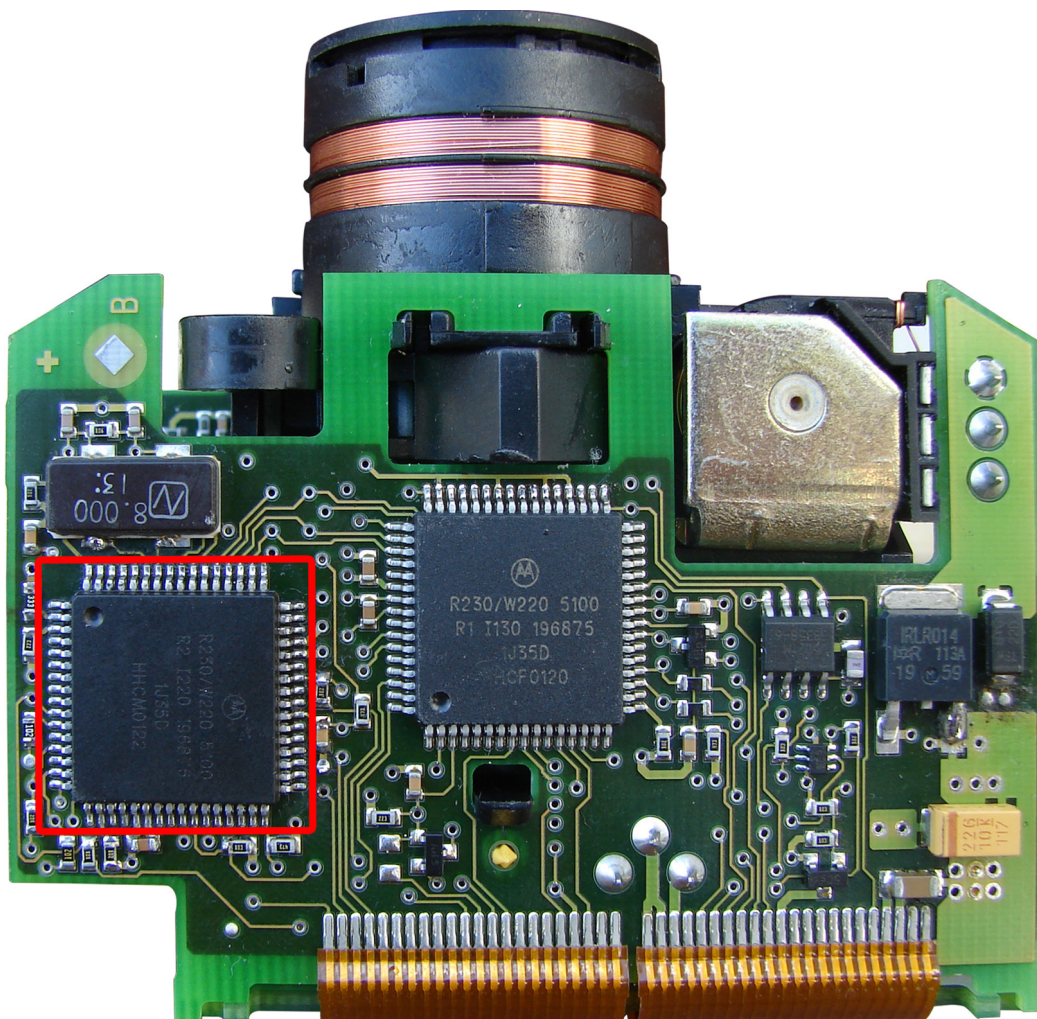
**Mercedes-Benz E Class "W215-W220" EZS / EIS
MCU MASK NUMBER : 1J35D
ZFH-EA9 / ZFH-EA10 - 64 Pins MCU Adapter (QFP64)**



ZFH-EA10



ZFH-EA9

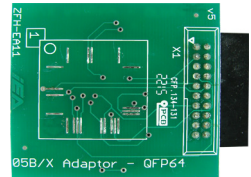


**Remove MCU from board and read it with Zed-FULL
using ZFH-EA9 or ZFH-EA10 adapters.**

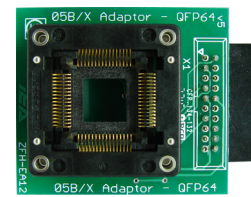
MASK NUMBER : 4J74Y, 2J74Y, 3K85K, 0L02M, 1L02M, 2M73Y
ZFH-EA9 / ZFH-EA10 - 64 Pins MCU Adapter (QFP64)



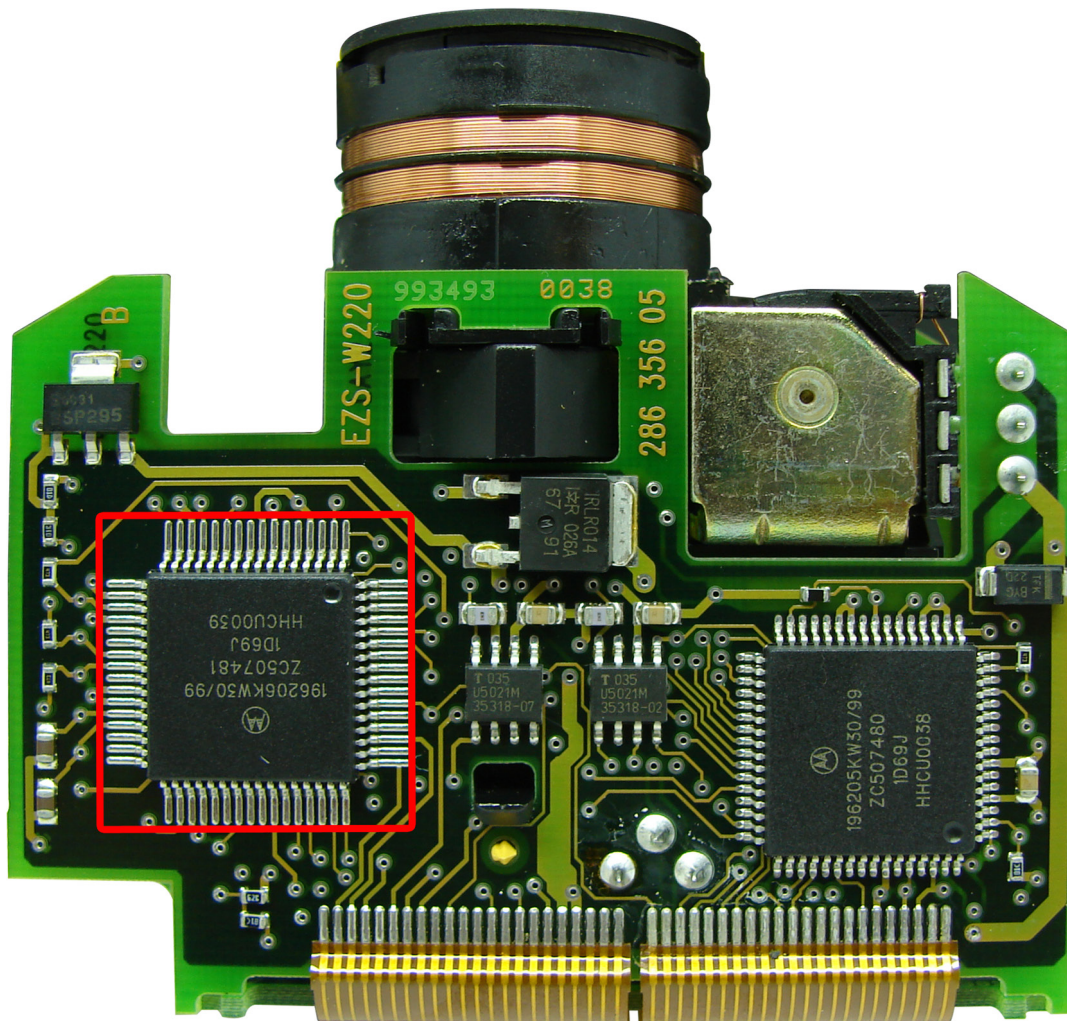
**Mercedes-Benz E Class "W215-W220" EZS / EIS
MCU MASK NUMBER : 1D69J
ZFH-EA11 / ZFH-EA12 - 64 Pins MCU Adapter (QFP64)**



ZFH-EA11

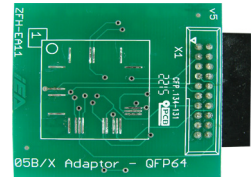


ZFH-EA12

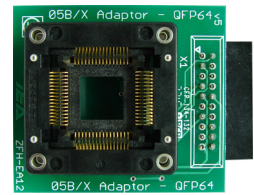


**Remove the MCU from board and read it with Zed-FULL
using ZFH-EA11 or ZFH-EA12 adapter.**

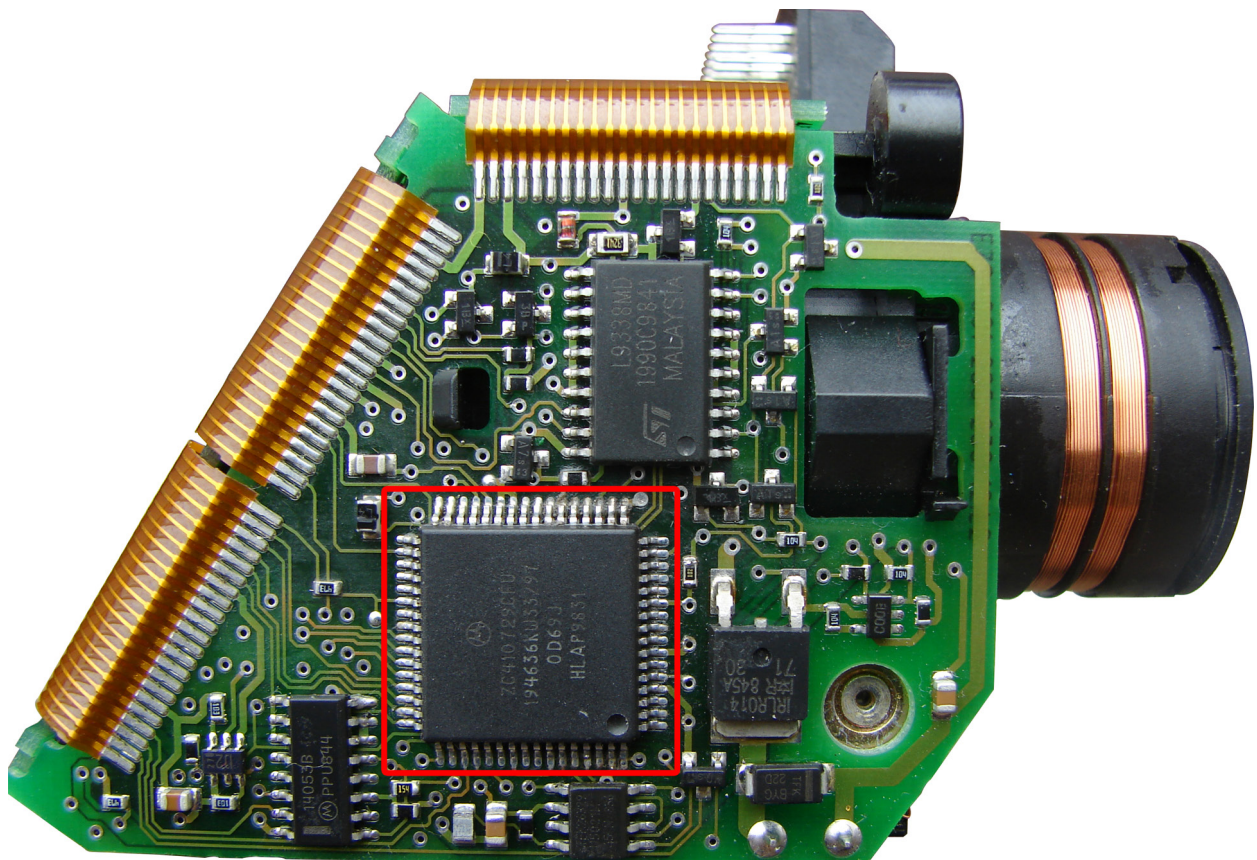
**Mercedes-Benz E Class "W202-W208-W210" EZS / EIS
MCU MASK NUMBER : 0D69J, 0G47V, 1D69J, 1H52A
ZFH-EA11 / ZFH-EA12 - 64 Pins MCU Adapter (QFP64)**



ZFH-EA11



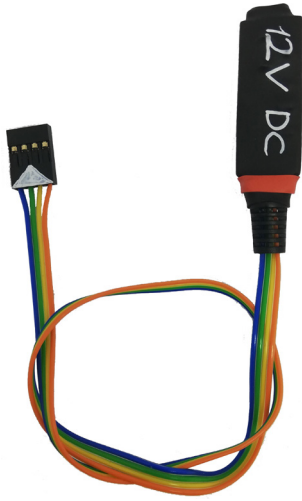
ZFH-EA12



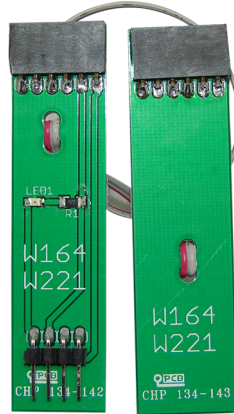
**Remove the MCU from board and read it with Zed-FULL
using ZFH-EA11 or ZFH-EA12 adapter.**

Mercedes-Benz Test Kit Contents

Power Cable



W164, W221 EZS/EIS Test Kit



W169, W209, W211 EZS/EIS Test Kit



W202, W208, W210 EZS/EIS Test Kit



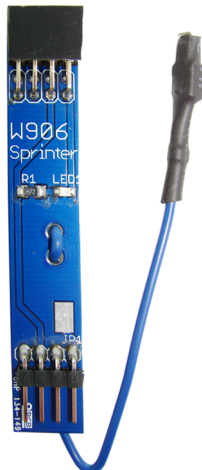
W203, W639 EZS/EIS Test Kit



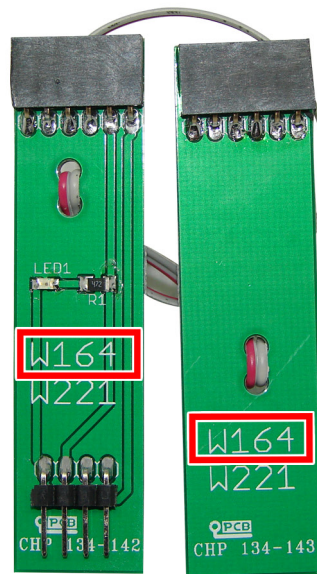
W215, W220 EZS/EIS Test Kit



W906 EZS/EIS (Sprinter) Test Kit

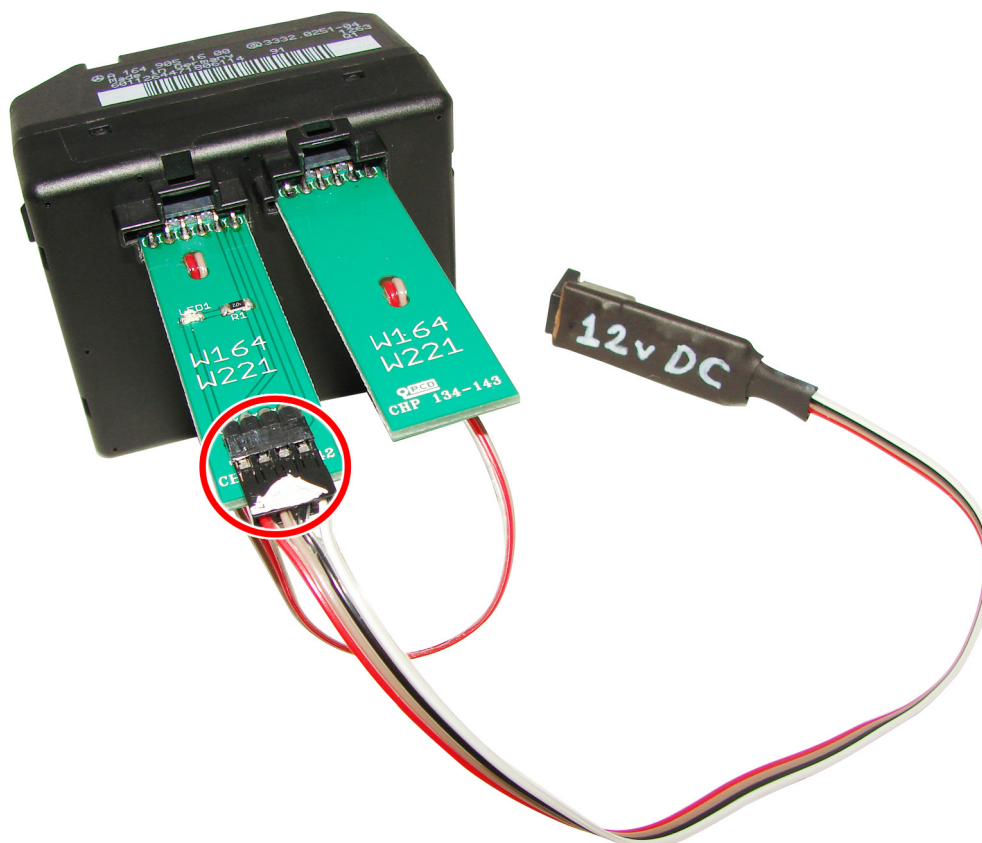


Mercedes-Benz "W164, W221" EZS / EIS Test Kit



Test Kit

Power Cable



Insert the test kit adapter to EZS/EIS unit as shown on Picture.

White color marked side on adapter must be on top side.

Give 12 Volt DC to power cable- Zed-FULL power adapter can be used.

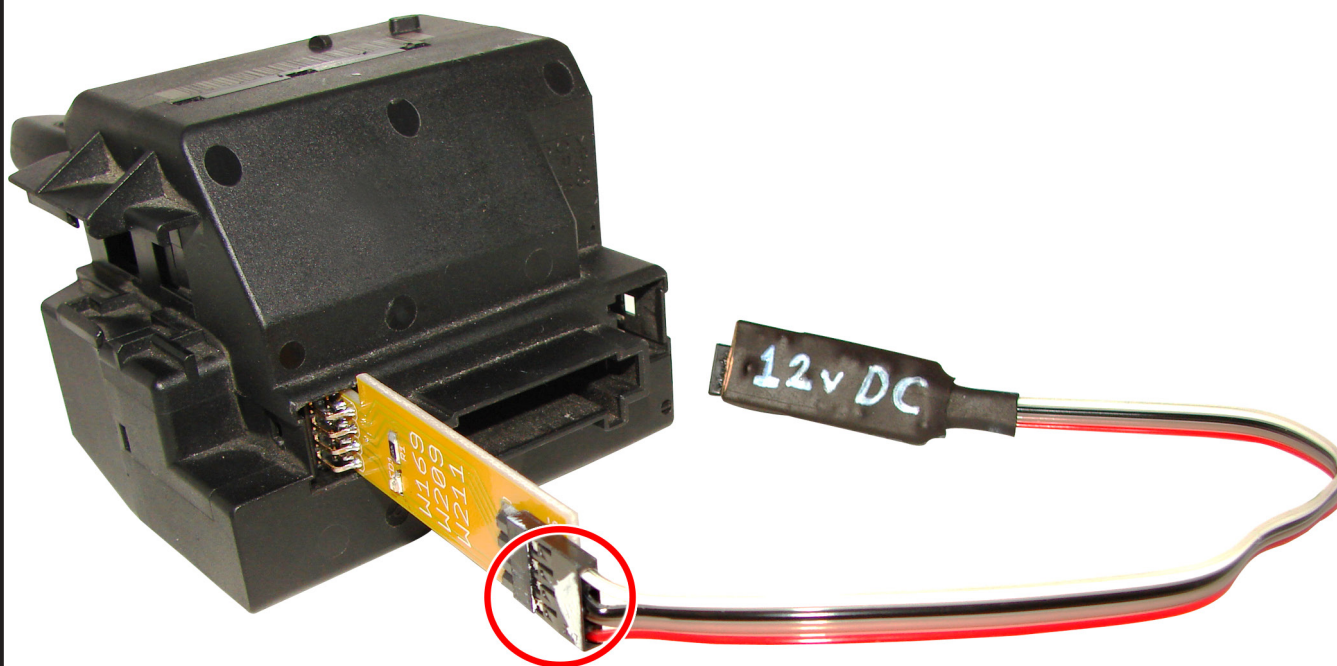
After all required connections you can test the keys which you have programmed with Zed-FULL.

Mercedes-Benz "W169, W209, W211" EZS / EIS Test Kit



Test Kit

Power Cable



Insert the test kit adapter to EZS/EIS unit as shown on Picture.

White color marked side on adapter must be on top side.

Give 12 Volt DC to power cable- Zed-FULL power adapter can be used.

After all required connections you can test the keys which you have programmed with Zed-FULL.

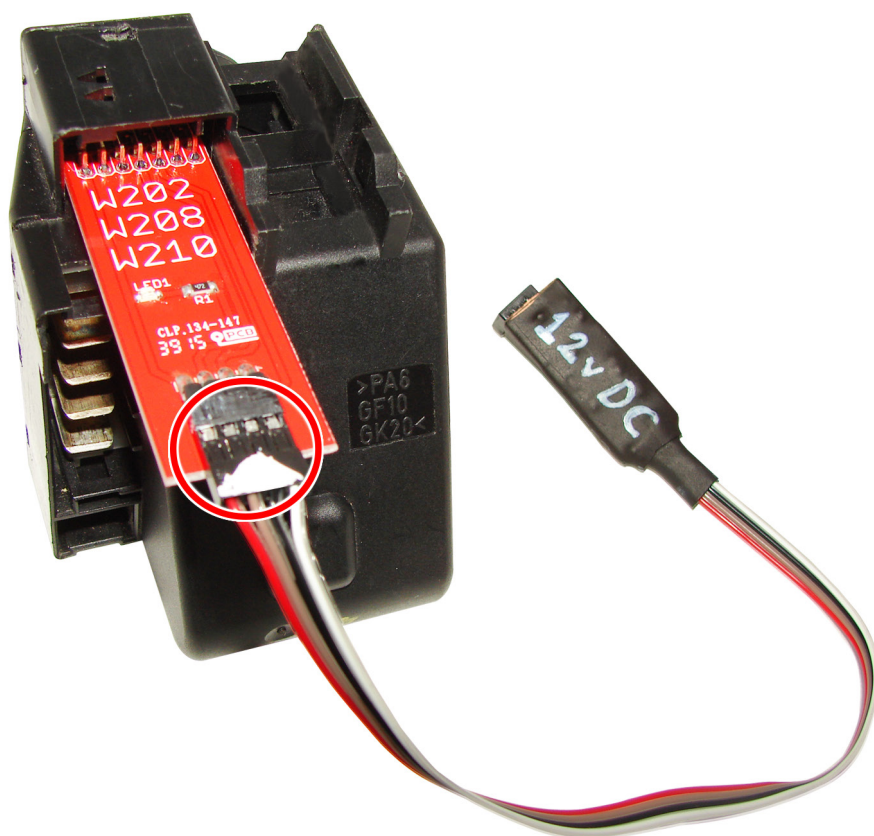
Mercedes-Benz "W202, W208, W210" EZS / EIS Test Kit



Test Kit



Power Cable



Insert the test kit adapter to EZS/EIS unit as shown on Picture.

White color marked side on adapter must be on top side.

Give 12 Volt DC to power cable- Zed-FULL power adapter can be used.

After all required connections you can test the keys which you have programmed with Zed-FULL.

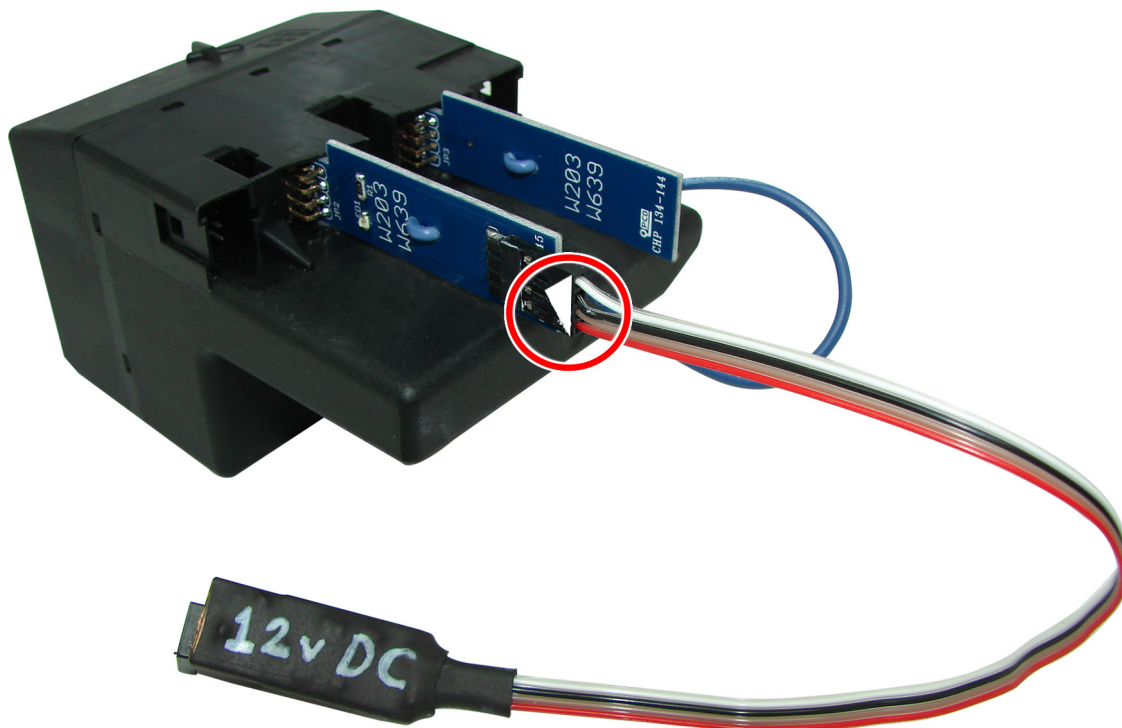
Mercedes-Benz "W203, W639" EZS / EIS Test Kit



Test Kit

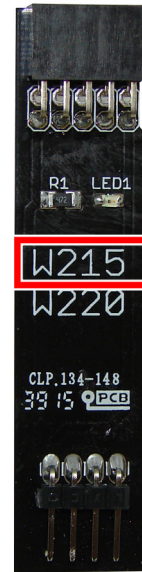


Power Cable



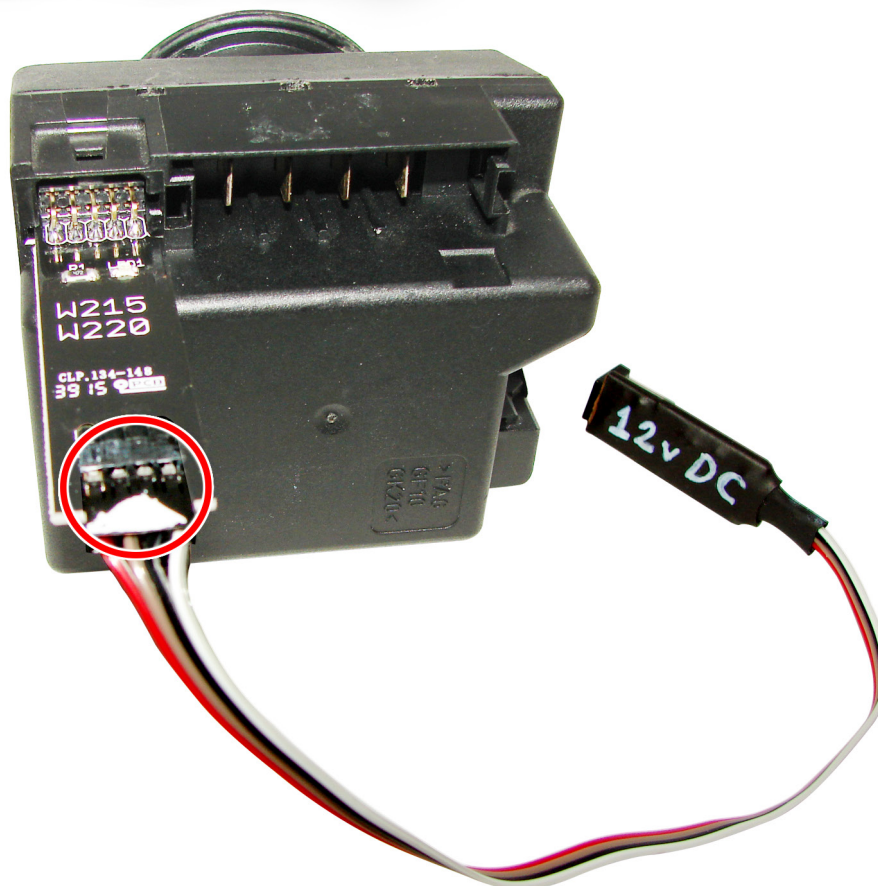
Insert the test kit adapter to EZS/EIS unit as shown on Picture.
White color marked side on adapter must be on top side.
Give 12 Volt DC to power cable- Zed-FULL power adapter can be used.
After all required connections you can test the keys which you have programmed
with Zed-FULL.

Mercedes-Benz "W215, W220" EZS / EIS Test Kit



Test Kit

Power Cable



Insert the test kit adapter to EZS/EIS unit as shown on Picture.

White color marked side on adapter must be on top side.

Give 12 Volt DC to power cable- Zed-FULL power adapter can be used.

After all required connections you can test the keys which you have programmed with Zed-FULL.

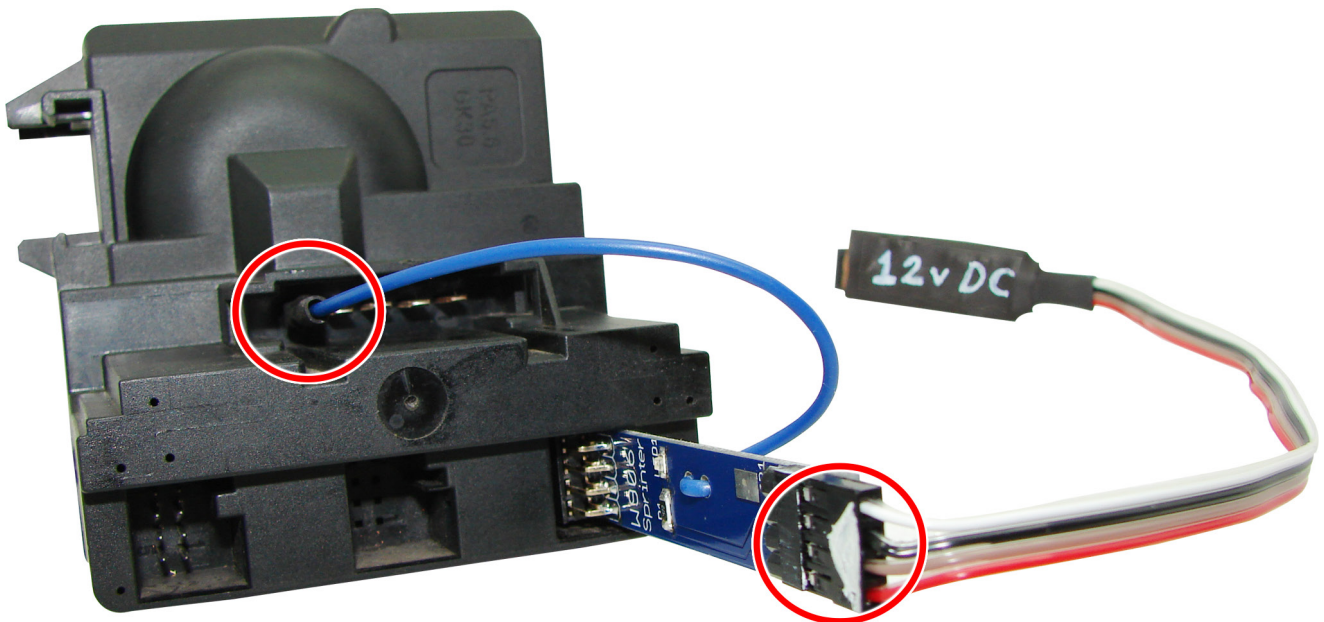
Mercedes-Benz "W906 Sprinter" EZS / EIS Test Kit



Test Kit



Power Cable



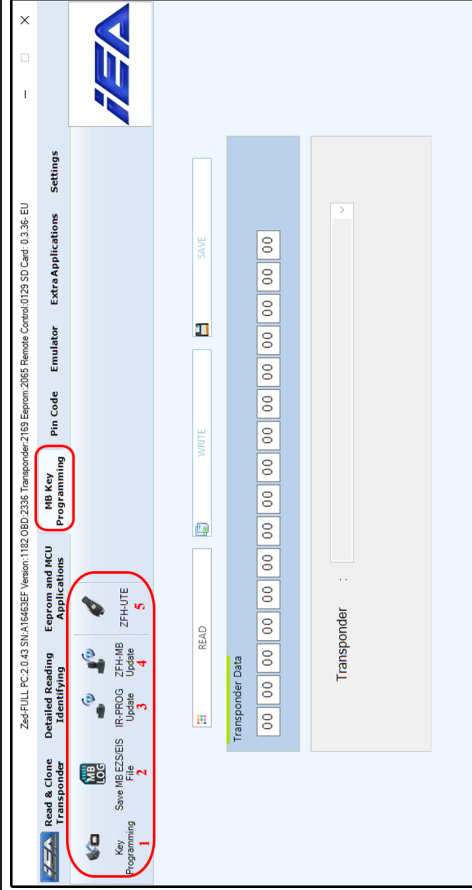
Insert the test kit adapter to EZS/EIS unit as shown on Picture.

White color marked side on adapter must be on top side.

Give 12 Volt DC to power cable- Zed-FULL power adapter can be used.

After all required connections you can test the keys which you have programmed with Zed-FULL.

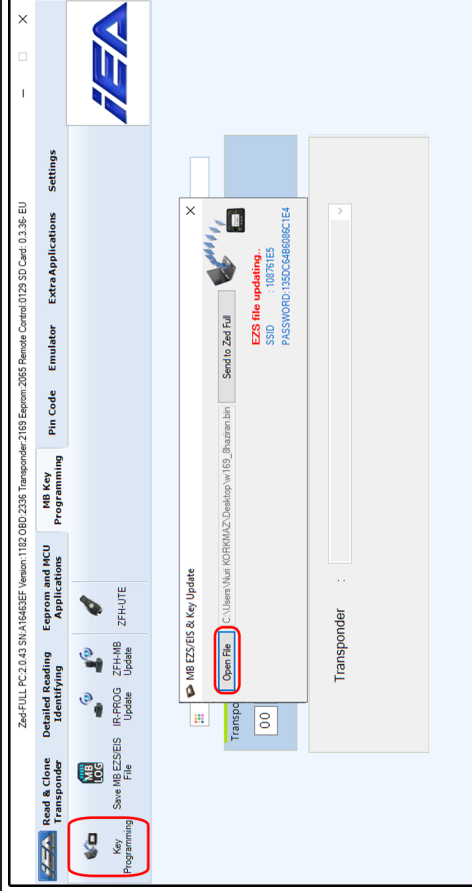
Mercedes-Benz key programming application on PC Software



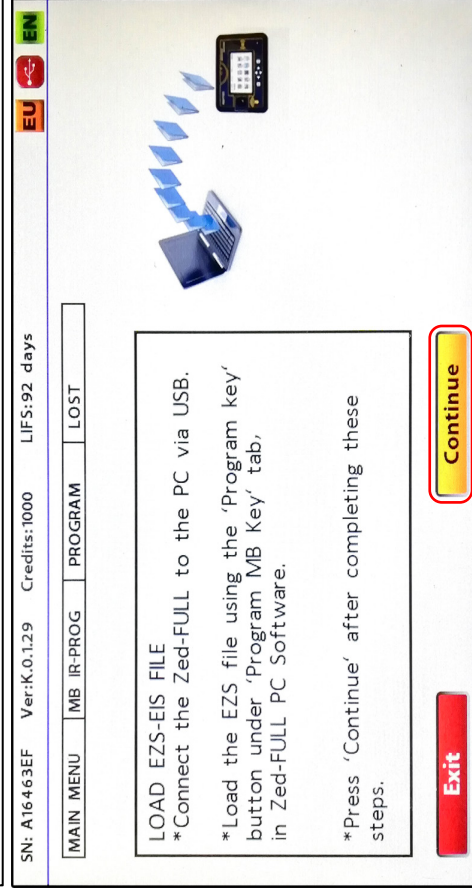
- 1- Key programming button.
- 2- Save Mercedes File button to save EZS / EIS files to your PC.
- 3- To update IR-PROG module.
- 4- To update ZFH-MB key.
- 5- To update ZFH-UTE .



If the password can not be calculated from dump file, PC SW will ask you to enter 16 digits password. Enter it or if you do not have the password, please send EZS/EIS dump file to your distributor or IEA support to get password.

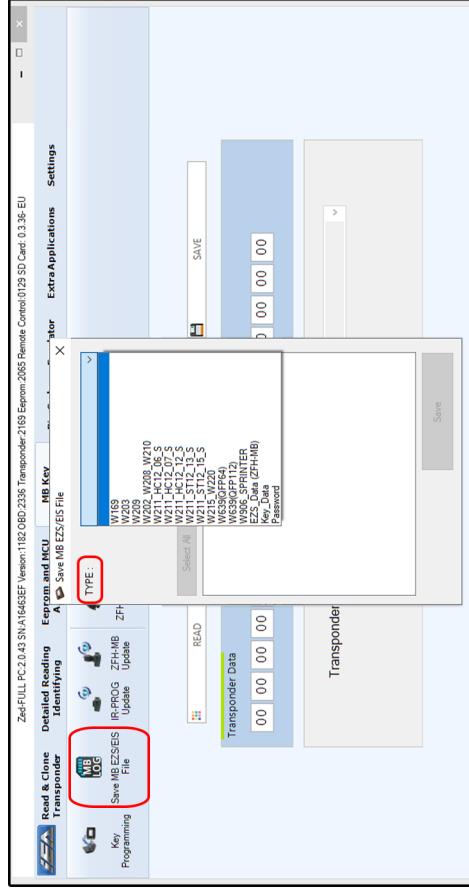


When a different programmer is used to read EZS/EIS MCU, this file must be sent to Zed-FULL using PC SW. For this click on “Key Programming” and on new window open the EZS/EIS dump file and press “OK”.

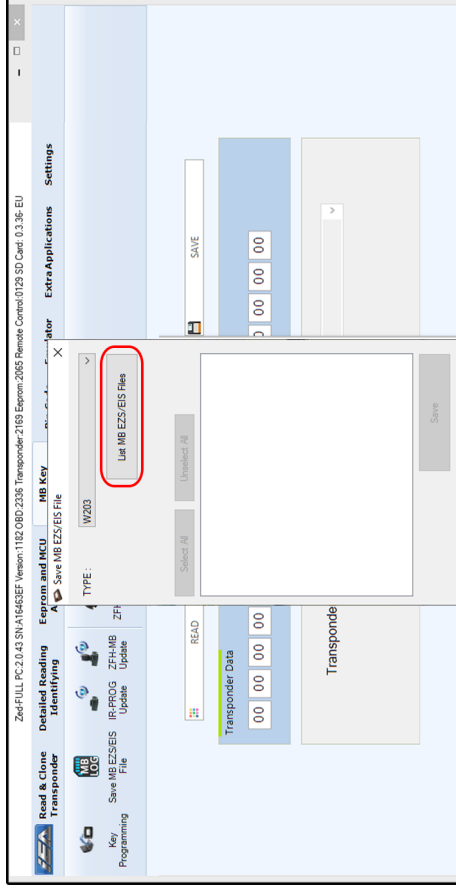


To get data from PC SW, Zed-FULL must be on this screen. As soon as we press on “Continue” button, Zed-FULL will pull the file from PC SW. The rest of procedure will be done on Zed-FULL screen.

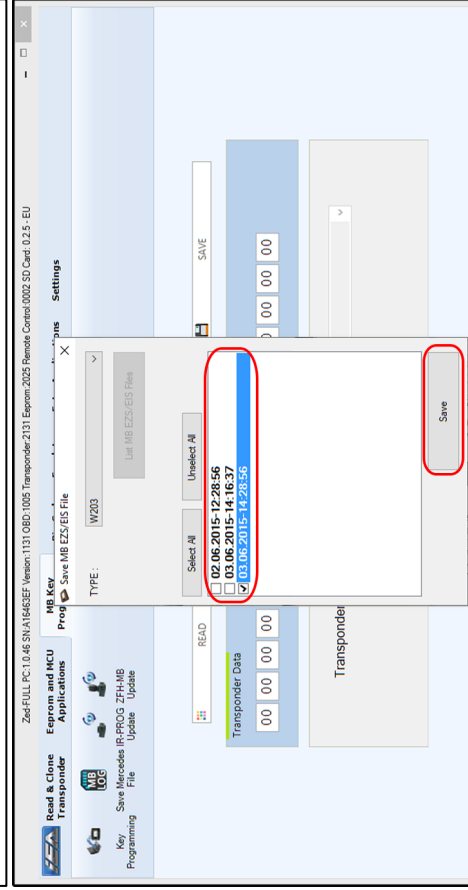
Saving Mercedes-Benz EZS / EIS files to PC



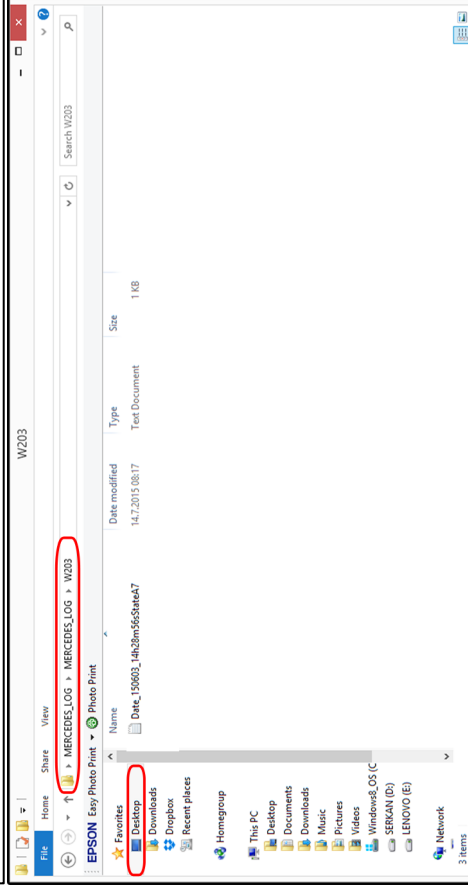
To save Mercedes files, select type of the EZS / EIS from the list.



Once you click on “List Mercedes Files” button, all read files will be listed.



Select the file which you want to save to your PC and click on “Save” button.

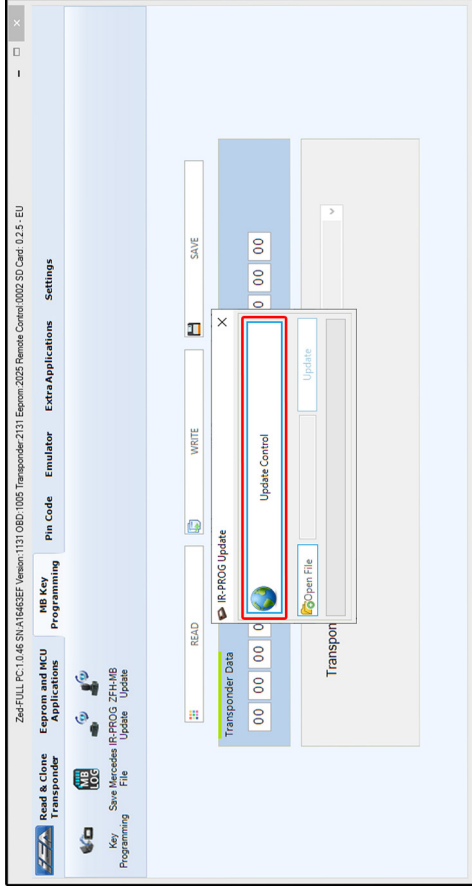


Once we click on “Save” button, a new folder will be created on your PC desktop and selected file will be saved in this folder.

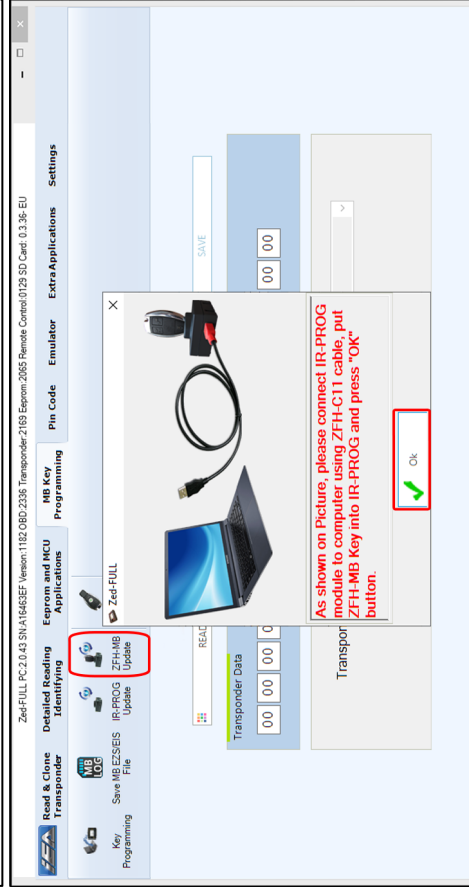
IR-PROG Module, ZFH-MB Key update



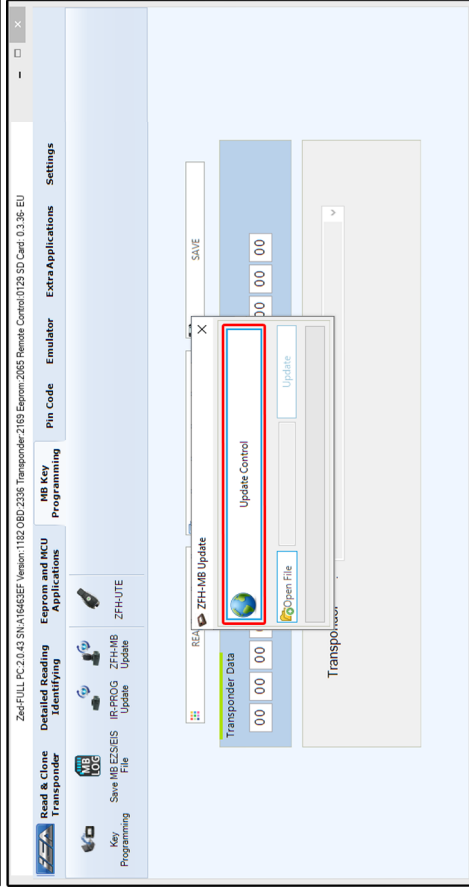
To update IR-PROG module connect it to PC and click on “IR-PROG Update” button.



Click on “Update Control” to make automatic update from internet.



To update ZFH-MB, connect “IR-PROG” to PC, insert ZFH-MB into IR-PROG and click on to “ZFH-MB Update” button.



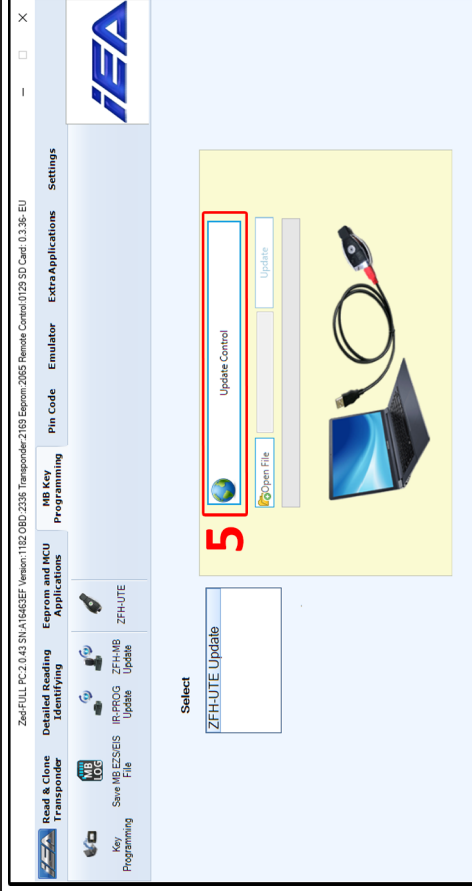
Click on “Update Control” to make automatic update from internet.

ZFH-UTE update



To update ZFH-UTE, please follow these steps;

- 1- Connect ZFH-UTE to PC with ZFH-CT1 cable.
- 2- Go to "ZFH-UTE" section on PC SW.
- 3- Select (ZFH-UTE Update) from PC SW.
- 4- Click on "Ok" button on PC SW.



5- Click on "Update Control" button to start automatic update from internet.



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