

# CAS3 add key by OBD on bench

Tip :

1 CAS1-3 no need DME ISN when add key (even if all key lost ,no need DME ISN too )

2 BMW car ,key position # 1 and #2 ,you can disable this two key position ,but can not delete the key or recover key position . It will make your car can not ignition on if you do that

3 BMW car only can support 2 smart keys normally , You can disable the lose smart key ,then you can add smart key

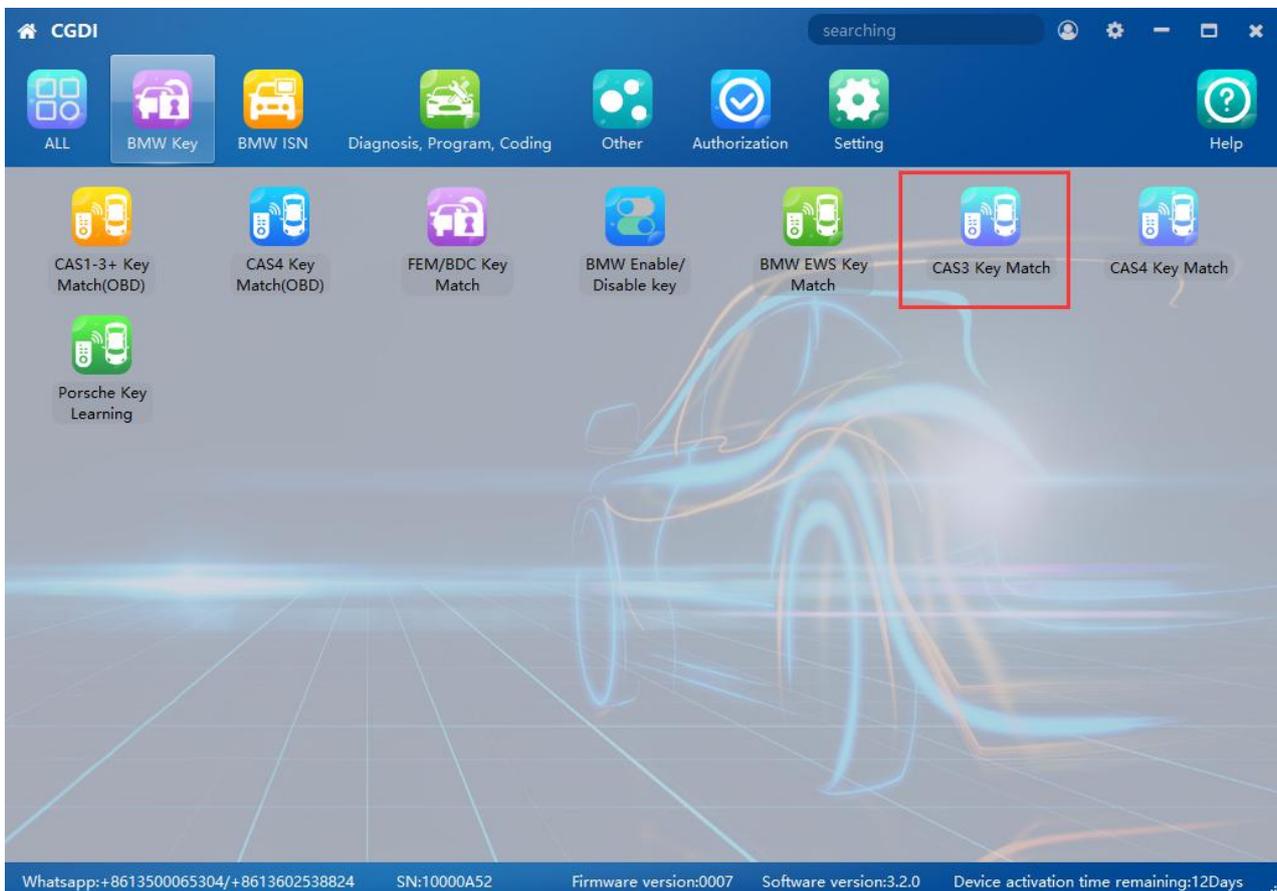
**Equipment: CGDI BMW**

**Function: BMW CAS1-3+ key match(OBD)**

**Parts needed: Gateway,ignition switch,CAS,new blank key,USB cable, OBD cable,Power and platform harness.**

## 1. Check the CAS3 key status

### 1.1 Make sure that you have the blank key



## 1.2 Put your key in CGDI BMW coil ,then click check key status

The screenshot shows the 'CAS3 key matching' software interface. The title bar includes 'CAS3 key matching' and 'Feature Version:0006'. The main area contains input fields for 'VIN:', 'Cas version:', 'Tooth code:', and 'Remote control frequency:'. A table with columns 'Key number', 'Key ID', and 'Status' is present but empty. On the right side, there are buttons for 'Load CAS data', 'Check key status', 'Generate dealer key', and 'Unlock key'. A 'Help' button is located at the bottom right. A modal dialog box titled 'Prompt' is displayed in the center, showing an information icon and the text 'Key blank' with a 'confirm' button. Below the table, the status text reads 'Checking key status', 'Blank key', and 'Key blank'.

VIN: \_\_\_\_\_ Cas version: \_\_\_\_\_

Tooth code: \_\_\_\_\_ Remote control frequency: \_\_\_\_\_

Key number	Key ID	Status
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Checking key status  
Blank key  
Key blank

Buttons: Load CAS data, Check key status, Generate dealer key, Unlock key, Help

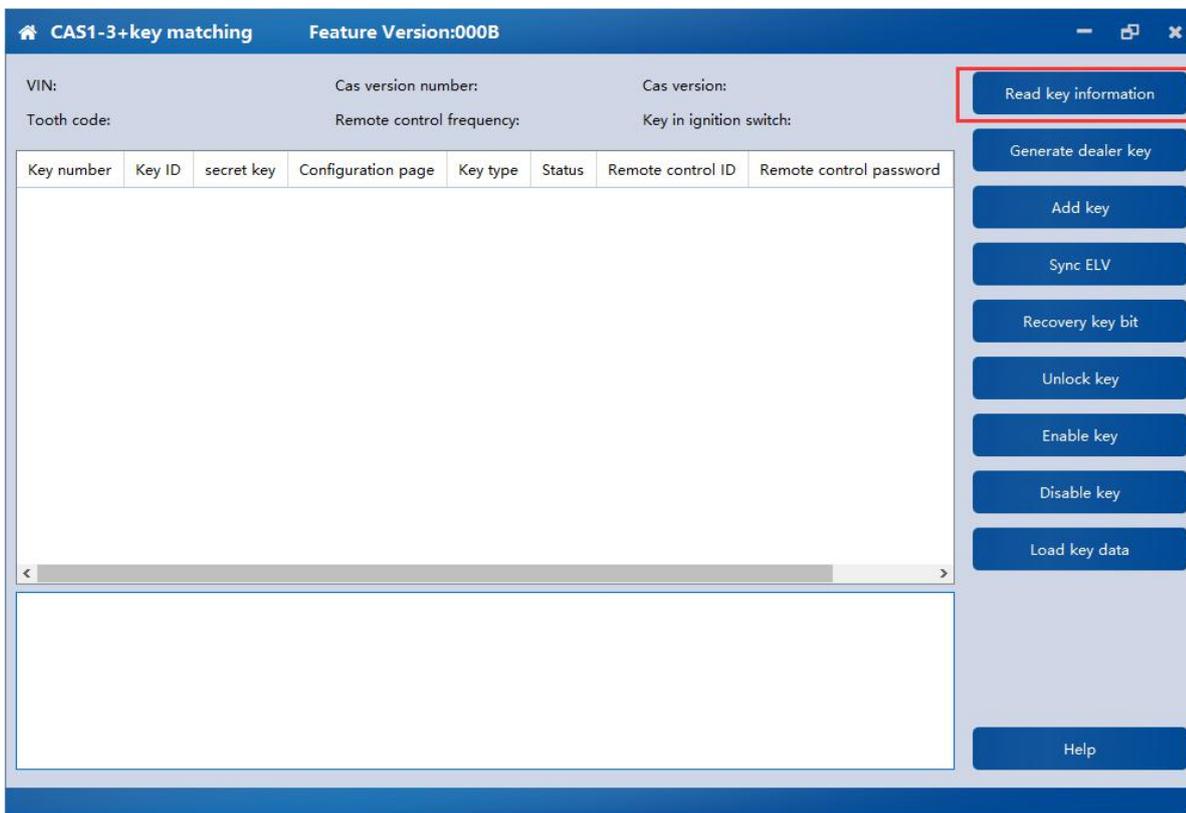
Modal Dialog: Prompt, Key blank, confirm

## 2. Enter into CAS1-3+ key match(OBD) page to add key

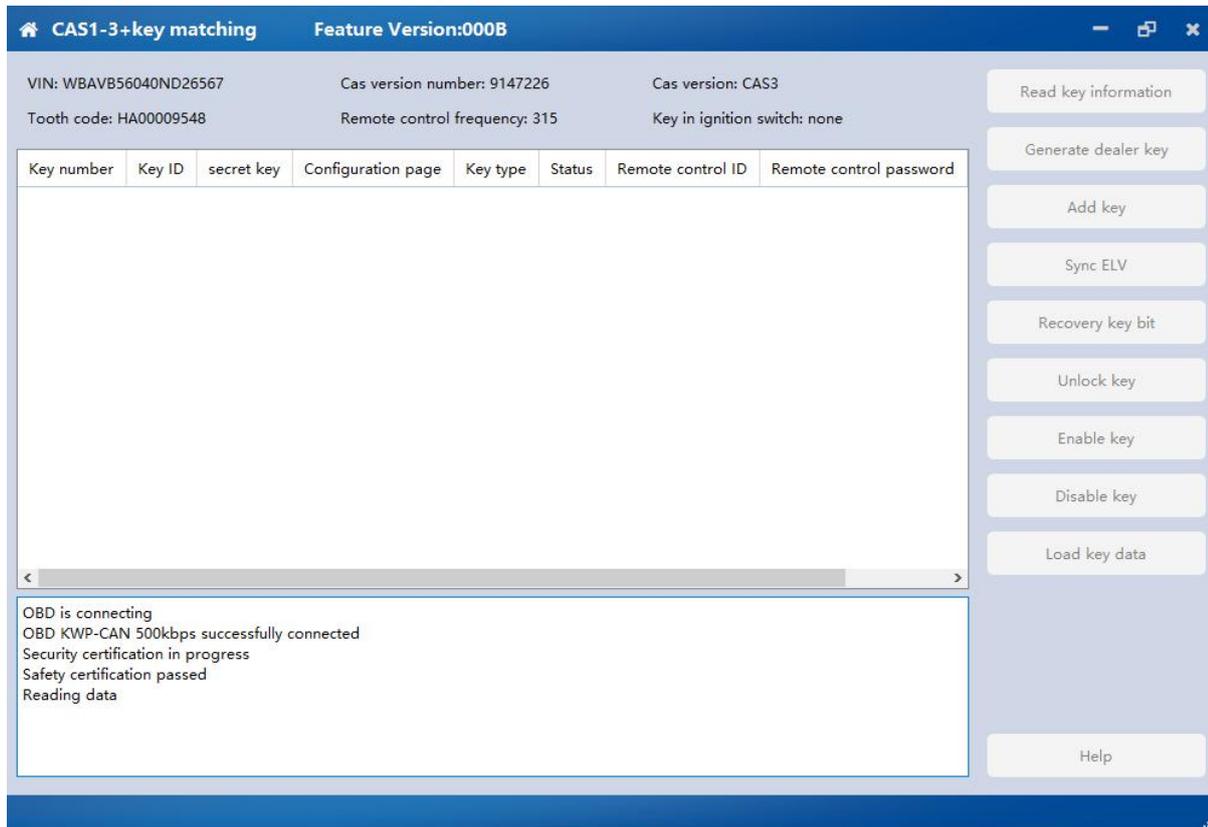


Tip: You need to make sure your instrument is light

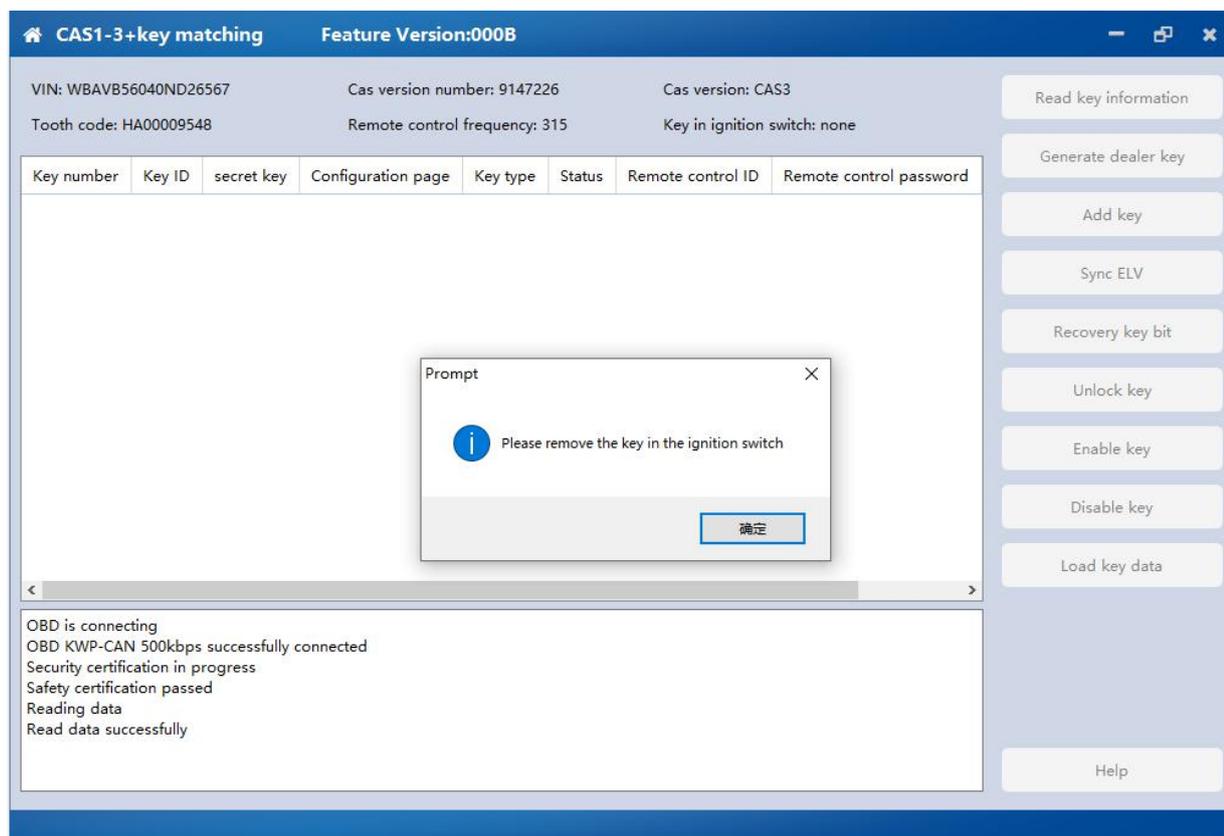
### 2.1 Click Read key information



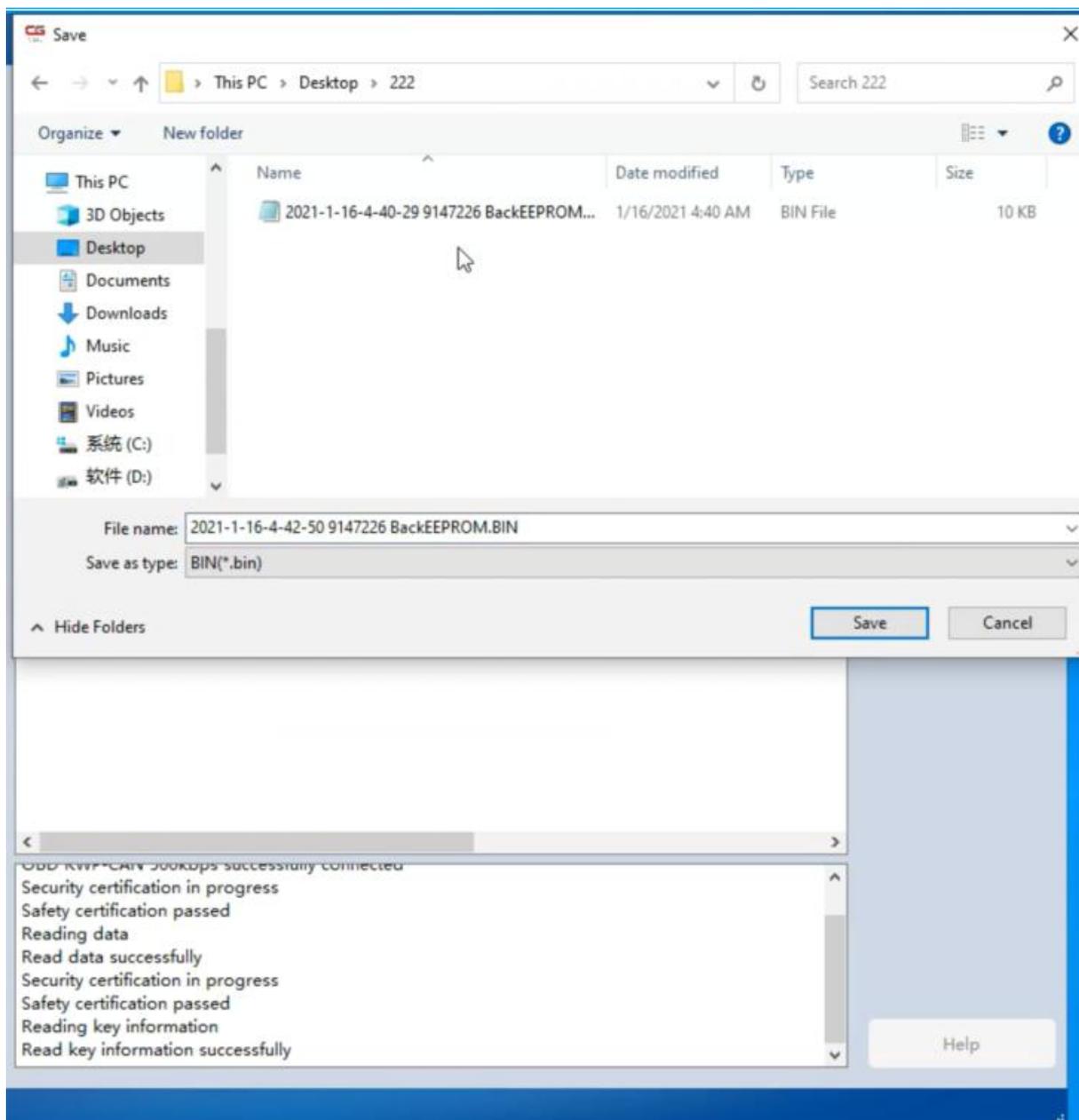
Please wait more seconds, it is reading ....



**2.2 When it tip you remove the key from the ignition switch ,you must need to make sure it no key in the ignition switch**



It will pop a file that you need to save it (This file can use to unlock key )



## 2.3 Click Generate dealer key

Choose empty key position then click Generate dealer key

**CAS1-3+key matching** Feature Version:000B

VIN: WBAVB56040ND26567 Cas version number: 9147226 Cas version: CAS3  
 Tooth code: HA00009548 Remote control frequency: 315 Key in ignition switch: none

Read key information  
**Generate dealer key**  
 Add key  
 Sync ELV  
 Recovery key bit  
 Unlock key  
 Enable key  
 Disable key  
 Load key data  
 Help

Key number	Key ID	secret key	Configuration page	Key type	Status	Remote control ID	Remote control
1	9EC83519	6C5A2C2828F3	CEB9B5E8	pcf7936	Enable	D1CB	3E0171E154AC
2	B389E597	50BE0687C4A5	C85F7580	smart key	Enable	F71A	8B0EC6AB1A61
3	DCC0839B	161F8077B53E	C8697B02	remote key	Enable	3DDD	3A043C7B9170
4	FFFFFFFF	73E065EF3E54	C8C50BC4	Unused	Enable	EB71	47CC99EE62F5
5	FFFFFFFF	AB5F0B46E417	C8141A5D	Unused	Enable	31FD	5A487E2F0B66
6	FFFFFFFF	CE67AFE5E7DE	C80FDAC9	Unused	Enable	9B59	3BEF7887182B
7	FFFFFFFF	FD65955EF727	C8BD19BF	Unused	Enable	6827	5D0E32DC6F95
8	FFFFFFFF	40B6B7B37738	C846AFB9	Unused	Enable	C276	151677CBD43E
9	FFFFFFFF	87AB0E485F15	C8A0F5DC	Unused	Enable	42C3	767F9DB61F7B
10	FFFFFFFF	2F263E4F0B08	C8B39D8B	Unused	Enable	93B7	9DB3C7329A48

Security certification in progress  
 Safety certification passed  
 Reading data  
 Read data successfully  
 Security certification in progress  
 Safety certification passed  
 Reading key information  
 Read key information successfully  
 File save path:C:/Users/Administrator/Desktop/宝马CGDI 3.2.0 版本/英文版/2020-12-28-19-8-45 9147226 BackEEPROM.BIN

Please put the blank key into CGDI as software said.

**CAS1-3+key matching** Feature Version:000B

VIN: WBAVB56040ND26567 Cas version number: 9147226 Cas version: CAS3  
 Tooth code: HA00009548 Remote control frequency: 315 Key in ignition switch: none

Read key information  
 Generate dealer key  
 Add key  
 Sync ELV  
 Recovery key bit  
 Unlock key  
 Enable key  
 Disable key  
 Load key data  
 Help

Key number	Key ID	secret key	Configuration page	Key type	Status	Remote control ID	Remote control
1	9EC83519	6C5A2C2828F3	CEB9B5E8	pcf7936	Enable	D1CB	3E0171E154AC
2	B389E597	50BE0687C4A5	C85F7580	smart key	Enable	F71A	8B0EC6AB1A61
3	DCC0839B	161F8077B53E	C8697B02	remote key	Enable	3DDD	3A043C7B9170
4	FFFFFFFF	73E065EF3E54	C8C50BC4	Unused	Enable	EB71	47CC99EE62F5
5	FFFFFFFF	AB5F0B46E417	C8141A5D	Unused	Enable	31FD	5A487E2F0B66
6	FFFFFFFF	CE67AFE5E7DE	C80FDAC9	Unused	Enable	9B59	3BEF7887182B
7	FFFFFFFF	FD65955EF727	C8BD19BF	Unused	Enable	6827	5D0E32DC6F95
8	FFFFFFFF	40B6B7B37738	C846AFB9	Unused	Enable	C276	151677CBD43E
9	FFFFFFFF	87AB0E485F15	C8A0F5DC	Unused	Enable	42C3	767F9DB61F7B
10	FFFFFFFF	2F263E4F0B08	C8B39D8B	Unused	Enable	93B7	9DB3C7329A48

Prompt

Please put the blank key into the coil of CGDI programmer

确定

Security certification in progress  
 Safety certification passed  
 Reading data  
 Read data successfully  
 Security certification in progress  
 Safety certification passed  
 Reading key information  
 Read key information successfully  
 File save path:C:/Users/Administrator/Desktop/宝马CGDI 3.2.0 版本/英文版/2020-12-28-19-8-45 9147226 BackEEPROM.BIN

Then choose your key type to add key

( Tip: BMW car only can support 2 smart keys normally , You can disable the lose smart key ,then you can add smart key )

The screenshot shows the 'CAS1-3+key matching' software interface. At the top, it displays 'Feature Version:000B'. Below this, there are fields for VIN (WBAVB56040ND26567), Cas version number (9147226), Cas version (CAS3), Tooth code (HA00009548), Remote control frequency (315), and Key in ignition switch (none). A table lists 10 keys with columns for Key number, Key ID, secret key, Configuration page, Key type, Status, Remote control ID, and Remote control. A dialog box titled 'Prompt' is overlaid on the table, asking 'Whether the currently programmed key is a smart key.' with a note: 'Note: If it is, the key will be locked!'. The dialog has two buttons: '是(Y)' (Yes) and '否(N)' (No). On the right side, there are several buttons: 'Read key information', 'Generate dealer key', 'Add key', 'Sync ELV', 'Recovery key bit', 'Unlock key', 'Enable key', 'Disable key', 'Load key data', and 'Help'. At the bottom, a log window shows the following text: 'Security certification in progress', 'Safety certification passed', 'Reading data', 'Read data successfully', 'Security certification in progress', 'Safety certification passed', 'Reading key information', 'Read key information successfully', and 'File save path:C:/Users/Administrator/Desktop/宝马CGDI 3.2.0 版本/英文版/2020-12-28-19-8-45 9147226 BackEEPROM.BIN'.

It show programming key success

The screenshot shows the 'CAS1-3+key matching' software interface after a successful key programming. The top section is identical to the previous screenshot. The table lists 10 keys, with the 'Key type' column now showing 'smart key' for key 2 and 'remote key' for key 3. The right side buttons are the same. The log window at the bottom shows the following text: 'Reading data', 'Read data successfully', 'Security certification in progress', 'Safety certification passed', 'Reading key information', 'Read key information successfully', 'File save path:D:/CGDI/temp/2020-12-28-19-17-39 9147226 BackEEPROM.BIN', 'Programming key', and 'Programming key success'.

## 2.4 Click Add key

Choose same key position as step 2 , then click Add key

The screenshot shows the CAS1-3+key matching software interface. The title bar indicates 'CAS1-3+key matching' and 'Feature Version:000B'. The main area displays vehicle information: VIN: WBAVB56040ND26567, Cas version number: 9147226, Cas version: CAS3, Tooth code: HA00009548, Remote control frequency: 315, and Key in ignition switch: none. A table lists 10 keys with columns for Key number, Key ID, secret key, Configuration page, Key type, Status, Remote control ID, and Remote control. Key 4 is highlighted in blue. To the right of the table is a vertical stack of buttons: Read key information, Generate dealer key, Add key (highlighted with a red box), Sync ELV, Recovery key bit, Unlock key, Enable key, Disable key, Load key data, and Help. Below the table is a log window showing the following text: 'reading data', 'Read data successfully', 'Security certification in progress', 'Safety certification passed', 'Reading key information', 'Read key information successfully', 'File save path:D:/CGDI/temp/2020-12-28-19-17-39 9147226 BackEEPROM.BIN', 'Programming key', and 'Programming key success'.

Key number	Key ID	secret key	Configuration page	Key type	Status	Remote control ID	Remote control
1	9EC83519	6C5A2C2828F3	CEB9B5E8	pcf7936	Enable	D1CB	3E0171E154AC
2	B389E597	50BE0687C4A5	C85F7580	smart key	Enable	F71A	8B0EC6AB1A61
3	DCC0839B	161F8077B53E	C8697B02	remote key	Enable	3DDD	3A043C7B9170
4	FFFFFFF	73E065EF3E54	C8C50BC4	Unused	Enable	EB71	47CC99EE62F5
5	FFFFFFF	AB5F0B46E417	C8141A5D	Unused	Enable	31FD	5A487E2F0B66
6	FFFFFFF	CE67AFE5E7DE	C80FDAC9	Unused	Enable	9B59	3BEF7887182B
7	FFFFFFF	FD65955EF727	C8BD19BF	Unused	Enable	6827	5D0E32DC6F95
8	FFFFFFF	40B6B7B37738	C846AFB9	Unused	Enable	C276	151677C8D43E
9	FFFFFFF	87AB0E485F15	C8A0F5DC	Unused	Enable	42C3	767F9DB61F7B
10	FFFFFFF	2F263E4F0B08	C8B39D8B	Unused	Enable	93B7	9DB3C7329A48

Put your key into CGDI coil (You can keep it in the coil ).then click ok

CAS1-3+key matching Feature Version:000B

VIN: WBAVB56040ND26567 Cas version number: 9147226 Cas version: CAS3  
 Tooth code: HA00009548 Remote control frequency: 315 Key in ignition switch: none

Read key information  
 Generate dealer key  
 Add key  
 Sync ELV  
 Recovery key bit  
 Unlock key  
 Enable key  
 Disable key  
 Load key data  
 Help

Key number	Key ID	secret key	Configuration page	Key type	Status	Remote control ID	Remote control ID
1	9EC83519	6C5A2C2828F3	CEB9B5E8	pcf7936	Enable	D1CB	3E0171E1
2	B389E597	50BE0687C4A5	C85F7580	smart key	Enable	F71A	8B0EC6AE
3	73C7839B	161F8077B53E	C8697B02	remote key	Enable	3DDD	3A043C7E
4	FFFFFFFF	73E065EF3E54	C8C50BC4	Unused	Enable	EB71	47CC99EE
5	FFFFFFFF	AB5F0B46E4					5A487E2F
6	FFFFFFFF	CE67AFE5E7					3BEF7887
7	FFFFFFFF	FD65955EF7					5D0E32DC
8	FFFFFFFF	40B6B7B377					151677CB
9	FFFFFFFF	87AB0E485F					767F9DB6
10	FFFFFFFF	2F263E4F0B08	C8B39D8B	Unused	Enable	93B7	9DB3C732

Prompt  
 Please insert the new car key into the CGDI programmer coil  
 OK

reading data  
 Read data successfully  
 Security certification in progress  
 Safety certification passed  
 Reading key information  
 Read key information successfully  
 File save path:C:/Users/20190729/Desktop/333/2021-1-15-22-19-42 9147226 BackEEPROM.BIN  
 Programming key  
 Programming key success

Then when it tip you write data successfully

CAS1-3+key matching Feature Version:000B

VIN: WBAVB56040ND26567 Cas version number: 9147226 Cas version: CAS3  
 Tooth code: HA00009548 Remote control frequency: 315 Key in ignition switch: none

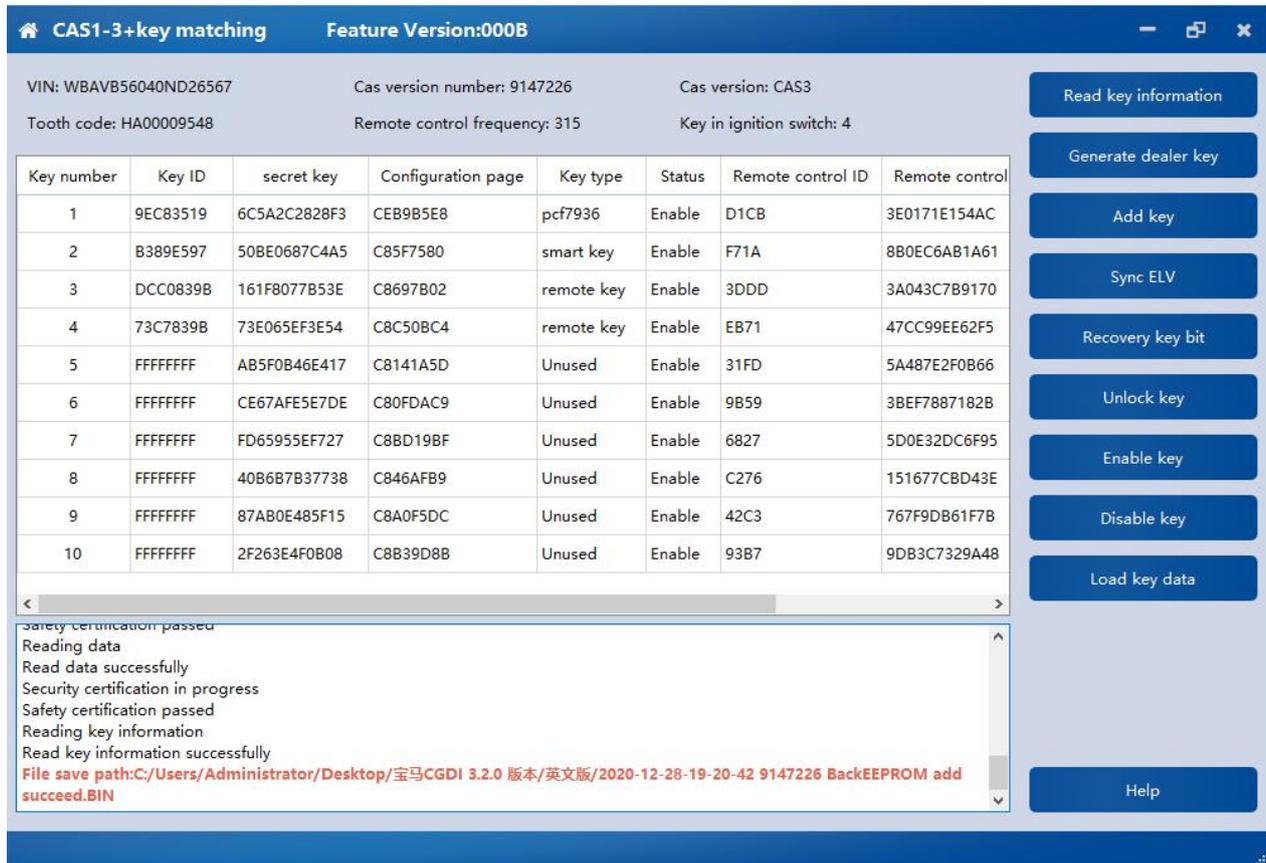
Read key information  
 Generate dealer key  
 Add key  
 Sync ELV  
 Recovery key bit  
 Unlock key  
 Enable key  
 Disable key  
 Load key data  
 Help

Key number	Key ID	secret key	Configuration page	Key type	Status	Remote control ID	Remote control ID
1	9EC83519	6C5A2C2828F3	CEB9B5E8	pcf7936	Enable	D1CB	3E0171E154AC
2	B389E597	50BE0687C4A5	C85F7580	smart key	Enable	F71A	8B0EC6AB1A61
3	DCC0839B	161F8077B53E	C8697B02	remote key	Enable	3DDD	3A043C7B9170
4	FFFFFFFF	73E065EF3E54	C8C50BC4	Unused	Enable	EB71	47CC99EE62F5
5	FFFFFFFF	AB5F0B46E417	C8141A5D	Unused	Enable	31FD	5A487E2F0B66
6	FFFFFFFF	CE67AFE5E7DE	C80FDAC9	Unused	Enable	9B59	3BEF7887182B
7	FFFFFFFF	FD65955EF727	C8BD19BF	Unused	Enable	6827	5D0E32DC6F95
8	FFFFFFFF	40B6B7B37738	C846AFB9	Unused	Enable	C276	151677CBD43E
9	FFFFFFFF	87AB0E485F15	C8A0F5DC	Unused	Enable	42C3	767F9DB61F7B
10	FFFFFFFF	2F263E4F0B08	C8B39D8B	Unused	Enable	93B7	9DB3C7329A48

successfully read the car key  
 OBD is connecting  
 OBD KWP-CAN 500kbps successfully connected  
 Restoring key bit  
 Security certification in progress  
 Safety certification passed  
 Security certification in progress  
 Safety certification passed  
 Write data successfully

## 2.5 Learn your key in ignition switch

Then put your key into ignition switch to learn the key 30 secs .Then you read key information again , it will add succeed .CAS3 add key by OBD on bench



**CAS1-3+key matching** Feature Version:000B

VIN: WBAVB56040ND26567 Cas version number: 9147226 Cas version: CAS3  
Tooth code: HA00009548 Remote control frequency: 315 Key in ignition switch: 4

Key number	Key ID	secret key	Configuration page	Key type	Status	Remote control ID	Remote control
1	9EC83519	6C5A2C2828F3	CEB9B5E8	pcf7936	Enable	D1CB	3E0171E154AC
2	B389E597	50BE0687C4A5	C85F7580	smart key	Enable	F71A	8B0EC6AB1A61
3	DCC0839B	161F8077B53E	C8697B02	remote key	Enable	3DDD	3A043C7B9170
4	73C7839B	73E065EF3E54	C8C50BC4	remote key	Enable	EB71	47CC99EE62F5
5	FFFFFFFF	AB5F0B46E417	C8141A5D	Unused	Enable	31FD	5A487E2F0B66
6	FFFFFFFF	CE67AFE5E7DE	C80FDAC9	Unused	Enable	9B59	3BEF7887182B
7	FFFFFFFF	FD65955EF727	C8BD19BF	Unused	Enable	6827	5D0E32DC6F95
8	FFFFFFFF	40B6B7B37738	C846AFB9	Unused	Enable	C276	151677CBD43E
9	FFFFFFFF	87AB0E485F15	C8A0F5DC	Unused	Enable	42C3	767F9DB61F7B
10	FFFFFFFF	2F263E4F0B08	C8B39D8B	Unused	Enable	93B7	9DB3C7329A48

Actions:

- Read key information
- Generate dealer key
- Add key
- Sync ELV
- Recovery key bit
- Unlock key
- Enable key
- Disable key
- Load key data
- Help

Log:

```
Safety certification passed
Reading data
Read data successfully
Security certification in progress
Safety certification passed
Reading key information
Read key information successfully
File save path:C:/Users/Administrator/Desktop/宝马CGDI 3.2.0 版本/英文版/2020-12-28-19-20-42 9147226 BackEEPROM add
succeed.BIN
```

## 3. Youtube video link

CGDI BMW ~CAS1-3 add key on bench : <https://youtu.be/gCMHUhqZXrw>