

April 2004 Technical Service

This Service Information bulletins supersedes S.I. 09 03 98 dated November 2003.

NEW designates changes to this revision

SUBJECT

"Car and Key Memory" (CKM) Configuration

MODEL

E38, E65, E66 (7 Series)

NEW E63, E64 (6 Series)

E39, E60 (5 Series)

E46 (3 Series)

E53 (X5)

E52 (Z8)

E85 (Z4)

E83 (X3)

SITUATION

Important: Due to the variations in hardware and software, it is recommended that "Print List" is selected prior to programming. "Print List" will give an overview of the available Car and Key Memory options for that specific vehicle.

Introduced for the first time on 1999 E46 models, "Car Memory/Key Memory" is an additional step towards customization of a vehicle according to an owner's individual preferences. Those features are incorporated in Coding/Programming and the scope of customization depends on the equipment installed in the vehicle.

DISPlus/GT1 Software allows for the selection of "Car Memory" choices in E38 and E39s produced prior to 9/98 depending on the vehicle hardware/software status. "Key Memory" is not available for E38 and E39 vehicles produced prior to 9/98.

"Car Memory" includes functions which are activated regardless of the vehicle key being used.

"Key Memory" contains functions which can be different depending on the vehicle key used. The vehicle key is identified during "unlocking", only when remote control is used (functions are inoperative during "manual" unlocking). Up to four different keys for the E46, E53, E52, E60, E65, E83, E85 vehicles, and two keys for the E38 and E39 can be customized (upon delivery, the customer is provided with two remote control transmitters).

The table below summarizes the most important options of the "Car/Key Memory" program which should be discussed with the customer during the sales consultation.

Car Memory	Key Memory
Daytime Driving Lights	Last Seat Position

Pathway Lighting	Last IHKA (Climate Control) Settings
DWA Acknowledgment Configuration	Selective Central Locking
	Automatic Door Locking after drive off

The customer must be informed about possible choices before delivery by filling out a selection sheet (attached). The questionnaire is a three-part form: one copy stays with the customer, one goes to sales department, and the last to service department. According to the customer choices, the vehicle should be customized during the QC 1. Selection changes during the ownership period are not reimbursable under warranty. The customer should not be charged for the coding. Individualizing your customer's vehicle is an important contribution to a positive customer experience.

"Car & Key Memory", allows a printout of the functions which can be coded in the vehicle. The list will contain the actual settings and the available settings, as well as the factory defaults. This list can be printed out under the heading "Print List" in the "Car & Key Memory" program, or using the print button in CIP for E60, NEW E63, E64, E65, E66, E83 and E85.

Any additional features listed in the attachments may also be coded, but we recommend that they should be discussed with customers at a later date during a service consultation and upon customer request or inquiry.

Attachment "B090398_Att2_CKMSet" itemizes **all** available "Car and Key Memory" options for the E38, E39, E46, E53, and E52 vehicles.

Attachment "B090398_Att3_CKM_E65" itemizes **all** available "Car and Key Memory" options for the E65 and E66 vehicles.

Attachment "B090398_Att4_CKM_E85" itemizes all available "Car and Key Memory" options for the E85 vehicles.

NEW Attachment "B090398_Att5_CKM_E60" itemizes **all** available "Car and Key Memory" options for the E60, E63 and E64 vehicles.

Attachment "B090398_Att6_CKM_E83" itemizes all available "Car and Key Memory" options for the E83 vehicles.

PROCEDURE

Note: All control units must be installed and functional.

If any errors appear during coding any functions of the "Car/Key Memory", the fault memory should be interrogated with a "Quick Test" and any faults stored should be rectified first. No faults are to be stored in the control units when changing the "Car/Key Memory" options. Also, "Error in Program Run" will be displayed if control modules used for "Car and Key Memory" are not coded correctly.

Vehicles equipped with DSP must have the radio turned "ON".

1.Before coding CKM, the customer must be informed about possible choices before delivery by filling out a Customer Selection form.

Please refer to attachment "B090398_att1_CKMFrm"

2.Connect the vehicle to an approved BMW battery charger. If battery voltage drops too low, the coding procedure will be terminated.

3.Using DISplus/GT1 or Software Service Station (SSS), and with the diagnostic head connected to the vehicle, select Coding/Programming.

Car and Key Memory for E60, NEW E63, E64, E65, E66, E83 and E85 vehicles:

- 1. Select option "CIP", then press the forward arrow. The initial CIP screen is then displayed.
- 2. Select the appropriate vehicle model.
- 3. Press the "**CKM**" button at the screen with the text "Program SELECTION: Load software, Car & Key Memory (CKM)".
- 4. The CKM screen displays all available CKM functions, their current settings, and the factory default setting.
- 5. Note: When selecting the text of each functionality, a popup screen will show further information about the selection.
- 6. Make CKM selections according to the customer request.
- 7. Press "Encode Car"
- 8. Press "Save", and a screen is displayed with green check marks to confirm that the VKM selections have programmed correctly.
- 9. Press "Finish" to return to the selection screen, with the new selections marked accordingly.

Car Memory procedure for E38, E39, E46, E53, and E52 vehicles:

1.Select "CAR MEMORY".

2. After a short period of time the menu screen will be displayed with a list of all detected control systems capable of Car Memory configuration.

3.Using the owner's selection list, enter the system selected for customization. If other features are to be programmed, the "Print List" feature should be selected.

4. From the system submenu select the function to be altered.

5.Make the appropriate selection (activation/deactivation). The following symbols may be displayed next to the selection choice:

- "=" sign indicates present status
- "*" sign indicates factory default (when present vehicle selection is different)
- ">" sign indicates entered change in selection.

6.After pressing the "continue" arrow, the system will accept the change in selection and the CAR MEMORY main menu will be displayed. If additional changes are required, enter the appropriate system and repeat steps from above.

7.When all of the required CAR MEMORY configuration changes are entered, scroll down to the bottom of the main menu. Three selections are available:

"97" - brings back the factory setting in all systems

"98" - rejects entered changes

"99" - set changes

After selecting "99 SET VEHICLE", all configuration changes are displayed. Check the displayed list against the owner's selection sheet to make sure that all of the choices were included. Print the list and place it in the vehicle service file for future reference.

To continue, press the arrow button. The display will request to cycle the ignition. Turn the ignition switch off, then switch back on. Press "Yes" to continue. A bar progress indicator is displayed along with current battery voltage. This portion of the configuration process varies in duration based on the total number of selections.

Important:

Observe the battery voltage level during the configuration. A low voltage condition will terminate the process or will incorrectly configure the vehicle.

When the display changes to "Vehicle setting completed", turn the ignition off for 10 seconds and turn it back on again. Verify the configuration changes by activating the new functions.

Key Memory Procedure for E38, E39, E46, E53, and E52 vehicles:

- 1. Select "KEY MEMORY".
- 2. After a short period of time the system will display a key number selection list (only two remote keys are supplied with new vehicle). The display also shows the identification number of the last used key (helpful to identify the key if the labels are misplaced or are missing).
- 3. Using the owner's selection list, select the key for Key Memory assignment, and press arrow to continue. System is going to scan for all available key memory functions for the specific key. If other features are to be programmed, the "Print List" feature should be selected.
- 4. From the system main menu select function to be altered. Following procedure steps are similar to the CAR MEMORY procedure.
- 5. A separate programming procedure must be carried out for the second key. To identify keys, attach color label at the back of each key (labels are supplied with the vehicle).



Recommended labeling (illustration shows the old style of key, prior to 09/99): Key 1- Red Key 2- Blue If additional keys were ordered: Key 3- Grey Key 4- Green



For the new style of key (from 09/99), labeling procedure is similar.



Note:

If the additional remote control keys have been ordered, they have to be initialized along with two original keys. To initialize the keys, proceed as follows:

- 1. Enter the vehicle and close the doors.
- 2. Briefly (max. 5 seconds) turn the ignition on and off again.
- 3. Remove key; press and hold "unlock" button. While holding "unlock"
- 4. button, rapidly press "lock" button 3 times within a period of 10 seconds.
- 5. Release "unlock" button. The LED flashes slowly for a maximum of 10 seconds.
- 6. The central locking system activates and releases all locks in rapid succession to indicate that the initialization procedure has been successful. If LED continues to flash or if the locking system fails to respond, the initialization procedure will have to be repeated.
- 7. To initialize additional remote control keys (make sure that no more then 30 seconds elapse between each initialization procedure) repeat steps 3 and 4.
- 8. Note: The ignition does not have to be cycled on/off for additional key initialization.

The initialization sequence defines the numbering of the keys in "Key Memory" program. The first key to be initialized automatically receives number one and should be labeled accordingly.

Important:

Key numbers in "Key Memory" programming may be different from key numbering sequence used in EWS system (EWS number is permanently assigned to a key, while the "Key Memory" number can be changed with the next initialization).

WARRANTY INFORMATION For information only.

ATTACHMENTS

view PDF at	ttachment	<u>B090398</u>	Att1	CKM	Frm.
view PDF at	ttachment	<u>B090398</u>	Att2	CKM	<u>Set</u> .
view PDF at	ttachment	<u>B090398</u>	Att3	<u>CKM</u>	<u>E65</u> .
view PDF at	ttachment	<u>B090398</u>	Att4	<u>CKM</u>	<u>E85</u> .
view PDF at	ttachment	<u>B090398</u>	Att5	<u>CKM</u>	<u>E60</u> .
view PDF at	ttachment	<u>B090398</u>	_Att6_	CKM	<u>E83</u> .

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