Parts and Accessories.
Installation Instructions.

Universal charger/hands-free kit upgrade
BMW 3 Series Saloon (E90)

These installation instructions are only valid for cars with SA 640 (telephone preparation) and SA 606 (Business navigation system) or SA 609 (Professional navigation system) or SA 663 (BMW Professional radio).

Upgrade kit No. 84 64 0 398 229

Installation time
The installation time is 2.0 hours, but this may vary depending on the condition of the car and the equipment in it.

Important information
These installation instructions are primarily designed for use within the BMW dealership organisation and by authorised BMW service companies.

In any event the target group for these installation instructions is specialist personnel trained on BMW cars with the appropriate specialist knowledge.

All work must be completed using the latest BMW repair manuals, circuit diagrams, servicing manuals and work instructions in a rational order using the prescribed tools (special tools) and observing current health and safety regulations.

To avoid unnecessary extra work and/or costs, if any installation or function problems occur, after a brief troubleshooting session (approx. 0.5 hours), an inquiry is to be sent straight away to the technical parts support via the Aftersales Assistance Portal (ASAP), quoting the chassis number, the part number of the upgrade kit and a precise description of the problem.

Do not archive the hard copy of these installation instructions since daily updates are made by ASAP.

See ASAP for details of the pictograms.

Pictograms

▷ Denotes instructions that draw your attention to special features.

◀ denotes the end of the instruction or other text.

Subject to technical modifications.

Before you install the upgrade system, test the control module status with the **CIP** (coding, customising, programming) test program. If the test detects incorrect statuses in one or more control modules, these must be updated first using the "Load software" function.

Installation information

When routing fibre optic cables, make sure the bending radius is no less than 25 mm.

Ensure that the cables/lines are not kinked or damaged as you install them in the car. The costs incurred as a result of this will not be reimbursed by BMW AG.

Additional cables/lines that you install must be secured with cable ties.

After the installation work the upgrade must be programmed / coded using SSS (software service station) via the **CIP** path.

All the figures show LHD cars, proceed accordingly on RHD cars.

Ordering instructions

The snap-in adapter is not supplied with the upgrade kit and must be ordered separately for the various telephones (see EPC for part number and documentation).

List of special equipment
The following special equipment must be taken into consideration when installing the upgrade kit:

SA 606 Business navigation system
**SA 609** Professional navigation system
SA 663 BMW Professional radio

Special tools required
00 9 317 Trim wedge

Contents

1. Parts list

090 0147 Z

Legend

A	Bluetooth aerial
B	Hands-free microphone
C	Universal charger/hands-free electronic control module (ULF)
D	ULF holder
E	Speed nut (4x)
F	Hexagonal nut (4x)
G	Cable ties (10x)
H	Cable tie holder (2x)
I	Eject box
J	Telephone trim
K	Rear axle differential heat insulation

2.   Preparations

|	TIS No.
Conduct a brief test	---
Disconnect the negative pole of the battery	12 00 ...
The following components must be removed first of all	
Boot floor trim	51 47 101
Backrest side section on the left	52 26 008
Pedal trim	51 45 185
Roof function centre	---

3.   Installation diagram
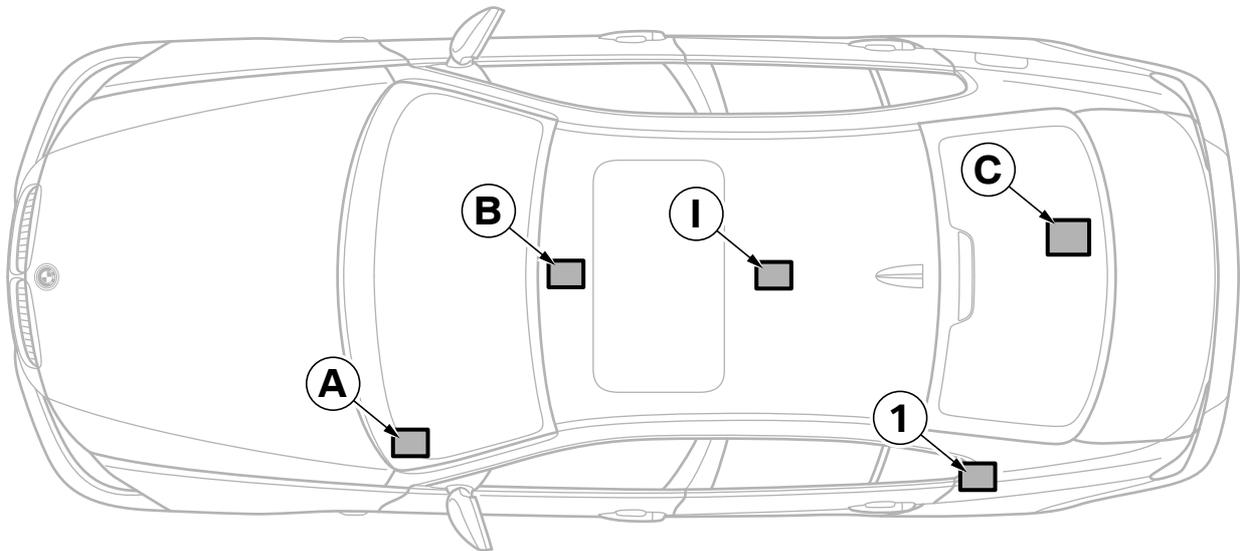
090 0146 Z

Legend

A   Bluetooth aerial

B   Hands-free microphone

C   Universal charger/hands-free electronic control module (ULF)

I   Eject box

1   Main distributor station **X14255** and distributor station preparation **X14280**

4. To connect the fibre optic cables

087 0081 Z
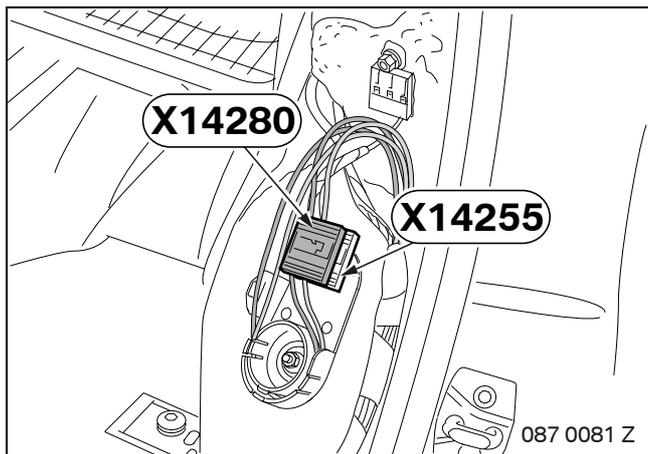
Release the preparation distributor station **X14280** and the main distributor station **X14255** behind the left backrest part.

Remove the cover caps from the distributor stations.

087 0082 Z
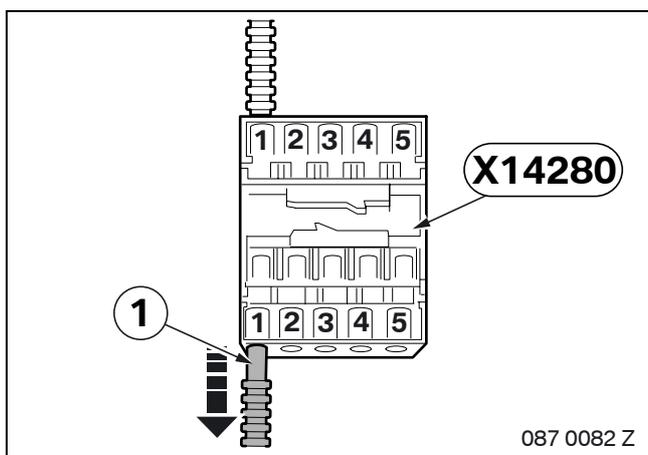
Disconnect the bottom fibre optic cable (1) from PIN 1 on the preparation distributor station **X14280**.


087 0083 Z
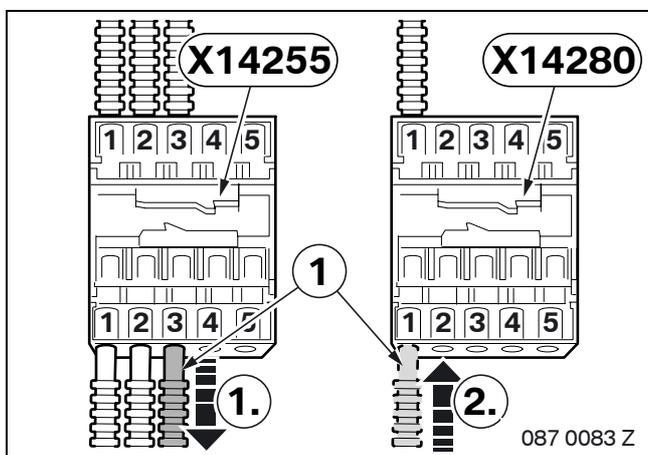
Disconnect any bottom fibre optic cable (1) from the main distributor station **X14255** and connect it to PIN 1 of the preparation distributor station **X14280**.

087 0084 Z
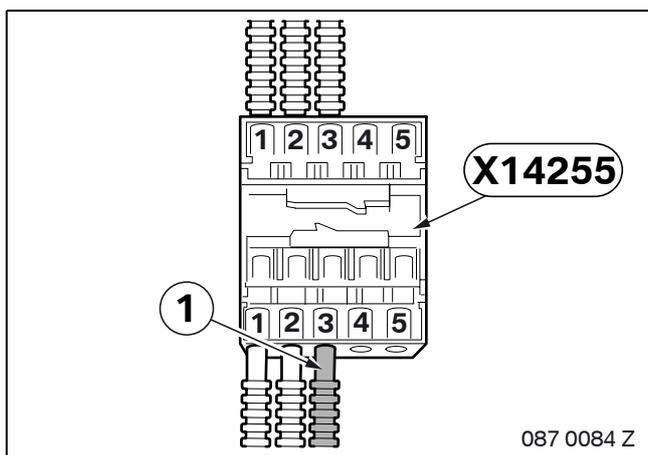
Connect the fibre optic cable (1) that you disconnected from the preparation distributor station **X14280** to the cleared PIN in the main distributor station **X14255**.

Place the caps on the distributor stations and secure the distributor stations to the car.

## 5.   To install and connect the universal charger/electronic hands-free control module

087 0085 Z
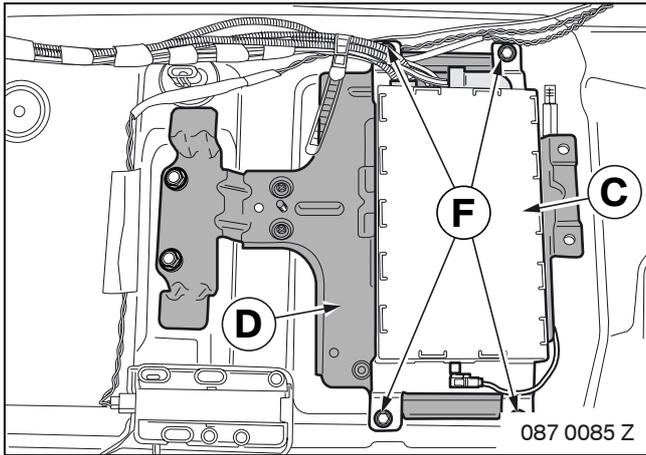
Secure the universal charger/electronic hands-free control module **C** to the stud bolt on the ULF holder **D** using hexagonal nuts **F**.


087 0086 Z
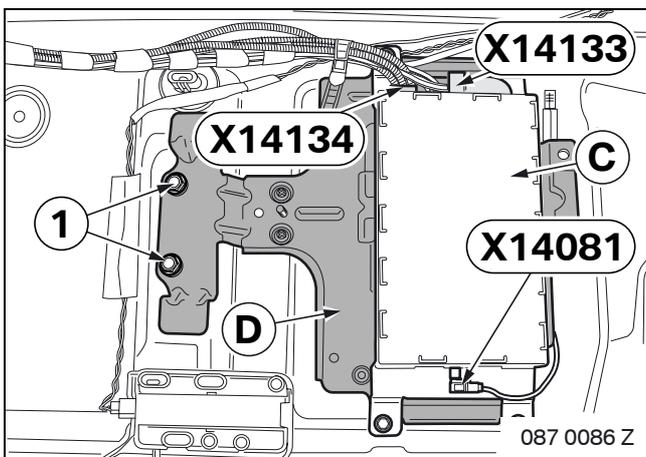
Attach the ULF holder **D** to the lugs in the car on the right-hand side and secure it with the existing nuts (1).

Connect plugs **X14133**, **X14134** and **X14081** to the ULF control module **C**.

087 0093 Z
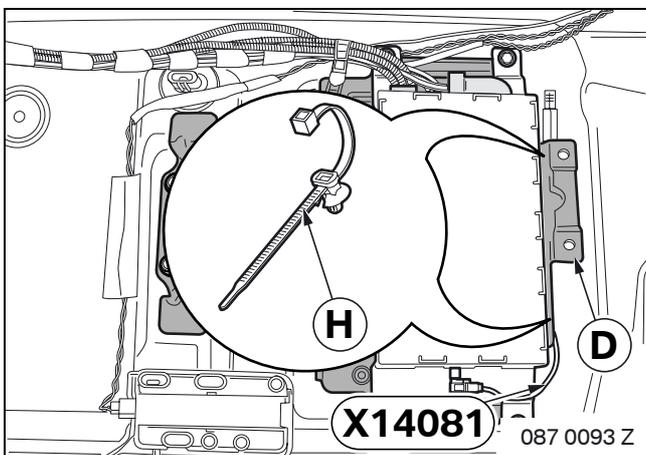
Secure the cable from plug **X14081** to the side of the ULF holder **D** using a cable tie holder **H**.

6. To install and connect the Bluetooth aerial and hands-free microphone


090 0212 Z
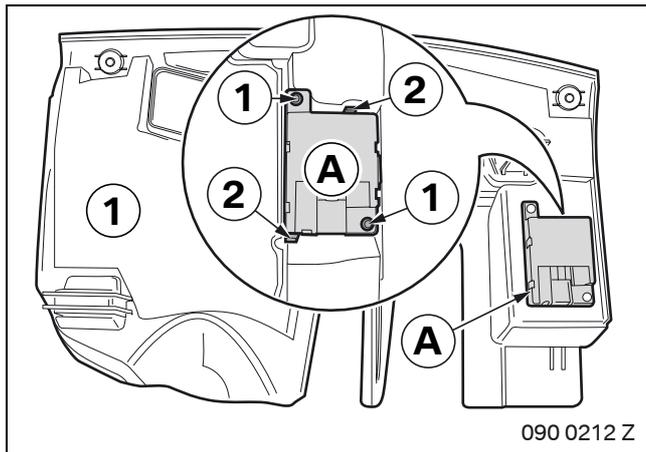
Place the Bluetooth aerial **A** on to the bolt on the pedal trim (1) until the retaining lugs (2) engage.

087 0138 Z
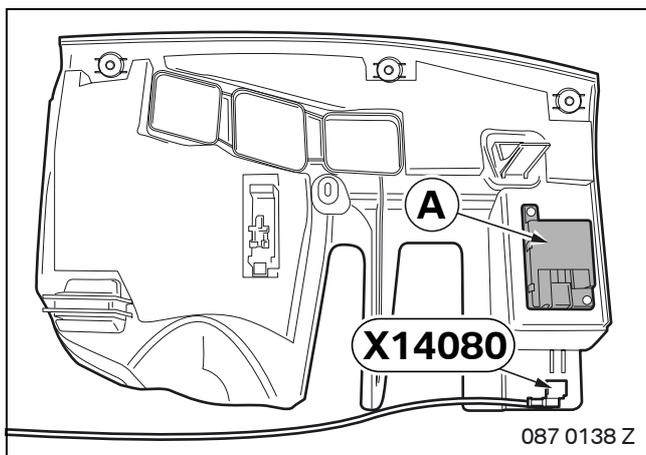
Connect the tied back plug **X14080** to the Bluetooth aerial **A**.

087 0087 Z
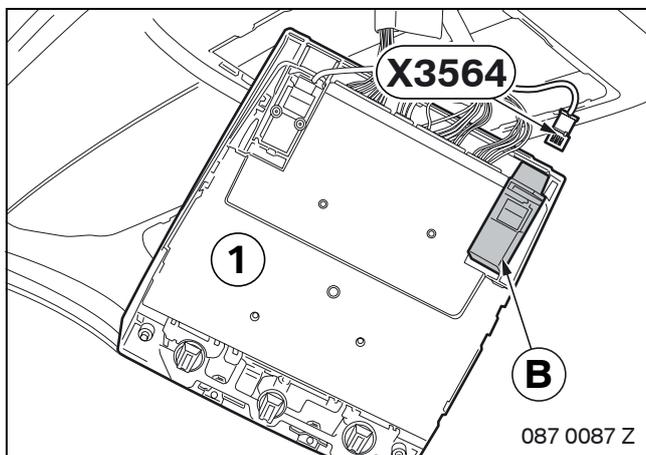
Remove the microphone trim from the roof function centre (1).

▷ The arrow on the hands-free microphone **B** must point to the front of the car after it has been installed. ◀

Clip the hands-free microphone **B** into the roof function centre (1) and connect the tied back plug **X3564** to the hands-free microphone **B**.

7. To install and connect the eject box
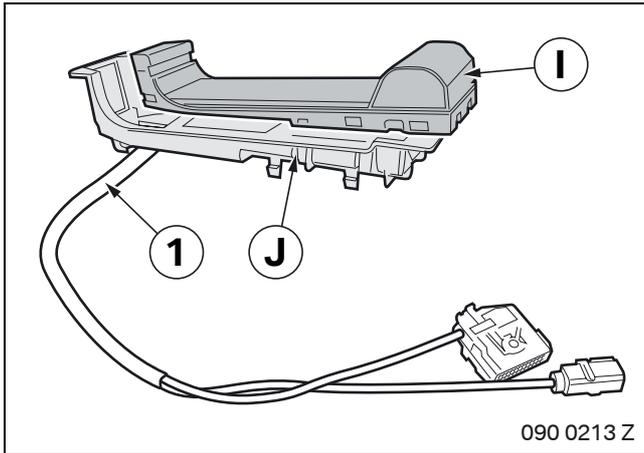
Route the cable (1) from the eject box **I** through the rear of the telephone trim **J** and clip the eject box **I** into the telephone trim **J**.

090 0213 Z
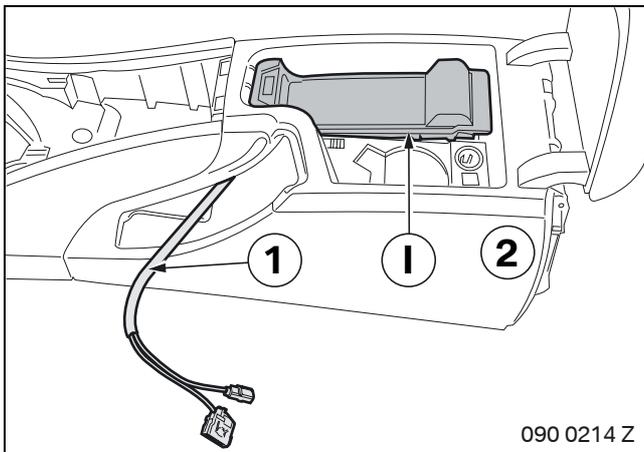
Remove the cover from the centre console (2).

Route the cable (1) from the eject box **I** through the centre console (2) and clip the eject box **I** into the centre console (2).

090 0214 Z
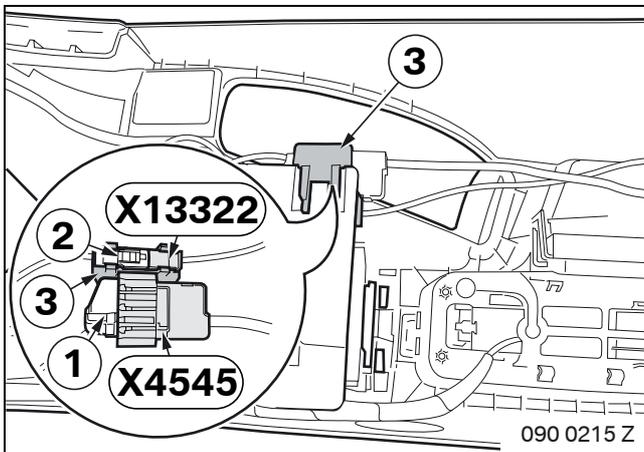
Connect plug **X4545** to the plug (1) and aerial plug **X13322** on the plug (2) for the eject box.

Clip the plug connectors into the plug connector holder (3).

Slide the plug connector holder (3) into the centre console.

090 0215 Z

8. To install the rear axle differential heat insulation

090 0219 Z
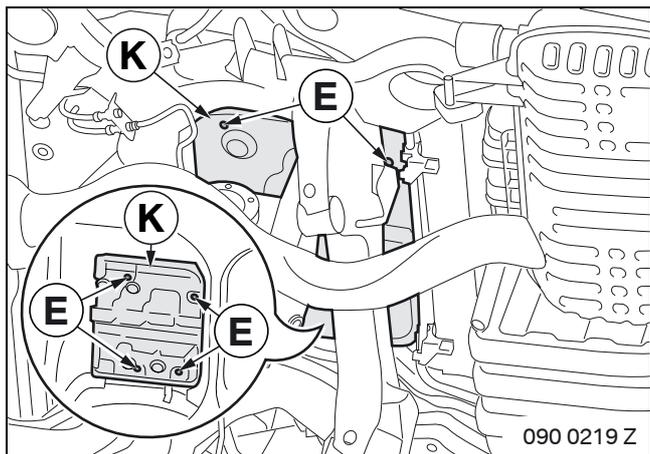
▷ For greater clarity, the illustration does not show the rear axle differential. ◀

Push the rear axle differential heat insulation **K** on to the stud bolt and secure it with speed nuts **E**.

9. Concluding work and coding

▷ This upgrade system requires coding. ◀

- Connect the battery
- Encode the upgrade with SSS (software service station) via the **CIP** path
- Conduct a brief test
- Register the handset (see section 10 or 11)
- Re-assemble the car

▷ The circuit diagram for the telephone preparation (SA 640) is available in DISPlus or GT-1 if required. ◀

10. To register the mobile phone in the car (cars with SA 606 or SA 609 only)

▷ The registration, also known as "pairing" can only be carried out if the encoding has been successful.
The Bluetooth code required for the pairing process, an arbitrary number with 1 – 16 figures, can be freely selected. ◀

After the installation of the ULF upgrade and the insertion of the mobile phone holder (snap-in adapter), the mobile phone must be registered as follows:

- Switch on the mobile phone

- Switch on the ignition, the main menu will appear in the on-board monitor

- Press the controller and select the **INFORMATION** menu point

- Select the **COMMUNICATION INTERFACE** menu point using the controller

- Press the controller, **BLUETOOTH COMMUNICATION ACTIVE** will appear in the on-board monitor

- Push the controller forwards, turn it anti-clockwise and select the **TELEPHONE** menu point

- Press the controller, **BLUETOOTH CONNECTABLE IN THIS MENU** will appear in the on-board monitor

- Select and activate the Bluetooth option on the mobile phone. (The steps required for this differ from phone to phone, see the manual supplied with the phone under searching for Bluetooth device, connecting BT device, pairing BT device)

- After a successful search the display on the phone will show **FOUND**, the car will register itself on the phone with a 5-digit number. Select the **SELECT** menu point

- Turn the controller and select the **ADD DEVICE** menu point

- Press the controller, **PASSKEY** will appear in the on-board monitor

- Enter a freely selectable 1 – 16-digit Bluetooth code using the controller

- Slide the controller downwards and select the **CONFIRM PASSKEY** menu point

- Press the controller

- Select **CONNECTION** or **REGISTRATION** on the mobile phone and confirm this

- **CONNECTED** will appear on the mobile phone

▷ ◀ You have a maximum of 10 seconds to enter the passkey or Bluetooth code. ◀

- Enter the same passkey and Bluetooth code in the mobile phone and confirm

- The message **HANDS-FREE ACCEPTED** will appear on the mobile.

- Press the menu button next to the controller twice

- Switch off the ignition for at least 30 seconds

- Quit the mobile phone sub-menu again

▷ If the registration process was not completed successfully, repeat the entire process quickly. ◀

11. To register the mobile phone in the car (cars with SA 663 only)

▷ The registration, also known as "pairing" can only be carried out if the encoding has been successful.
The Bluetooth code required for the pairing process, an arbitrary number with 1 – 16 figures, can be freely selected. ◀

After the installation of the ULF upgrade and the insertion of the mobile phone holder (snap-in adapter), the mobile phone must be registered as follows:

- Switch on the mobile phone
- Switch on the ignition
- Press the menu key on the radio
- The menu will appear on the radio display
- Select **TEL** by pressing the key beneath it on the radio
- The radio display shows **Searching for connected devices**
- Select **BT** by pressing the key beneath it on the radio
- The radio display shows **BT devices**
- Select **SEARCH** by pressing the key beneath it on the radio
- The radio display shows **BT devices connectable**
- Select and activate the Bluetooth option on the mobile phone. (The steps required for this differ from phone to phone, see the manual supplied with the phone under searching for Bluetooth device, connecting BT device, pairing BT device)
- After a successful search the display on the phone will show **FOUND**, the car will register itself on the phone with a 5-digit number. Select the **SELECT** menu point
- The radio display shows **Ext. device ready!**
- Select **ADD** by pressing the key beneath it on the radio
- Enter a freely selectable 1 – 16-figure Bluetooth code on the radio using the number pad beneath it.
- Press the right-hand control knob on the radio to confirm the Bluetooth code
- Select **CONNECTION** or **REGISTRATION** on the mobile phone and confirm this
- **CONNECTED** will appear on the mobile phone

▷ You have a maximum of 10 seconds to enter the passkey or Bluetooth code. ◀

- Enter the same passkey and Bluetooth code in the mobile phone and confirm
- The message **HANDS-FREE ACCEPTED** will appear on the mobile.
- The radio display shows **Pairing succeeded**
- Select **OK** by pressing the key beneath it on the radio
- To exit the menu, select **"Arrow"** by pressing the key beneath it on the radio
- Switch off the ignition for at least 30 seconds – the registration/pairing process is complete

▷ If the registration process was not completed successfully, repeat the entire process quickly. ◀