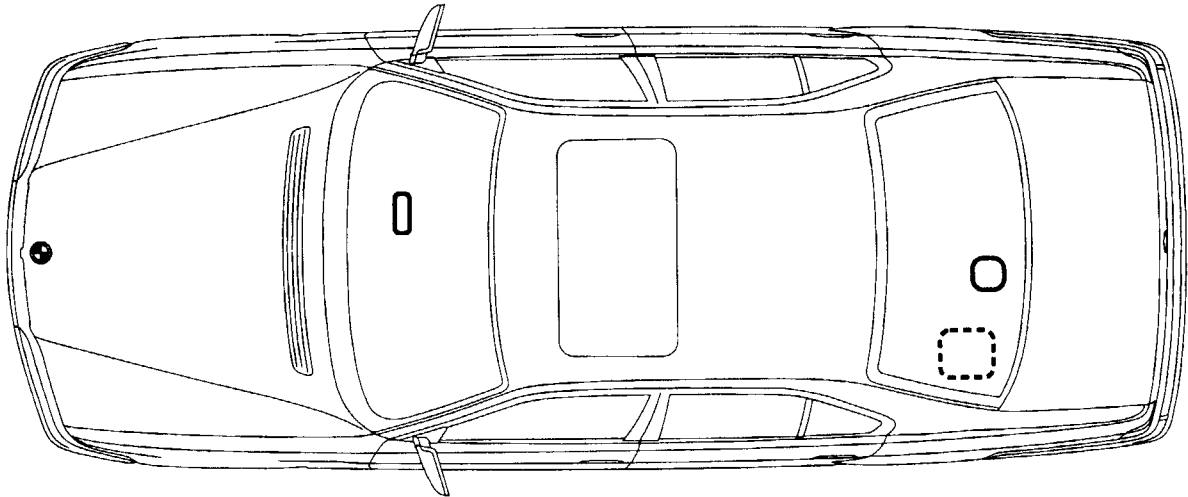




# Parts and Accessories Installation Instruction



F 38 82 117 M

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## Navigation system II (system with supplementary monitor)

### BMW 7 Series E38

(Only for use in the BMW trading organisation)

Installation time approx. 4 - 5 hours, which can vary according to the condition and fittings of the vehicle.

In addition, approx. 0.25 hours is needed for the calibration of the system.

Knowledge of the body electronics is required.



The following are not part of the installation kit and have to be ordered separately (see EPC):

- The switch-over module listed as item 6 in the Overview of the Installation kit, unless it has already been fitted as part of a retrofit kit (telephone, sound module).
- The software CD for loading languages and/or spoken announcements other than German or English, which is listed as item 23 in the Overview of the Installation kit.

Agreement has to be reached with the customer over the following points before installation:

- not switching off of the radio during navigation announcements (page 6 and 10).
- installation location of the support station for the remote control (page 13).
- language setting (page 14).

## Note

All item numbers in the illustrations relate to the overview of the installation kit.

All items designated with capital letters relate to the overview of the supplementary wiring harnesses for the navigation system.

All items not listed in the "Overview of the Installation Kit" are shown in lower case letters.

All passages in the text marked with this sign  **must** be taken special note of and contain notes which are important for installation.

## Subject to technical modification.

## Required tools and auxiliary materials

Phillips screwdriver	1/2 inch reversible ratchet
1/2 inch socket-wrench insert SW 10 mm, 13 mm, T50	Side cutting pliers
1/2 inch extension"	Ring spanner SW 8 mm, 10 mm, 13 mm
Socket wrench SW 8 mm, 10 mm	Trimming knife
Flat-tip screwdriver	1/4 inch reversible ratchet
1/4 inch socket-wrench insert SW 10 mm, 8 mm	Torch
1/4 inch extension	TORX screwdriver T10, T20, T27
Drilling machine	Twist drill Ø 3 mm, 4 mm, 4.5 mm

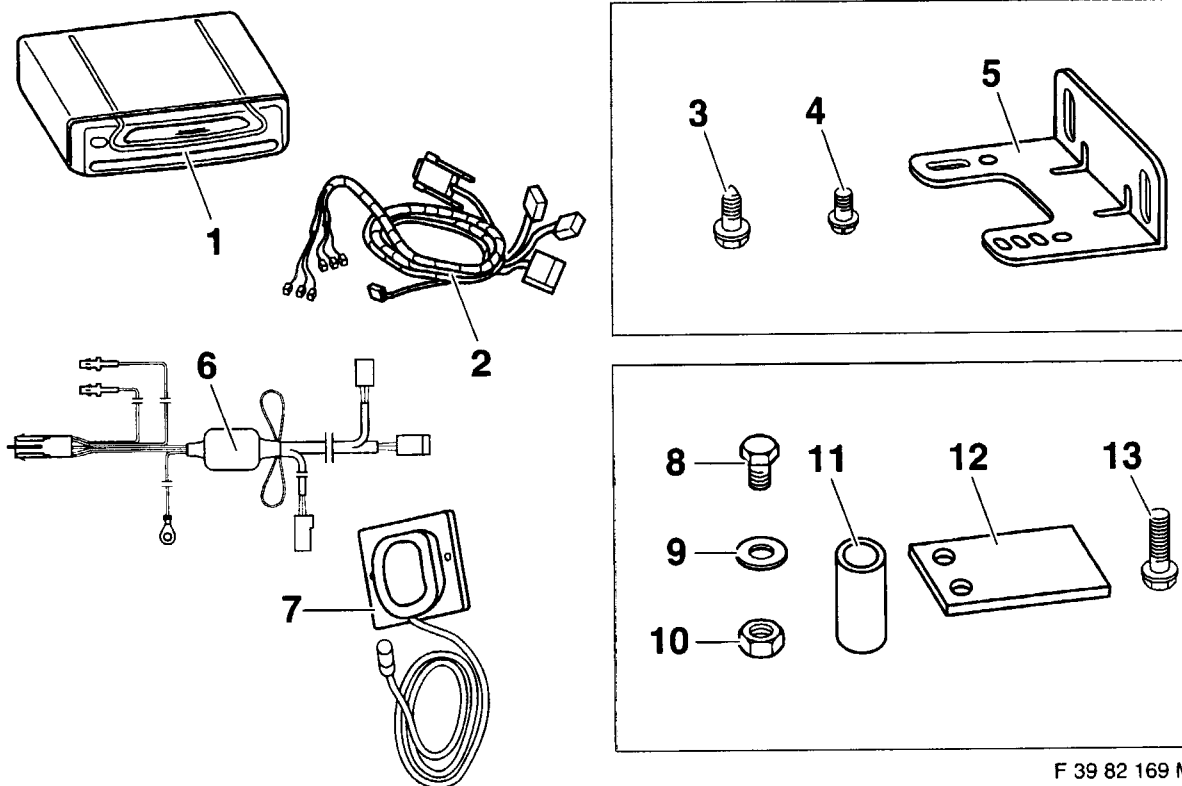
## Contents

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2. Overview of installation kit.....	3
3. Overview of supplementary wiring harnesses for navigation system.....	5
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11. Language setting .....	14
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## 1. Necessary preparatory work on the vehicle

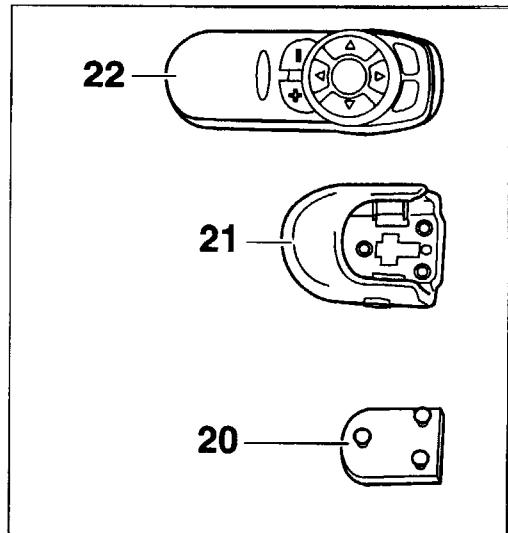
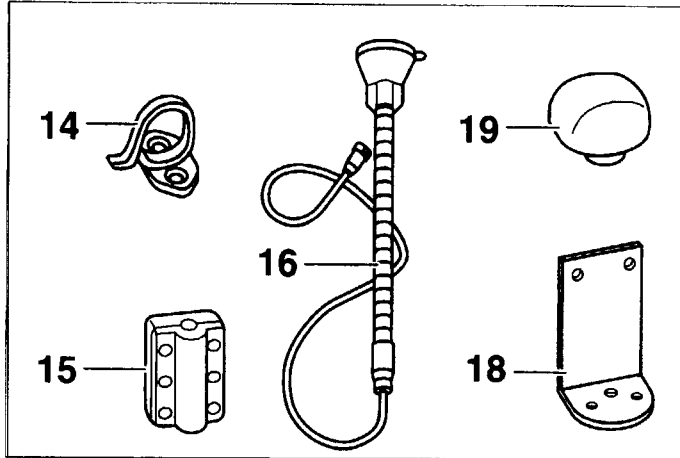
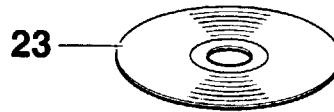
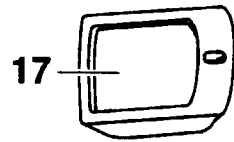
1. Print out fault memory.
2. Disconnect vehicle battery.
3. Dismantle seats front.
4. Dismantle glove box.
5. Dismantle A-pillar lower trim panel on driver's side.
6. Dismantle rear-seat bench.
7. Dismantle C-pillar trim.
8. Dismantle covering of rear-window shelf.
9. Dismantle rear speaker on left.
10. Dismantle trim panels in the boot at the front and on left.
11. Dismantle centre console.

## 2. Overview of installation kit



F 39 82 169 M

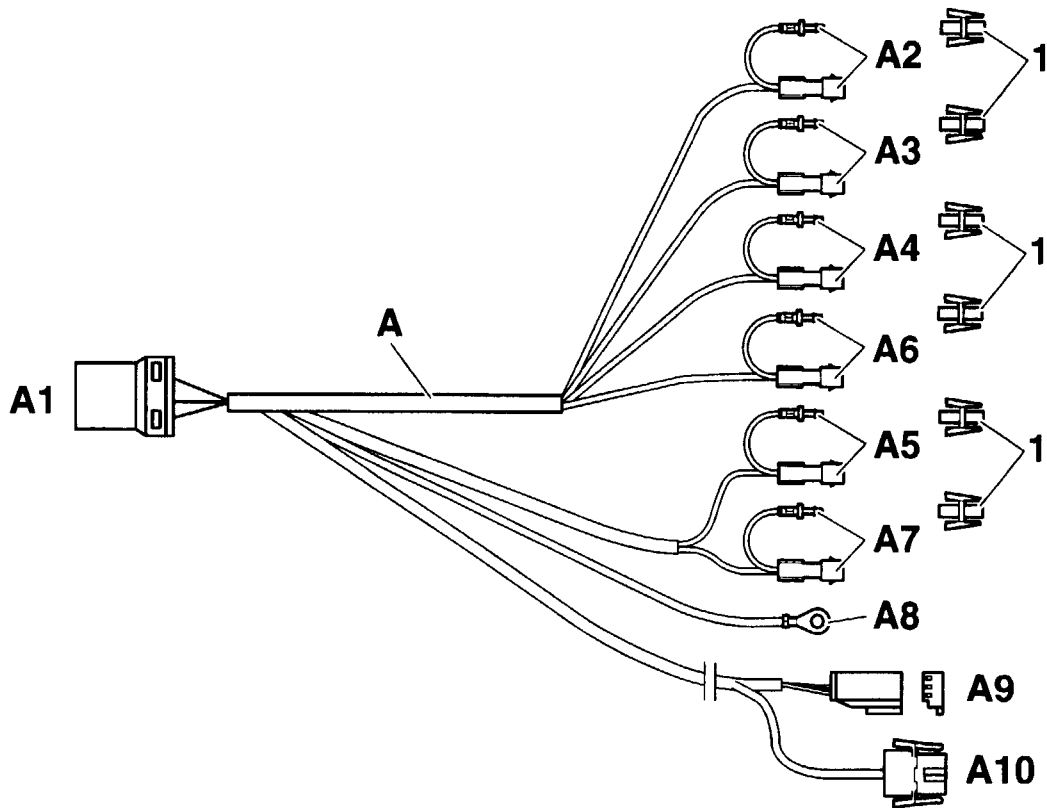
Item	Designation	Quantity
1	Navigation CD computer	1
2	Supplementary wiring harnesses for navigation (see Overview of supplm. wiring harnesses for navig. system)	1
3	Hexagon head self-tapping screw 4,8x16 with washer (attachment of navigation CD computer to body)	4
4	Phillips screw M4x10 with washer (attachment of navigation CD computer to bracket)	4
5	Bracket for navigation CD computer	2
6	Switch-over module (see Overview of wiring harnesses for navigation system) <span style="float: right;">to be ordered separately as per EPC</span>	1
7	Antenna GPS	1
8	Hexagon head screw M4x10 (attachment of GPS antenna)	2
9	Washer 4 mm (attachment of GPS antenna)	2
10	Hexagon nut M4 (attachment of GPS antenna)	2
11	Spacer bushing for attachment of support plate for flexible conduit	2
12	Support plate E38 for flexible conduit	1
13	Hexagon head screw M8x40 with washer for attachment of support plate for flexible conduit	2



F 39 82 568 M

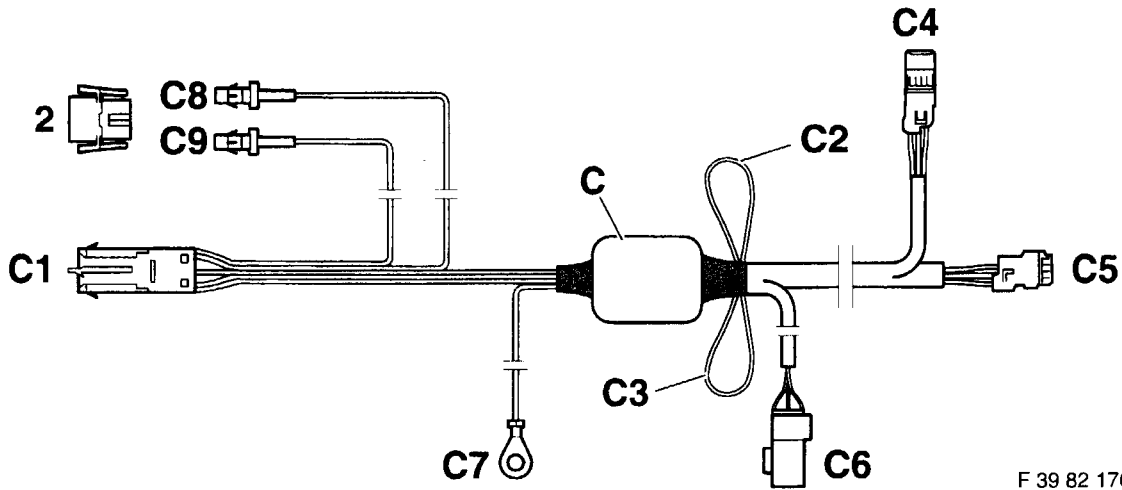
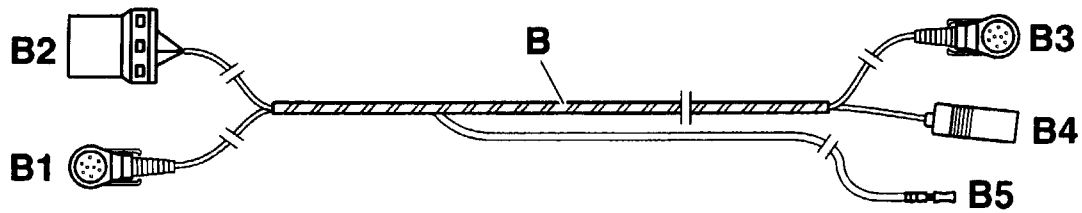
Item	Designation	Quantity
14	Retaining clamp with screws (attachment of flexible conduit above)	1
15	Mounting foot for flexible conduit (2-part) with screws	1
16	Flexible conduit	1
17	Monitor	1
18	Mounting bracket for monitor (with mounting components)	1
19	Covering cap for flexible conduit (when monitor is removed)	1
20	Locating plate for support station (with stop plate and adhesive tape for attachment)	1
21	Support station for remote control	1
22	Remote control	1
23	Software CD (for loading other languages)	to be ordered separately as per EPC 1

### 3. Overview of wiring harnesses for navigation system



F 39 82 175 M

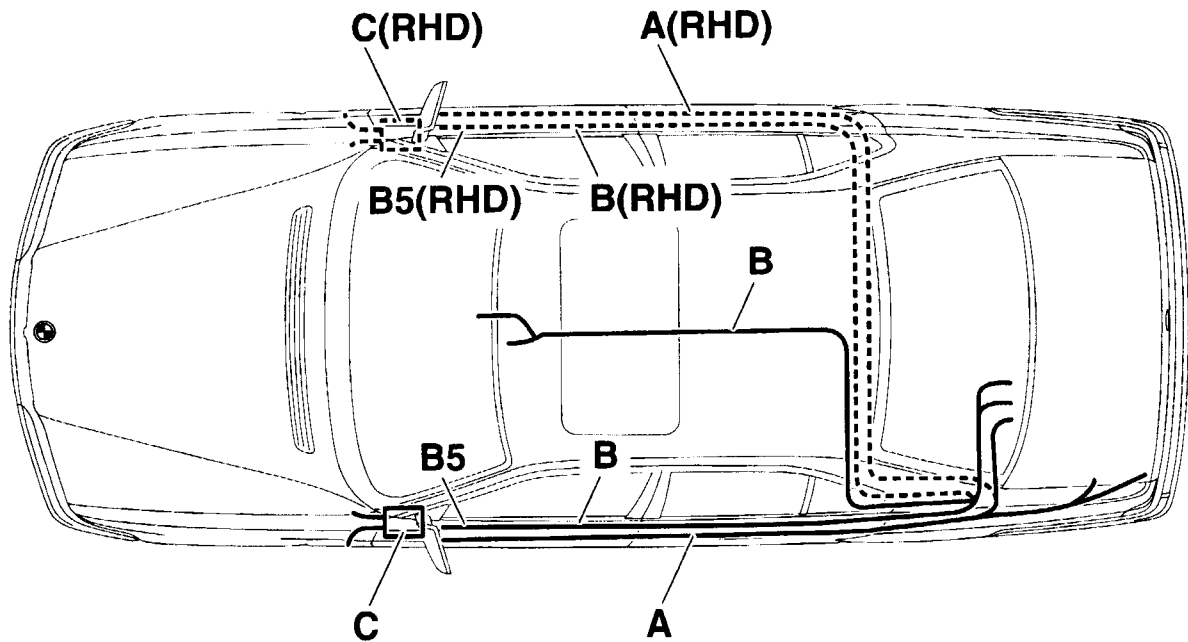
Item	Package /Designation/ Cable cross-section	Cable colour	Connection point in vehicle	Code des./ Plug-in place
<b>A</b>	Navigation system wiring harness	-		-
<b>A1</b>	12-contact black socket housing	-	Navigation CD computer in boot on left	-
<b>A2</b>	Connector with twin-lead terminal / terminal 30 (4.0mm <sup>2</sup> )	red	12-cont. black plug-in con. in boot on left <b>In vehicles with already fitted switch-over module, the navigation system wiring harness is to be changed (see page 11)</b>	X322/1
<b>A3</b>	Connector with twin-lead terminal / terminal R (1.5mm <sup>2</sup> )	violet	12-contact black plug-in connector in boot on left	X322/2
<b>A4</b>	Connector with twin-lead terminal / terminal TAA (1.0mm <sup>2</sup> )	black/white	12-contact black plug-in connector in boot on left	X322/3
<b>A5</b>	Connector with twin-lead terminal / terminal 58 (1.0mm <sup>2</sup> )	grey	8-contact black socket housing at rear light on left	X319/2
<b>A6</b>	Connector with twin-lead terminal / Radio-Mute (1.0mm <sup>2</sup> )	white/brown	12-contact black plug-in connector in boot on left <b>Do not connect if there is an already fitted switch-over module</b>	X322/8
<b>A7</b>	Connector with twin-lead terminal / terminal RSL (rear light) (1.0mm <sup>2</sup> )	white/yellow	8-contact black socket housing at rear light left	X319/5
<b>A8</b>	Cable lug 6 mm / terminal 31 (1.0mm <sup>2</sup> )	brown	Ground post at rear light left	X10305
<b>A9</b>	3-contact black socket housing / Navi-NF (1.0mm <sup>2</sup> )	blue/yellow blue/green	Branch cable <b>C6</b> in A-pillar on driver's side <b>Veh. with already fitted switch-over module:</b> connect to 3-contact black pin housing (C6) from switch-over module	-
<b>A10</b>	2-contact black socket housing (1.5mm <sup>2</sup> )	red/white white/brown	Branch cable <b>C1</b> in A-pillar on driver's side at switch-over module <b>Veh. with already fitted switch-over module:</b> tie back - not required	-



F 39 82 176 M

Item	Package/Designation/ Cable cross-section	Cable colour	Connection point in vehicle	Code des/ Plug-in place
<b>B</b>	Monitor wiring harness	-		-
<b>B1</b>	13-contact black pin housing	-	Navigation CD computer in boot on left	-
<b>B2</b>	16-contact black socket housing	-	Navigation CD computer in boot on left	-
<b>B3</b>	13-contact black pin housing	-	Monitor connection cable at centre console front	-
<b>B4</b>	6-contact black socket housing	-	Control unit connection cable at centre console front	-
<b>B5</b>	Socket contact/Navi-Mute/(0.35mm <sup>2</sup> )	white/brown	Press into branch cable <b>A9</b> plug-in place no. 3	-/3
<b>2</b>	2-contact black socket housing	-	Attach to branch cables <b>C8</b> and <b>C9</b> and tie back	-
<b>C</b>	Switch-over module (Item 6 in installation kit)	-	<b>Vehicles with already fitted switch-over module:</b> connect br. c. <b>A9</b> to already fitted switch-over module (C6)	-
<b>C1</b>	2-cont. black pin housing (1.5mm <sup>2</sup> )	white/brown red/white	Connect with branch cable <b>A10</b> to navigation system wiring harness	-
<b>C2</b>	Coding loop - see page 10	blue	Must be cut in vehicles with BMW Hi-Fi System Professional DSP and retrofitted navigation system	-
<b>C3</b>	Coding loop - see page 10	white	Must be cut if the customer does not want the radio to be turned off when there is a navigation announcement	-
<b>C4</b>	8-contact black pin housing (0.75mm <sup>2</sup> )	-	Door cut-out connector driver's side	X18196 resp. X19198
<b>C5</b>	8-contact black socket housing (0.75mm <sup>2</sup> )	-	To exposed pin housing of door cut-out connector	X18196 resp. X19198
<b>C6</b>	3-cont. black pin housing/Navi-NF	-	Connect with branch cable <b>A9</b>	-
<b>C7</b>	Cable lug 6 mm / terminal 31 (0.75mm <sup>2</sup> )	brown	Ground post in footwell on driver's side	X173 resp. X490
<b>C8</b>	Socket cont./terminal 30/(1.5mm <sup>2</sup> )	red/white	Press into 2-contact black socket housing (2)	-
<b>C9</b>	Socket cont./Radio-Mute/(0.75mm <sup>2</sup> )	white/brown	Press into 2-contact black socket housing (2)	-

## 4. Overview of the laying of the supplementary wiring harnesses



Cables of the supplementary wiring harnesses that are too long are to be tied back in the boot. The dotted lines in the illustration refer to cable installation in right-hand drive models (RHD). In vehicles with already fitted switch-over module, branch cable **A6** is to be tied back at the wiring harness.

Branch cable **A2** of the navigation wiring harness is to be changed (see page 11).

### **Navigation wiring harness A**

- In boot on left: Connect branch cable **A1** to navigation CD computer.  
Connect branch cables **A2**, **A3**, **A4** and **A6** to black 12-contact plug-in connector X322.  
Connect branch cable **A5** and **A7** to 8-contact connector X319 from rear light on left and  
connect branch cable **A8** to ground post X10305 at rear light on left.
- At A-pillar driver's side: Connect branch cables **A9** and **A10** to switch-over module **C**. In vehicles with existing switch-over module, tie back branch cable **A10**.

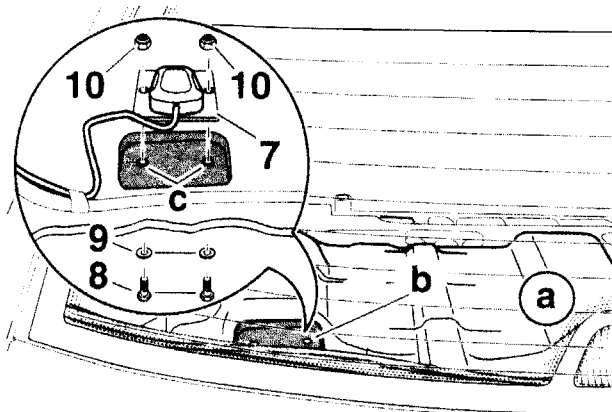
### **Monitor wiring harness B**

- In boot on left: Connect branch cables **B1** and **B2** to navigation CD computer.
- In centre console front: Connect branch cable **B3** to monitor connection cable and branch cable **B4** to connection cable from support station for remote control (operating unit connection cable).
- At A-pillar driver's side: Insert branch cable **B5** in branch cable **A9**.

### **Switch-over module C**

- At A-pillar driver's side: Join branch cable **C1** with branch cable **A10**.  
Connect branch cables **C4** and **C5** to door cut-out connectors on driver's side X18196 and X18198 respectively.  
Join branch cable **C6** with branch cable **A9**  
Connect branch cable **C7** to ground post in footwell on driver's side X173 or X490 and tie back switch-over module C to wiring harness.  
Press branch cables **C8** and **C9** in socket housing and tie back to wiring harness (is not connected).

## 5. Install GPS antenna



F 39 82 172 M

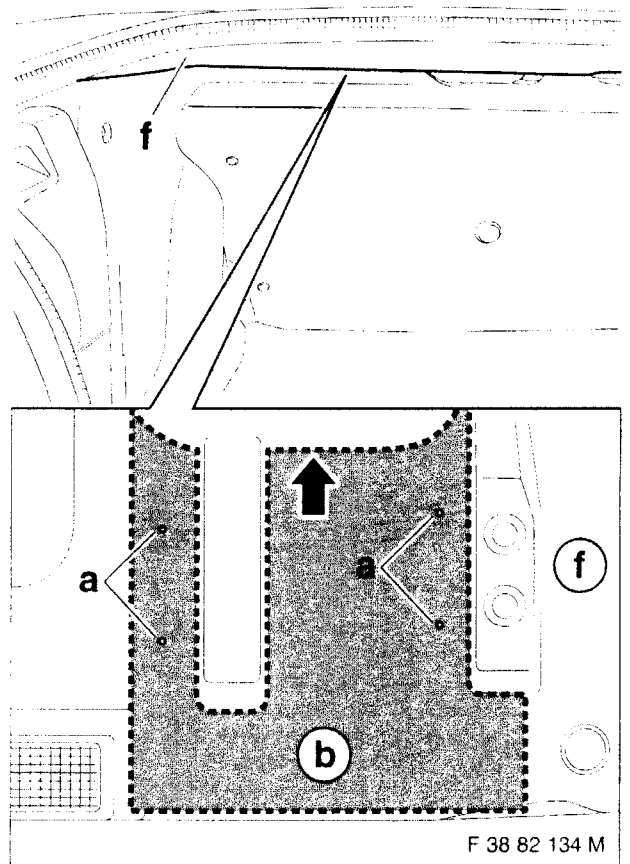


Drilling sites are to be treated against corrosion according to BMW specifications. The standard installation position can be recognised by the stamped-out section in the insulating mat (a).

Place GPS antenna (7) in the area of the standard installation position under the rear window shelf on the insulating mat (a) and draw round it.

Make cut out (b) for GPS antenna (7). Place GPS antenna (7) in the cutaway section (b) of the insulating mat (a) and mark drill holes (c). Drill a hole  $\varnothing$  4.5 mm at the marked places (c). Attach GPS antenna (7) with enclosed hexagon head screws M4x10 (8), washers (9) and hexagon nuts (10) as shown. Lay connection cable of GPS antenna (7) along the vehicle wiring harness into the boot on the left.

## 6. Install navigation CD computer



F 38 82 134 M



The illustration shows the boot partition wall above (f).

Use the enclosed template (b) to mark the drilling sites. The drilling sites are to be treated against corrosion according to BMW specifications.

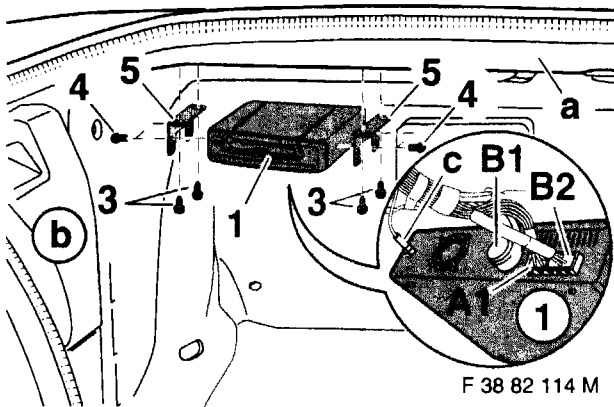
The arrow in the illustration indicates the direction of travel of the vehicle. The white areas on the enclosed template must be cut out.

Lay template (b) on the contours of the boot partition wall above (f) and secure with adhesive tape. Transfer drilling sites (a) to the body.

Before making the drill holes, the navigation CD computer is to be held over the marked drilling sites and the installed position checked.

Drill hole:  $\varnothing$  3mm





F 38 82 114 M



When the navigation CD computer (1) is being installed in the boot space left, care should be taken to see that the flap of the side trim panel (b) is left open.

The bracket (5) can be positioned appropriately using the elongated holes. The navigation CD computer (1) must be installed horizontally. Unevennesses in the boot partition wall above (a) are to be compensated for by adjustment of the bracket (5).

Attach right bracket (5) to the navigation CD computer (1) with Phillips screws M4x10 (4). Attach left bracket (5) to the upper boot partition wall with 2 hexagon head self tapping screws 4,8x16 (3).

Connect branch cables **A1**, **B1**, **B2** and the connector (c) of the GPS antenna to the navigation CD computer (1).

Attach navigation CD computer (1) to the left bracket (5) with Phillips screws M4x10 and to the boot partition wall above (a) with two hexagon head self tapping screws 4,8x16.

## 7. Install supplementary wiring harnesses

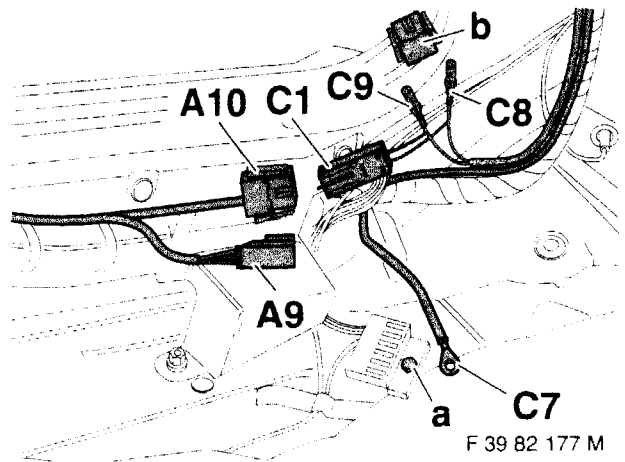


Cables of the supplementary wiring harnesses that are too long are to be tied back in the boot.

Proceeding from the boot on left-hand side, install branch cables **B3** (monitor connection) and **B4** (operating unit connection) forwards to the centre console at the selector or gearshift lever.

Press branch cable **B5**, cable colour white/brown, into the free plug-in place no. 3 of branch cable **A9**, cable colour blue/yellow and blue/green.

Lay branch cables **A9**, **A10** and **B5** to A-pillar on driver's side.



F 39 82 177 M

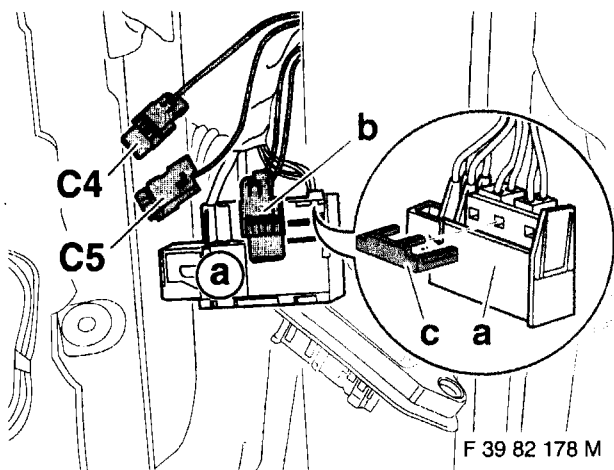


In vehicles with an already fitted switch-over module, branch cable **A10** of the navigation wiring harness is to be tied back.

Connect branch cable **C7**, cable colour brown, to ground post X173 (a) or, in right-hand drive models, to ground post X490 under the carpet in the footwell on the driver's side.

Join branch cable **A10** with branch cable **C1**. Put socket housing (b) on branch cable **C8**, cable colour red/white and branch cable **C9**, cable colour white/brown and tie them back - they are not connected.

Install branch cable **A9** to the switch-over module at the A-pillar.



F 39 82 178 M

Dismantle door cut-out connector (a) on the driver's side and separate it.

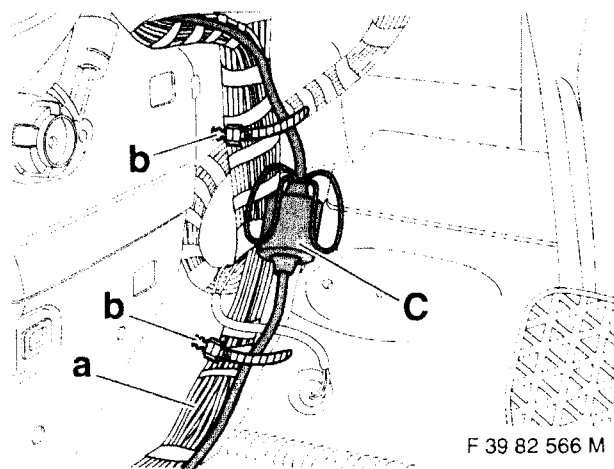
Pull out blue locking clamp (c) from the door cut-out connector (a).

Press out 8-contact pin housing X18196 (b), or in right-hand drive models X18198, from the door cut-out connector (a) and press in branch cable **C4**.

Join pressed-out 8-contact pin housing X18196 (b), or in right-hand drive models X18198, with branch cable **C5** and secure the plug-in connection with insulating tape (plug-in connectors do not lock in place). Install door cut-out connector.

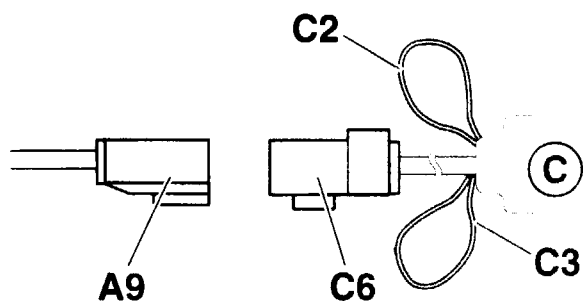
### Only in vehicles with BMW Hi-Fi System Professional DSP

In vehicles with BMW Hi-Fi System Professional DSP the coding loop **C2**, cable colour blue, must be cut at the switch-over module and the cable ends insulated. Tie back switch-over module with cable ties to the vehicle wiring harness in the area of the A-pillar.



F 39 82 566 M

Tie back connected switch-over module **C** to vehicle wiring harness (a) in the area of the A-pillar, below, with cable ties (b).



F 39 82 179 M

Join branch cable **C6** with branch cable **A9**.



If the customer does not want the radio to be muted during an announcement from the retrofit navigation system, the coding loop **C3**, cable colour white, must be cut at the switch-over module and the cable ends insulated.

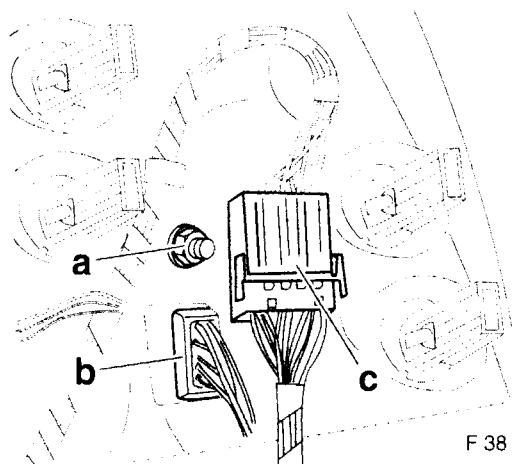


In vehicles with already fitted switch-over module, branch cable **A6** is to be tied back to the wiring harness.

Connect branch cable **A2**, cable colour red, to plug-in connector X322 (c) at plug-in place no. 1, cable colour red/green.

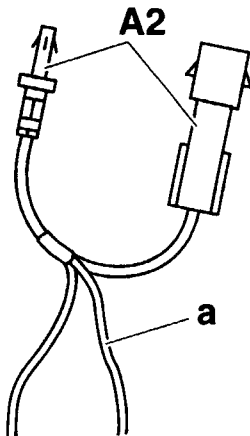
Connect branch cable **A3**, cable colour violet, to plug-in connector X322 (c) at plug-in place no. 2, cable colour violet/red.

Connect branch cable **A4**, cable colour black/white, to plug-in connector X322 (c) at plug-in place no. 3, cable black/white.



F 38 65 068 M

Connect branch cable **A5**, cable colour grey, to plug-in connector X319 (b) of rear light left at plug-in place no.2, cable colour grey/violet. Connect branch cable **A6**, cable colour white/brown, to plug-in connector X322 (c) at plug-in place no. 8, cable colour white/brown. Connect branch cable **A7**, cable colour white/yellow, to plug-in connector X319 (b) from rear light left at plug-in place no. 5, cable colour white/yellow. Connect branch cable **A8**, cable colour brown, to ground post X10305 (a).



F 38 82 120 M



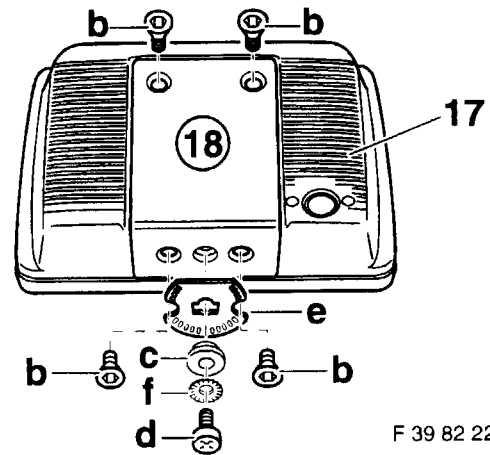
In vehicles with already fitted switch-over module, branch cable **A2** of the navigation wiring harness is to be changed as follows:

Divide cable (a), cable colour red/white, immediately next to branch cable **A2**, insulate the cable ends and tie back to the navigation wiring harness.

## 8. Install monitor, flexible conduit and remote control

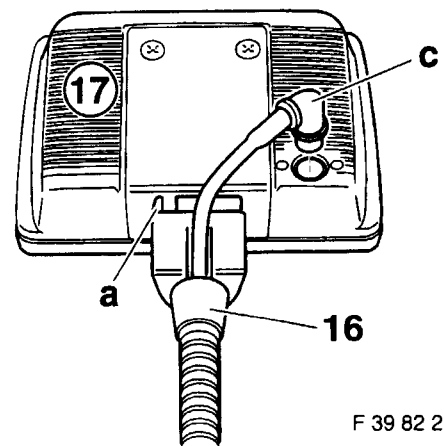


For reasons of safety, the following work steps are to be observed precisely and carried out as specified!



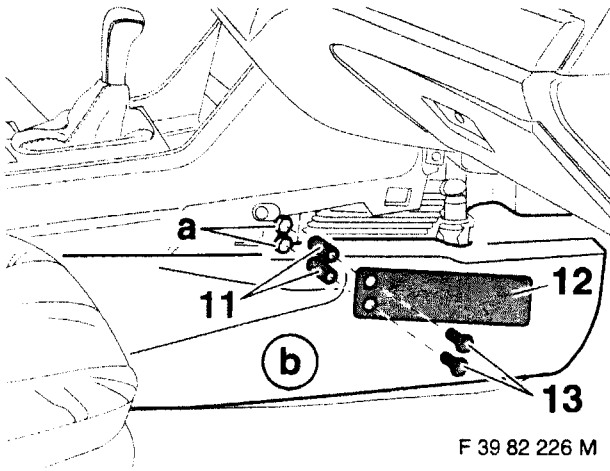
F 39 82 221 M

Attach monitor assembly bracket (18) to monitor (17) with countersunk head screws M5x10 (b). Place detent plate (e) in the recess on the monitor assembly bracket (18). Attach rotary knob (c) with screw 1/4" x 5/8" (d) and toothed lock washer (f) to monitor (17).



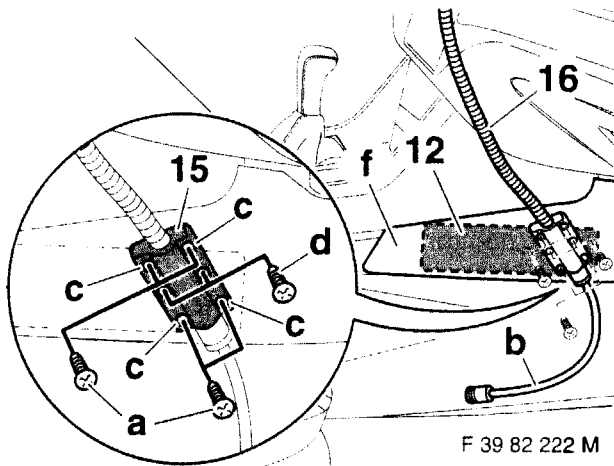
F 39 82 220 M

Place preassembled monitor (17) in the support of the flexible conduit (16) and secure with retaining clip (a). Connect connector (c) to monitor (17).



F 39 82 226 M

Remove hexagon head screws (a).  
Secure retaining plate E38 (12) for flexible conduit with enclosed hexagon head screws (13) and spacer bushings (11).  
Install side trim panel (b).



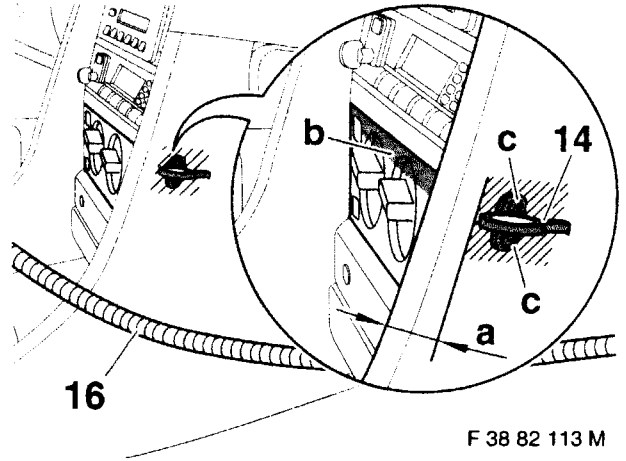
F 39 82 222 M



When making the drill holes, take care to see that no cables are damaged.  
When the flexible conduit is fitted, care should be taken that the glove box can be opened and drawn out free of contact.  
**In vehicles with telephone console** care should be taken to see that the telephone can be inserted and taken out absolutely without hindrance.

The adhesive film on the mounting foot of the flexible conduit (15) may only be removed when final assembly takes place.  
Loosely attach mounting foot of flexible conduit (15) to flexible conduit with screws M5x16 (d).  
Hold monitor with flexible conduit (16), and arrange mounting foot of flexible conduit (15) in such a way that the drilling sites (c) lie in the area of the retaining plate (12) behind the trim panel (f).

Drill the drilling sites (c), through the side trim panel (f) and retaining plate (12).  
Diameter of drill hole: 4.0 mm  
Secure monitor with flexible conduit (16) using self tapping screws 4,8x38 (a).  
Install monitor connection cable (b) under the side trim panel (f) to the centre console in the area of the selector or gearshift lever.  
Monitor connection cable (b) may not be kinked or squeezed.



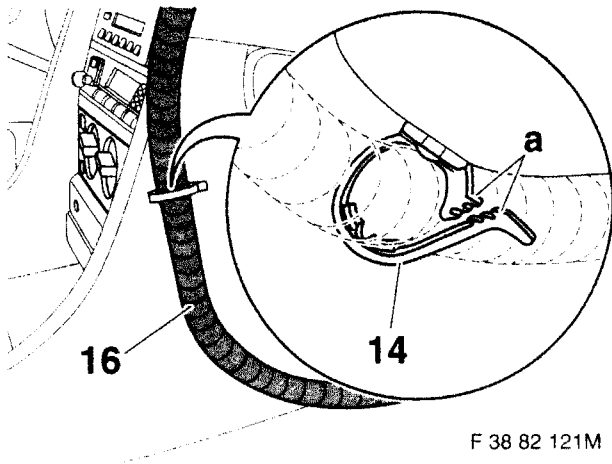
F 38 82 113 M

Measurement a = 20mm



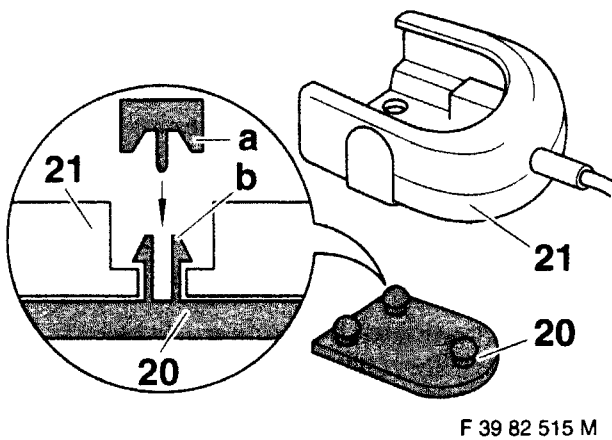
The instrument panel may not be pre-drilled for attachment of the retaining clip (14) of the flexible conduit (16) with self-tapping screws (c) 3,5x30.

The attachment points for the self-tapping screws (c) of the retaining clip (14) must be chosen in such a way that they lie on the hatched area on the side part of the instrument panel trim.  
Height of the hatched surface on the side part of the centre console: in the upper area of the heating and air conditioning control (b).  
After attachment of retaining clip (14), check it for a definite snug fit.

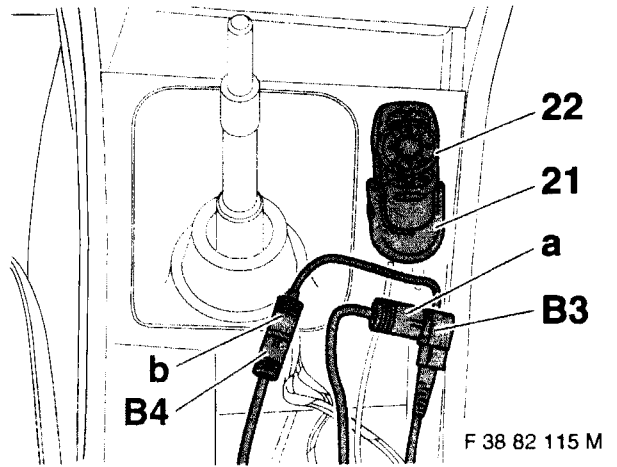


When the retaining clip (14) is closed make sure that the teeth (a) grip completely into each other and the retaining clip (14) firmly grasps the flexible conduit (16) all round.

Thread the flexible conduit (16) through the retaining clip (14) and fasten it.



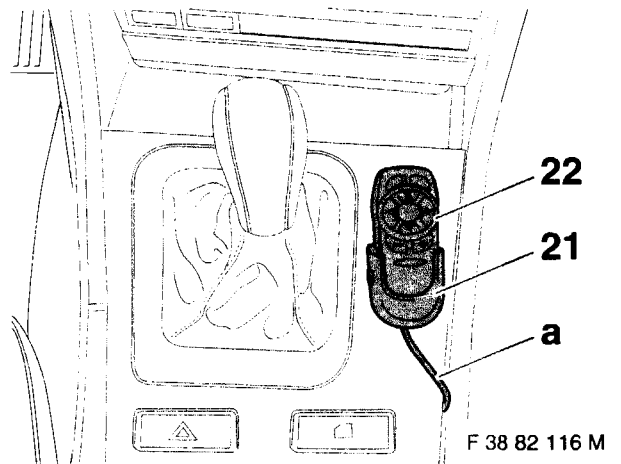
Clip locating plate (20) into the support station (21). Press the detent pins (a) into the detents (b) of the locating plate (20).



Insert remote control (22) in support station (21). Join branch cable **B3** and monitor connector (a).

Join branch cable **B4** and connector (b) from support station (21).

Tie back the cables under the centre console.



The place where the support station (21) is to be fitted on the centre console is to be agreed with the customer. Finishing work will have to be carried out on the centre console in the area of the cable feed-through to avoid the connection cable (a) of the support station (21) for the remote control (22) getting jammed.

Attach support station (21) at the installation location agreed with the customer. If the customer wishes, the support station (21) can be screwed on.

Reassemble components in the reverse order of disassembly.  
Connect battery.

## 9. Coding

This system is not coding relevant.

## 10. Functional test and calibration

**Check the following functions when the vehicle is stationary and the ignition switched on:**

- Insert navigation CD into navigation CD computer.
- Insert remote control in support station:  
The buttons on the remote control must be illuminated.
- Turn on side light:  
The monitor must change from daytime to night-time colours.



If the system is completely separated from the vehicle electrical system, a start-up phase of approx. 15 minutes has to be reckoned on when commissioning it. Park the vehicle so the GPS antenna has uninterrupted visual contact with the sky. A delay of up to 10 minutes may then be required before the signal is received from the satellite.

Make a short test run (approx. 10 mins.) for automatic calibration by driving on digitised streets and changing direction several times.

- Approaching a cross roads:  
The distance indication on the monitor must react correctly.
- Reversing over a short distance:  
The position indicator on the monitor must show the travelling motion correctly.

## 11. Language setting

There are two languages available in the navigation system (German and English). You will need the software CD (23) to set other languages and spoken announcements for the navigation system.  
The ignition must be switched on for the loading of other languages.

## Prepare to load languages

1. Select "Einstellungen" (Settings) in the main menu.
2. Select "Sprache" (Language) in the settings menu.  
-the currently selected language is shown.
3. Select "Andere Sprache" (Other language).  
-You are requested to insert the software CD into the navigation computer.
4. Remove the map CD and insert the software CD in the navigation computer.
5. Confirm with "OK".  
-the menu "Sprache laden" (Load language) is shown.
6. Select the language which is to be replaced by another.  
-A list of the available languages appears.  
The currently loaded language is **not** shown.  
If you have inserted the wrong CD, a warning message appears. Insert the correct CD and confirm with the ENTER button.

## Load new languages from CD

1. Select the desired language from the list using the cursor button and confirm with the ENTER button.
2. Select "Load" and confirm with the ENTER button  
-The screen is briefly switched off.  
-The system loads the selected language.  
-The system is then initialised (started again).
3. Insert the map CD again.  
-Normal functions are restored.

Should you **not** wish to load the chosen language, select "Quit" in the menu "Sprache laden" (Load language).  
-The previous language remains active.



## Handing over the vehicle to the customer:

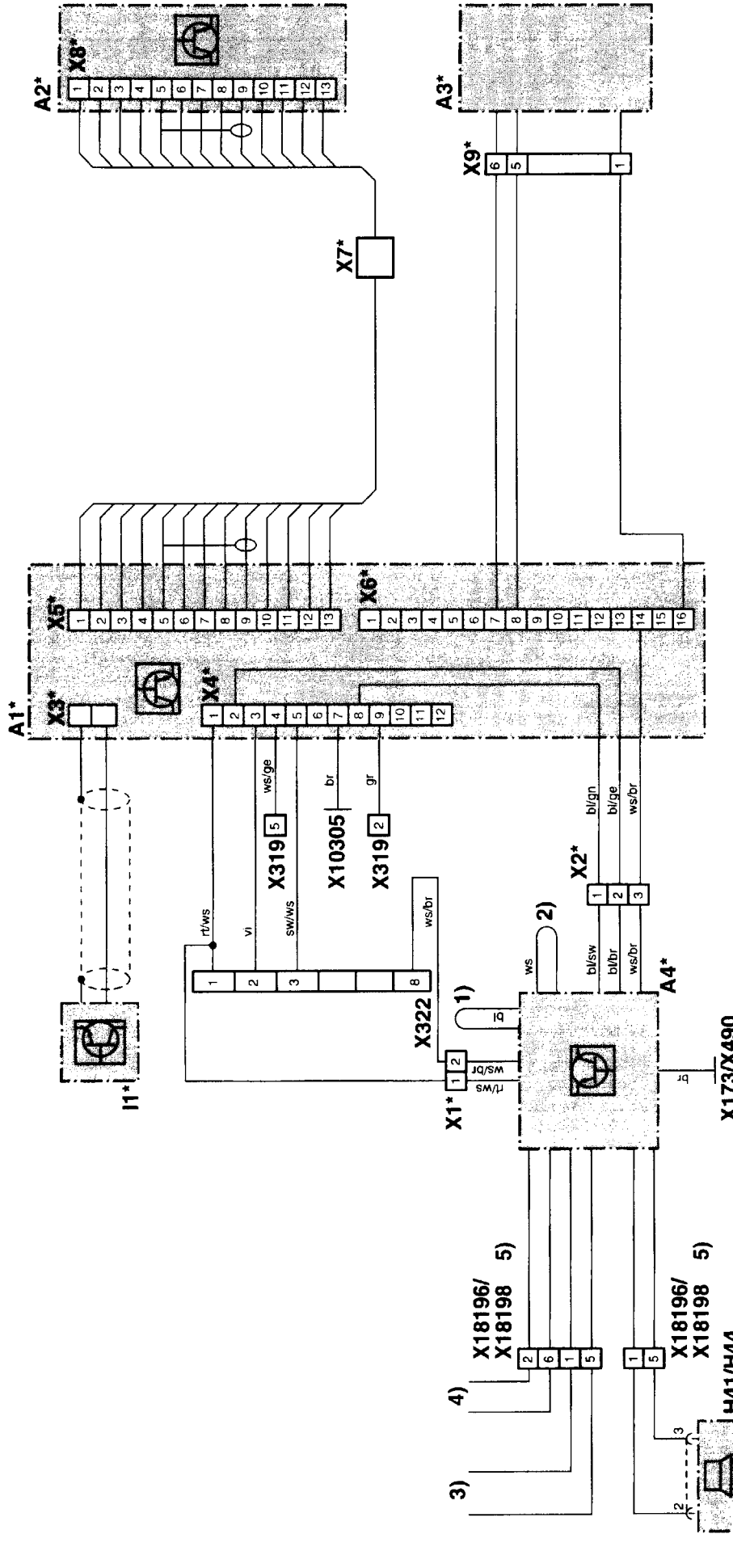
Set screen colours according to customer's wish.

Explain the major functions using the operations manual.

When the monitor is removed the covering cap (19) must be placed in the flexible conduit (16).

The covering cap (19) is to be handed over to the customer and its function demonstrated.

## 12. Circuit diagram



F 38 82 118 M

- |     |                                    |        |   |
|-----|------------------------------------|--------|---|
| A1* | CD computer navigation             | X6*    | 16-contact black socket housing         |
| A2* | On-board monitor navigation        | X7*    | 13-contact black plug-in connector      |
| A3* | Support station for remote control | X8*    | 13-contact black pin housing            |
| A4* | Switch-over module                 | X9*    | 6-contact plug-in connector             |
| H41 | Speaker driver's side (LHD)        | X173   | Ground post footwell front left (LHD)   |
| H44 | Speaker driver's side (RHD)        | X319   | 8-contact black socket housing          |
| I1* | GPS antenna                        | X322   | 12-contact white plug-in connector      |
| X1* | 2-contact black plug-in connector  | X490   | Ground post footwell front right (RHD)  |
| X2* | 3-contact black plug-in connector  | X10305 | Ground post rear left                   |
| X3* | GPS antenna plug                   | X18196 | 8-contact black plug-in connector (LHD) |
| X4* | 12-contact black socket housing    | X18198 | 8-contact black plug-in connector (RHD) |
| X5* | 13-contact black pin housing       |        |   |
- 1) **Coding loop (cable colour blue):**  
Must be cut in vehicles with BMW Hi-Fi System Professional DSP
- 2) **Coding loop (cable colour white):**  
**Coding loop closed:** navigation makes radio mute  
**Coding loop open:** Navigation announcement comes in parallel to radio announcement or music.
- 3) to radio or Hi-Fi system  
4) to telephone  
5) The plug-in connection X18196 or X18198 is separated and joined to navigation wiring harness.
- Items marked with \* refer only to this circuit diagram, all other items correspond to the BMW KD circuit diagrams
- Colour abbreviat.**  
bl = blue  
br = brown  
ge = yellow  
gn = green  
gr = grey  
rt = red  
sw = black  
vi = violet  
ws = white



# BMW Parts and Accessories Installation Instructions

This supplementary sheet is only required for installation of the Navigation System II (system with additional monitor) in vehicles of model range BMW 7 Series (E38) and BMW 5 Series saloon (E39) and applies to the following installation instructions:

Order No. 01 29 9 790 588 Navigation System II  
BMW 7 Series (E38)

Order No. 01 29 9 790 597 Navigation System II  
BMW 5 Series (E39)

## Important information !

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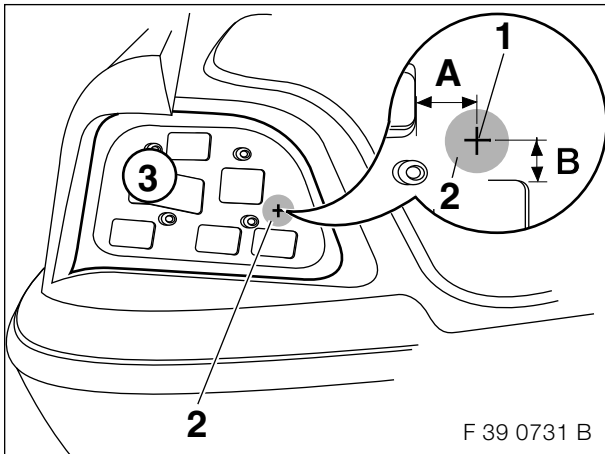
The following work steps should be undertaken when connecting branch cable A8 to the ground post of the taillight left in the installation instructions. ◀



**Applies to all vehicles of model range BMW 7 Series (E38) and vehicles of model range BMW 5 Series saloon (E39) up to production date 9/00.**

▶ Illustrations show the connection in E39 vehicles. Proceed in the identical sequence for E38 vehicles. ◀

▶ If the ground post at the taillight left does not exist, a new ground post will have to be retrofitted as described in the following pages. ◀



Dismantle taillight left.  
Mark drilling site (1) with prick punch.

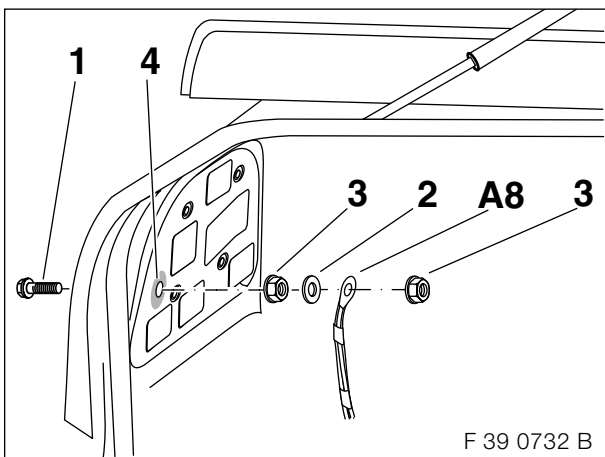
Measurement **A** = 22mm  
Measurement **B** = 17mm

Remove vehicle paint and primer in the grey area (2) Ø20mm around the drilling site (1) on the front and rear side of the taillight cup (3).

The sheet metal **must** be bare in the grey area (2) to provide perfect contact.

**⚠** Risk of damage! Before starting on the drilling, care should be taken to see that the cable and connector attachments are unclipped and that the cables are away from the drilling site. ◀

Make drill hole of Ø6 mm.  
While drilling vacuum up any drilling chips.  
Then deburr drill hole.



Insert hexagon-head screw with collar (1) from the **rear** into the drill hole (4) which has just been made and screw tight with nut M6 (3).

When the earth connection cable is fitted later, care should be taken to see that the washer (2) is put on **first** and then branch cable **A8**.

Finally fasten branch cable **A8** (ring terminal must point with the cable line to the centre of the vehicle) with the second nut M6 (3).

**⚠** In E38 vehicles, the ring terminal must point with cable line downwards. ◀

▶ When the attachment procedure has been done, all parts should be treated with corrosion-prevention methods to BMW norms. ◀

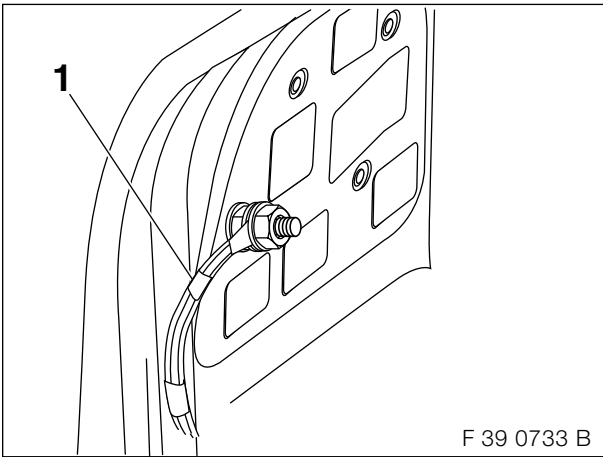

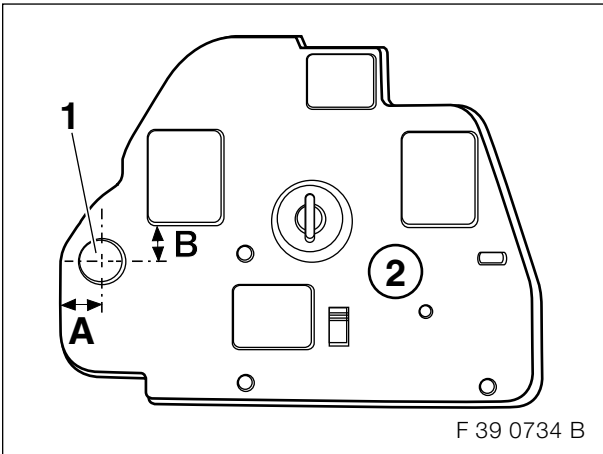


Illustration shows the final installed position of the earth connection cable. Cable loom (1) must point towards the centre of the vehicle.

 In E38 vehicles, the ring terminal must point with cable line downwards. ◀



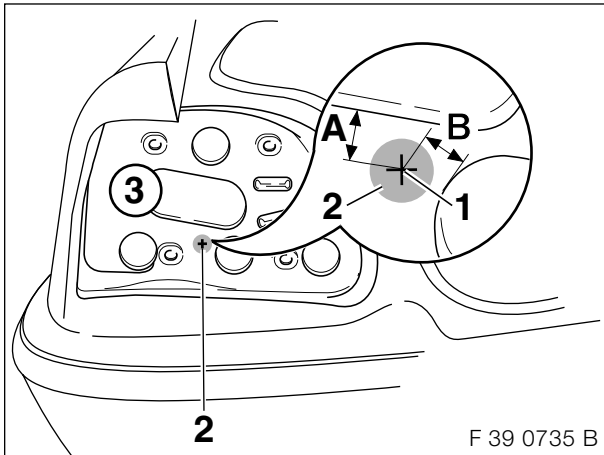
Mark drilling site (1) on bulb holder left (2) and then drill a hole  $\varnothing$  18 mm with a step drill.

Measurement **A** = 17mm  
Measurement **B** = 11mm

Deburr edges and then re-install taillight left and bulb holder left.

**Applies to all vehicles of model range BMW 5 Series saloon (E39)  
from production date 9/00.**

▶ If the ground post at the taillight left does not exist, a new ground post will have to be retrofitted as described on this page. ◀



Dismantle taillight left.  
Mark drilling site (1) with prick punch.

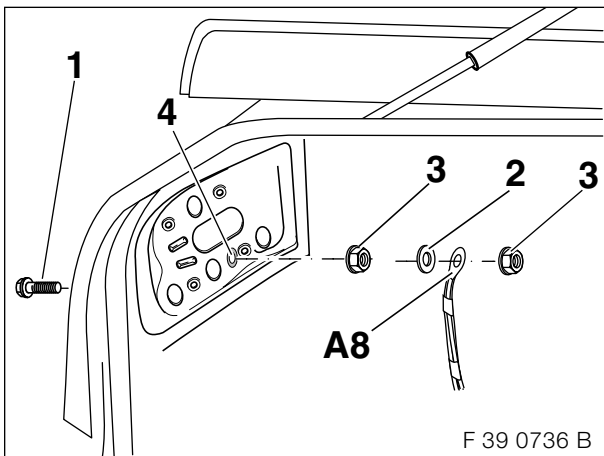
Measurement **A** = 19mm  
Measurement **B** = 17mm

Remove vehicle paint and primer in the grey area (2) Ø20mm around the drilling site (1) on the front and rear side of the taillight cup (3).

The sheet metal **must** be bare in the grey area (2) to provide perfect contact.

⚠ Risk of damage! Before starting on the drilling, care should be taken to see that the cable and connector attachments are unclipped and that the cables are away from the drilling site. ◀

Make drill hole of Ø6 mm.  
While drilling, vacuum up any drilling chips. Then deburr drill hole.



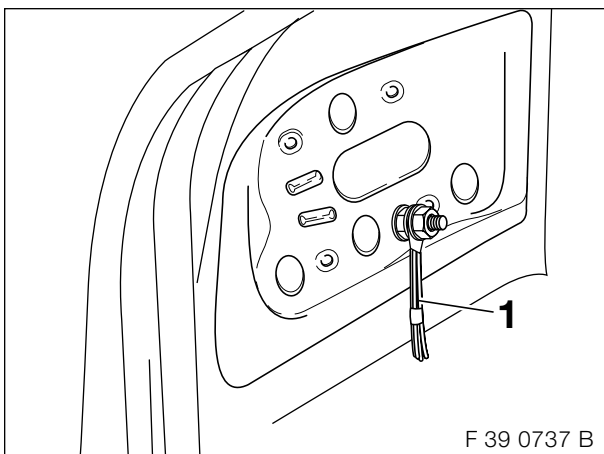
Insert hexagon-head screw with collar (1) from the **rear** into the drill hole (4) which has just been made and screw tight with nut M6 (3).

When the earth connection cable is fitted later, care should be taken to see that the washer (2) is put on **first** and then branch cable **A8**.

Finally fasten branch cable **A8** (ring terminal must point with the cable line downwards) with the second nut M6 (3).

▶ When the attachment procedure has been done, all parts should be treated with corrosion-prevention methods to BMW norms. ◀

Illustration shows the final installed position of the earth connection cable. Cable loom (1) must point downwards.





# Parts and Accessories Installation Instruction

## Supplementary sheet to the Installation Instructions Navigation system II (system with supplementary monitor)

**BMW 5 Series E39, Order no. 01 29 9 790 597**

**BMW 7 Series E38, Order no. 01 29 9 790 588**

The X-designation of the grounding point for the switch-over module **C** is shown in the Installation Instructions as **X173** (left-hand drive vehicle) and **X490** (right-hand drive vehicle). These X-designations are not correct and are replaced by the following X-designations:

### **5 Series E39**

-re Illustration F 39 82 499 M:

Branch cable **C7**: Code designation / Plug-in place: X1108 for left-hand drive vehicles  
X10012 for right-hand drive vehicles

-re Illustration F 39 82 171 M:

**Switch-over module C** : Connect branch cable **C7** to ground post in footwell on driver's side X1108 or X10012 and tie back switch-over module **C** to the vehicle wiring harness.

-re Illustration F 39 82 177 M:

Connect branch cable **C7**, cable colour brown, to ground post X1108 (a) or, in right-hand drive models, to ground post X10012 under the carpet in the footwell on the driver's side.

-re Illustration F 39 82 227 M:

X1108 Ground post footwell driver's side front left (LHD)  
X10012 Ground post footwell driver's side front right (RHD).

### **7 Series E38**

-re Illustration F 39 82 176 M:

Branch cable **C7**: Code designation / Plug-in place: X1108 for left-hand drive vehicles  
X10012 for right-hand drive vehicles

-re Illustration F 38 82 119 M:

**Switch-over module C** : Connect branch cable **C7** to ground post in footwell on driver's side X1108 or X10012 and tie back switch-over module **C** to the vehicle wiring harness.

-re Illustration F 39 82 177 M:

Connect branch cable **C7**, cable colour brown, to ground post X1108 (a) or, in right-hand drive models, to ground post X10012 under the carpet in the footwell on the driver's side.

-re Illustration F 38 82 118 M:

X1108 Ground post footwell driver's side front left (LHD)  
X10012 Ground post footwell driver's side front right (RHD).



# Parts and Accessories Installation instructions

## Supplementary sheet to the installation instructions for navigation system II (system with additional monitor)

Order No. 01 29 9 790 597, BMW 5 Series (E39)

Order No. 01 29 9 790 997, BMW 5 Series touring (E39/2)

Order No. 01 29 9 790 588, BMW 7 Series (E38)  
(Cars built before 9.98 only)

Additional installation time approx. 0.25 hours.



The earth cable (branch **C7**) on the switch module is only to be connected to the existing ground post X1108 / X10012 in the footwell on the driver's side as described in the above installation instructions. This is the only way to ensure that the switch functions correctly. ◀

**For cars with telephone or mobile phone preparations (SA640) or with a factory-fitted telephone or mobile phone (SA629 or SA625), the following is also required.**

### Section 7 (E38, E39):

**To install the additional wiring harnesses**

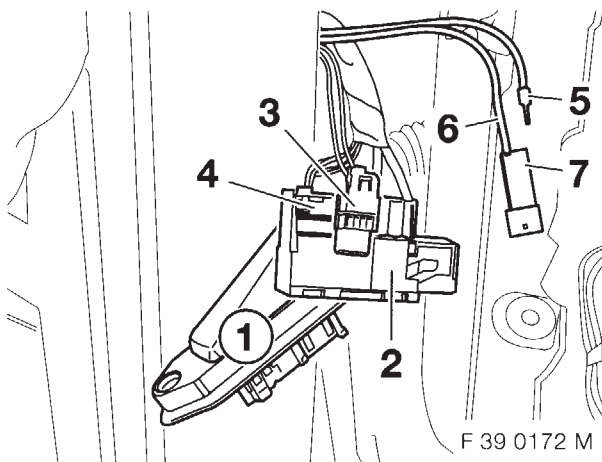
Figure F 39 82 178 M:

### Section 12 (E39/2):

**To install the additional wiring harnesses**

Figure F 39 62 320 B:

After completing the work described for the above figures in the existing installation instructions, proceed as follows:



Cut the door plug (1) **on the passenger side** and disconnect the plug connector. Remove the catch mechanism (4) from the plug casing (2) and press out the 8-pin plug casing X18196 or X18198 (3).

Push the pin contact (5), black/white cable, out of the 8-pin plug casing (3) on the door plug, slot No. 6 and push it into the 3-pin Bordeaux-coloured plug casing (7) on slot No. 1.

Push the pin contact (6), black/brown cable, out of the 8-pin plug casing (3) on the door plug, slot No. 2 and push it into the 3-pin Bordeaux-coloured plug casing (7) on slot No. 2. Tie back the plug casing (7) on the vehicle wiring harness.

The remaining procedures for the installation of the switch module are as described in the installation instructions "Navigation system II (system with additional monitor)".