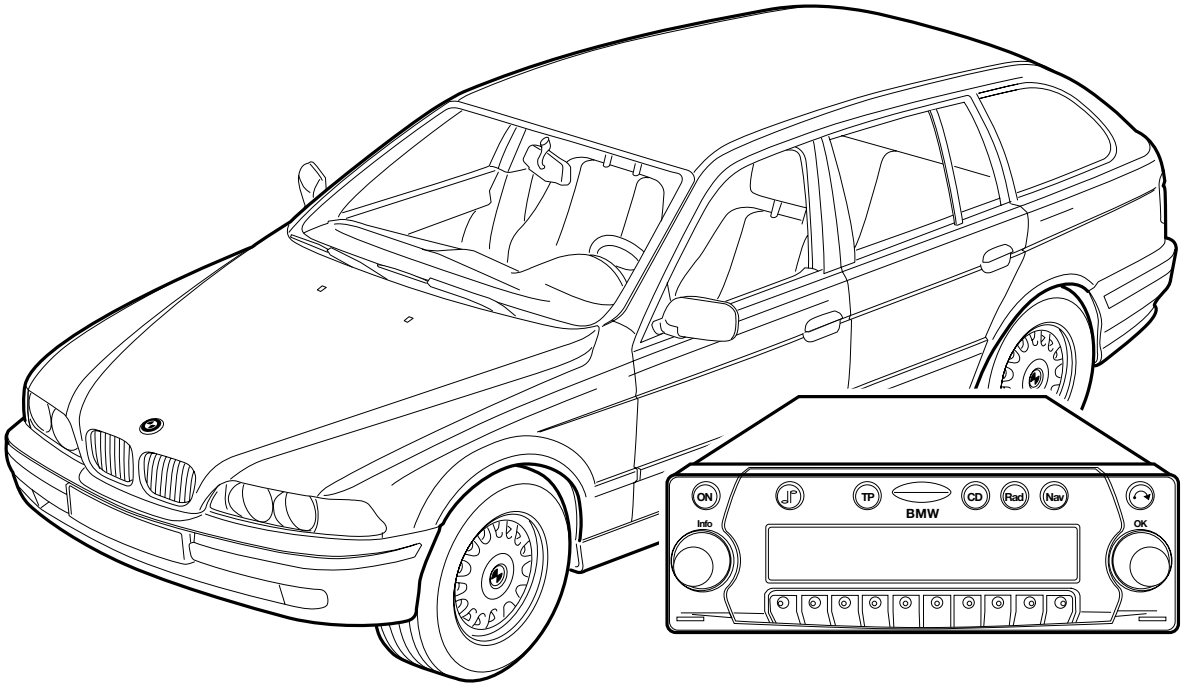
BMW Parts and Accessories Installation Instructions



039 0004 B

BMW Traffic Pro installation kit

BMW 5 Series Saloon (E 39) with a production date after 09/00
BMW 5 Series touring (E 39/2) with a production date after 09/00

These installation instructions are **not valid** for cars with **SA358** (climate comfort windscreen).

These installation instructions are **onlyvalid for**:

- cars without an on-board monitor, without **SA663** (BMW Professional radio) with a production date after 09/00
- cars without an on-board monitor, with **SA663** (BMW Professional radio) with a production date after 02/01

Technical and electrical knowledge required
The installation time is approx. 1.5 hours but this may vary depending on the condition of the car and the equipment in it.

Retrofit/Installation kit No. 65 90 0 027 973
65 90 0 139 839

Contents

1. Important information for the installation of the navigation radio

Only for use in the BMW dealer organisation.

The navigation radio may only be installed by a specialist workshop that has the required special tools and manuals.

Ensure that the cables/lines are not kinked or damaged as you install them in the car. Additional cables/lines that you install must be secured with cable ties.

All the figures show LHD cars, proceed in exactly the same way on RHD cars.

Item numbers refer only to the overview drawings and to the texts next to the appropriate figure.

 The operating manual supplied with the kit is to be given to the vehicle keeper. ◂

Subject to technical modifications

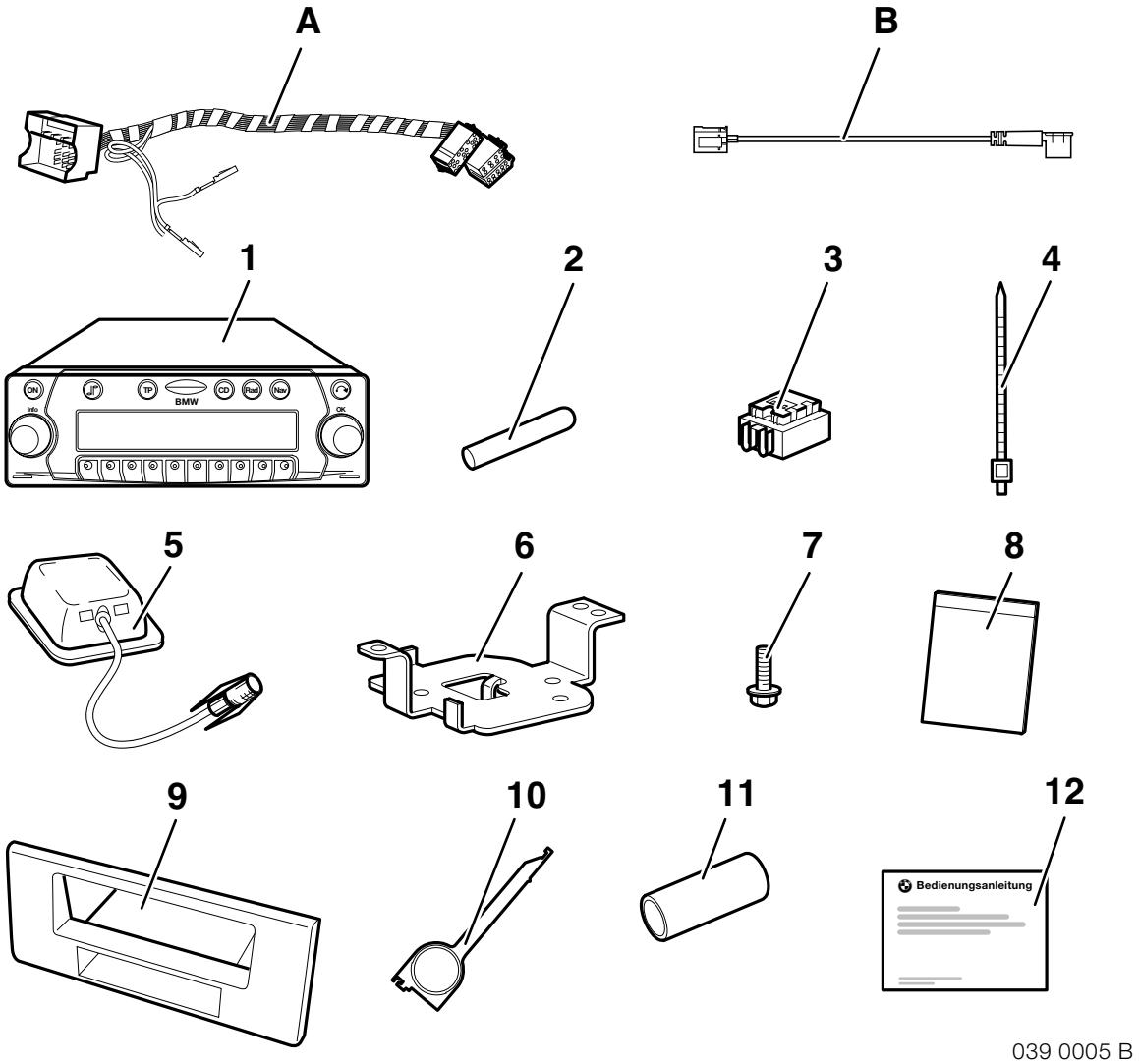
Required tools and equipment

MoDIC III or DIS	Combination pliers
Set of straight slot screwdrivers	Angle cutter
Cable lamp	Cable lamp

2. Preparations

	TIS instruction No.
Conduct a brief test	---
Disconnect the battery	12 00 ...
Remove the instrument cluster	62 21 000
Remove the radio	65 11 030
Remove the glove compartment	51 16 360
Remove the front right door sill trim	51 47 000
Remove the A pillar trim at the bottom right	---
Remove the centre air jet	---

3. Parts list

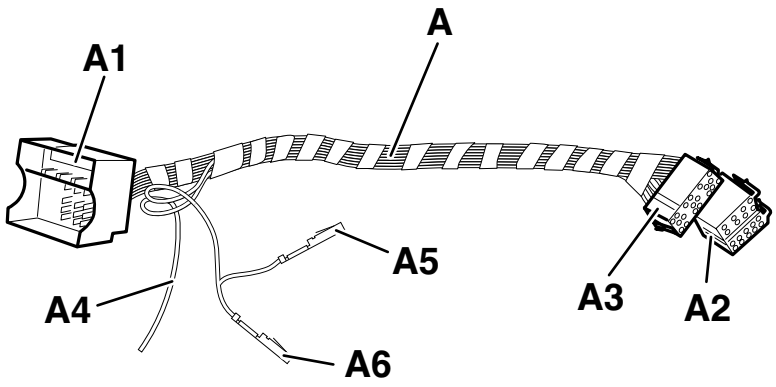


039 0005 B

Legend

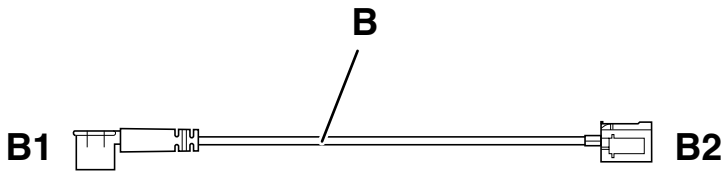
A Adapter cable
B Aerial adapter
1 Navigation radio
2 Radio retaining pin
3 Double insulation-piercing connector (2x)
4 Cable tie (8x)
5 GPS aerial
6 GPS aerial holder
7 Hexagonal screws (2x)
8 Rattle guard (2x)
9 Radio installation trim
10 Installation clip (2x)
11 Shrink hose
12 Owner's manual

4. Adapter cable connection diagram



039 0006 B

Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	Adapter cable	---	---	---	---
A1	Black 16-pin plug casing	---	---	To black 16-pin plug casing in the centre console	X18126
A2	Black 16-pin socket casing	---	---	To the navigation radio in the centre console	---
A3	Red 20-pin socket casing	---	---	To the navigation radio in the centre console	---
A4	Open cable end	Reversing light terminal	BL/GE	To the standard wiring harness, right A pillar on the light module, using double insulation-piercing connector (check whether the signal exists)	---
A5	Blade terminal contact	Tacho A signal	SW/WS	To the white 18-pin socket casing on the instrument cluster	X10113 PIN3
A6	Blade terminal contact	Tacho A signal	WS	To the white 26-pin socket casing on the instrument cluster	X11175 PIN14

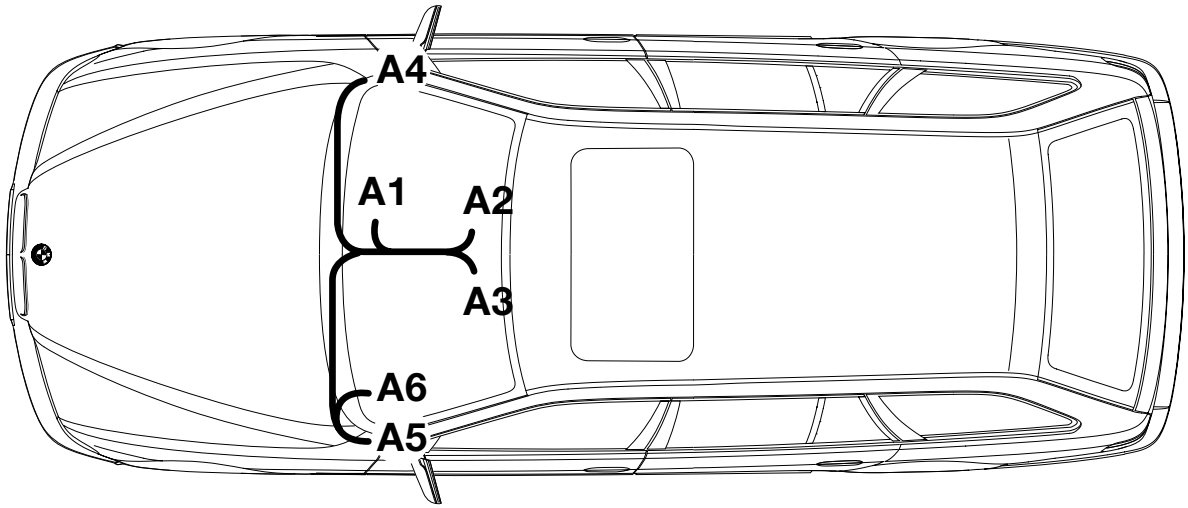


039 0007 B

Coaxial plug casing

Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
B	Aerial adapter	---	---	---	---
B1	Coaxial plug casing	---	---	To the navigation radio in the centre console	---
B2	Fakra coaxial plug casing	---	---	To coaxial Fakra aerial plug in the centre console	---

5. Adapter cable connection overview (LHD cars only)



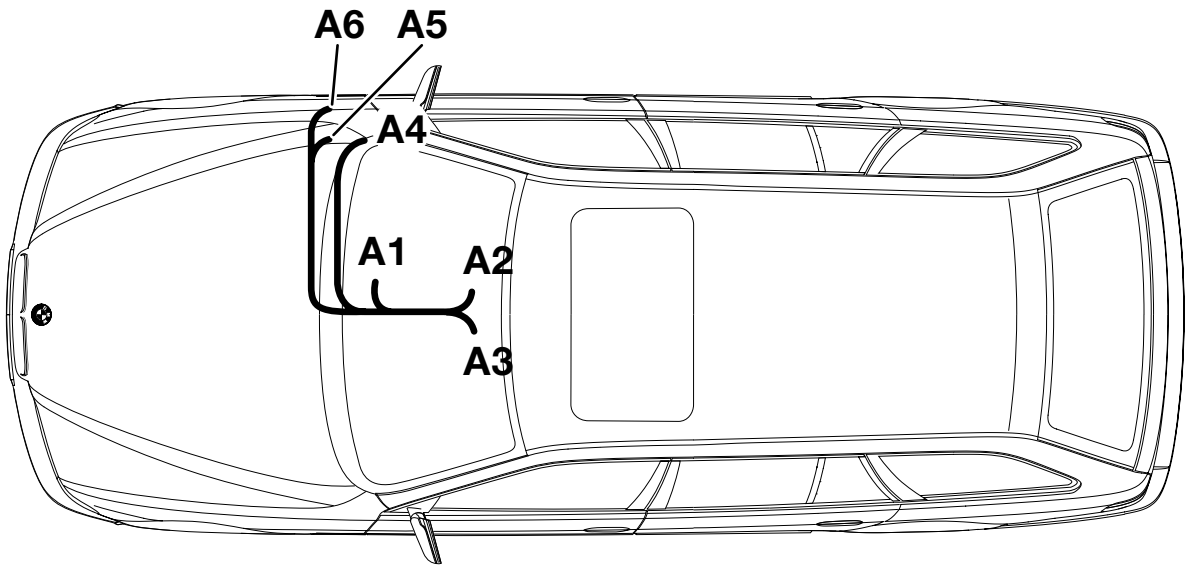
039 0025 B

Lay the adapter cable A, as shown in the figure, and secure it with cable ties.

Branch **A1** to the black 16-pin plug casing **X18126** in the centre console
Branch **A2** to the navigation radio in the centre console
Branch **A3** to the navigation radio in the centre console
Branch **A4** to the standard wiring harness on the A pillar at the front right using a double insulation-piercing connector
Branch **A5** to the white 18-pin socket casing **X10113 PIN3** on the instrument cluster
Branch **A6** to the white 26-pin socket casing **X11175 PIN14** on the instrument cluster

Tie back any excess lengths.

6. Adapter cable connection overview (RHD cars only)



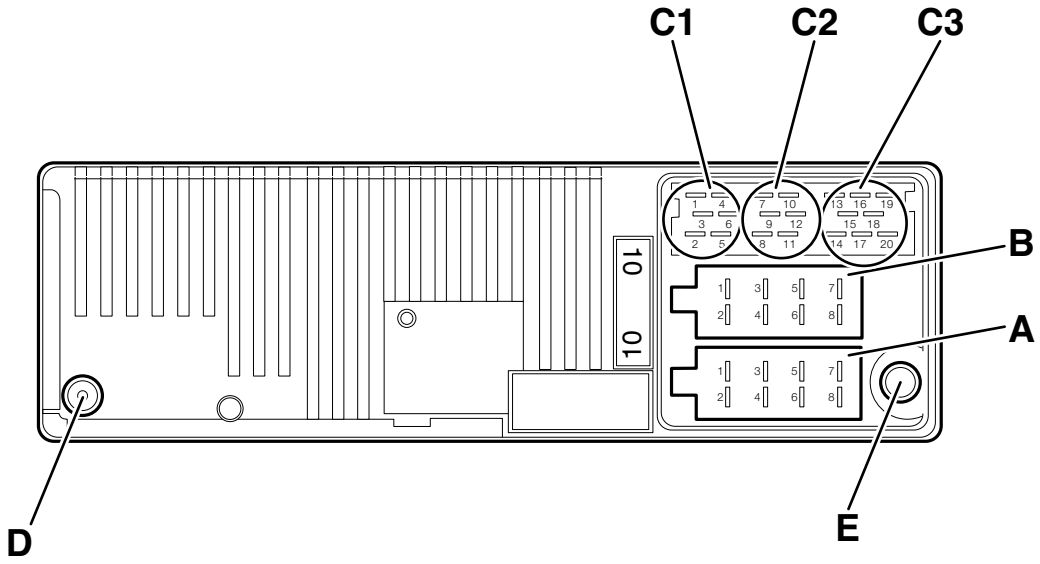
039 0041 B

Lay the adapter cable A, as shown in the figure, and secure it with cable ties.

Branch **A1** to the black 16-pin plug casing **X18126** in the centre console
Branch **A2** to the navigation radio in the centre console
Branch **A3** to the navigation radio in the centre console
Branch **A4** to the standard wiring harness on the A pillar at the front right using a double insulation-piercing connector
Branch **A5** to the white 18-pin socket casing **X10113 PIN3** on the instrument cluster
Branch **A6** to the white 26-pin socket casing **X11175 PIN14** on the instrument cluster

Tie back any excess lengths.

7. Navigation radio connection diagram



039 0021 B

Legend

Chamber A

1	Speed signal (TAA)
2	Signal from reversing light
3	Telephone mute
4	Continuous positive (terminal 30)
5	Control output for automatic aerial/amplifier
6	Light (terminal 58G)
7	Switched positive (terminal 15)
8	Earth (terminal 31)

Chamber B

1	Speaker rear right+
2	Speaker rear right-
3	Speaker front right+
4	Speaker front right-
5	Speaker front left+
6	Speaker front left-
7	Speaker rear left+
8	Speaker rear left-

Chamber C1

1	LineOut rear left
2	LineOut rear right
3	Low frequency earth
4	LineOut front left
5	LineOut front right
6	Subwoofer LineOut

Chamber C2

7-12	Specific connection for CD changer

Chamber C3

13	Low frequency telephone input
14	Earth telephone input
15-17	Specific connection for CD changer
18	CD low frequency earth (AUX)
19	CD low frequency left (AUX)
20	CD low frequency right (AUX)

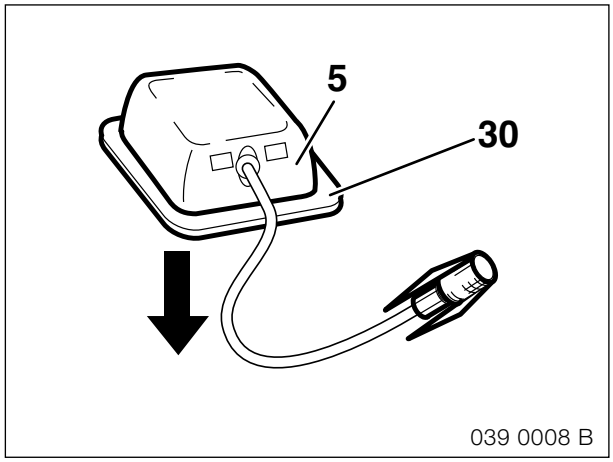
Jack D

Radio aerial jack

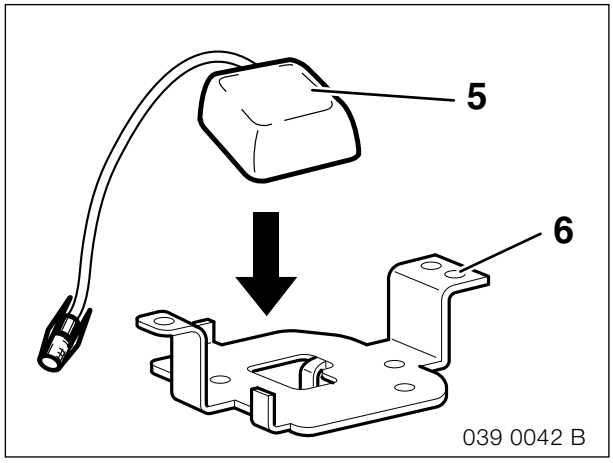
Jack E

GPS aerial jack

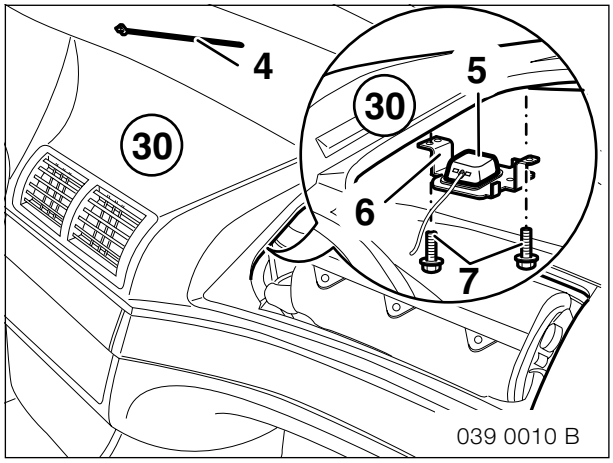
8. To install the GPS aerial (LHD cars only)



Remove the plate (30) from the GPS aerial (5).



Place the GPS aerial (5) on the holder (6) (the aerial will be held in place by integrated magnets).

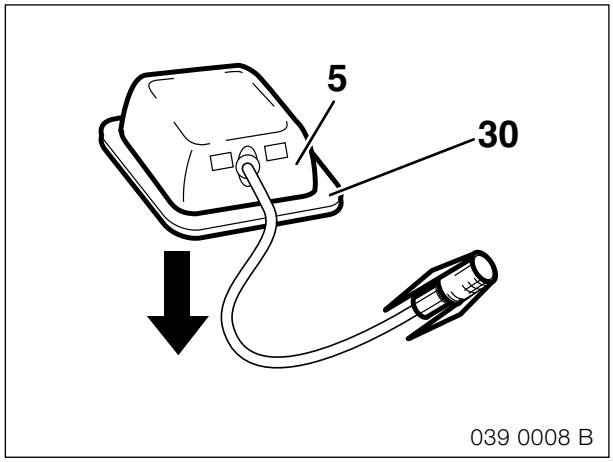


The figure shows the installation site of the GPS aerial under the instrument panel. ◂

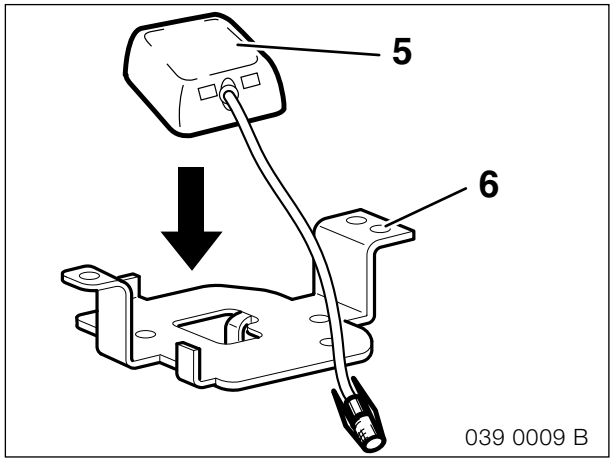
The mounting points for the GPS aerial holder (6) are marked in the instrument panel (30). During the installation process ensure that you do not miss the mounting points since otherwise you will damage the instrument panel (30). ◂

Secure the GPS aerial holder (6) with the fitted GPS aerial (5) to the instrument panel (30) using two hexagonal screws (7).
Lay the GPS aerial cable to the installation site of the radio and secure it with cable ties (4).

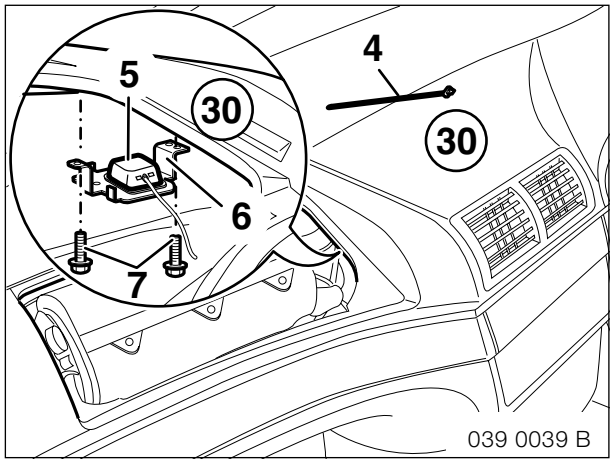
9. To install the GPS aerial (RHD cars only)



Remove the plate (30) from the GPS aerial (5).



Place the GPS aerial (5) on the holder (6) (the aerial will be held in place by integrated magnets).

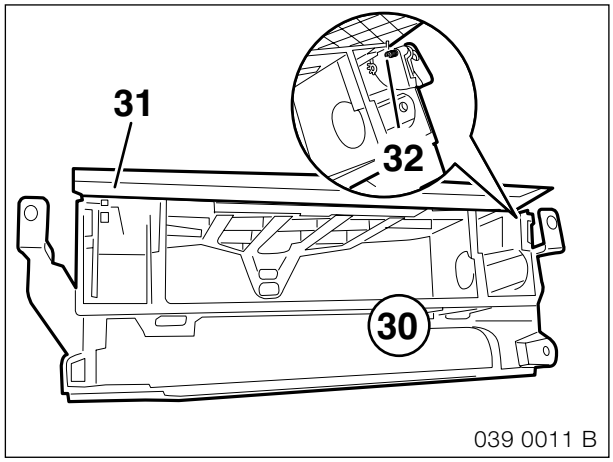


The figure shows the installation site of the GPS aerial under the instrument panel. ◂

The mounting points for the GPS aerial holder (6) are marked in the instrument panel (30). During the installation process ensure that you do not miss the mounting points since otherwise you will damage the instrument panel (30). ◂

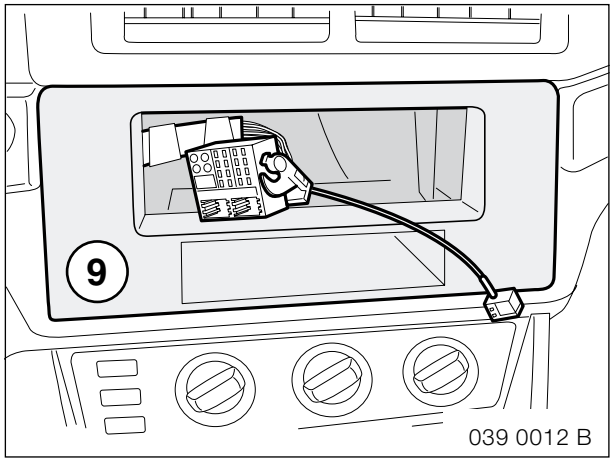
Secure the GPS aerial holder (6) with the fitted GPS aerial (5) to the instrument panel (30) using two hexagonal screws (7).
Lay the GPS aerial cable to the installation site of the radio and secure it with cable ties (4).

10. To install the adapter cable and connect the navigation radio

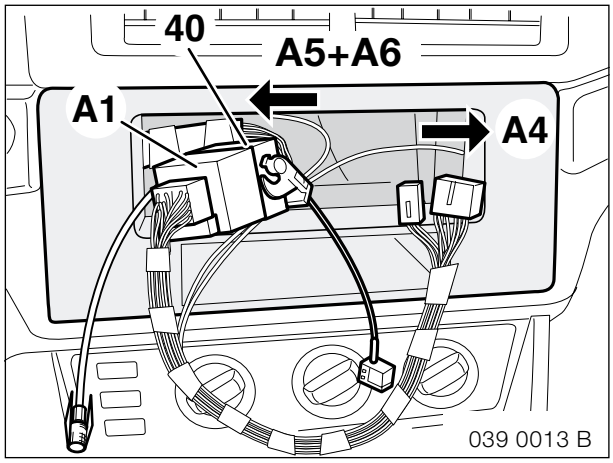


The figure shows the radio module holder (30).

Remove the flap (31) on the radio module holder (30) to allow the radio trim (9) to be installed. Remove the pins (32) for this purpose.

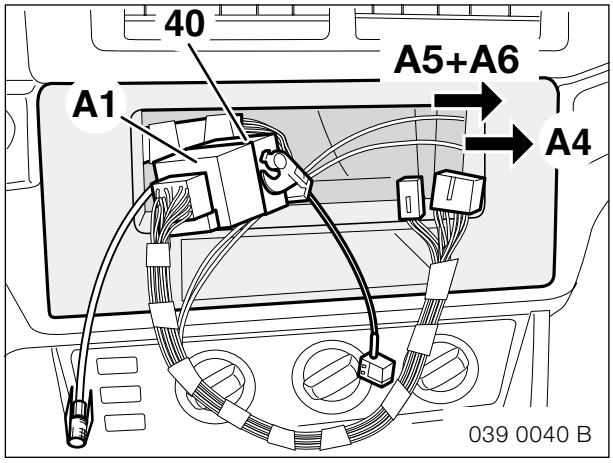


Insert the radio trim (9).
The radio trim (9) is held in place later by the fastening for the navigation radio.



LHD cars only.

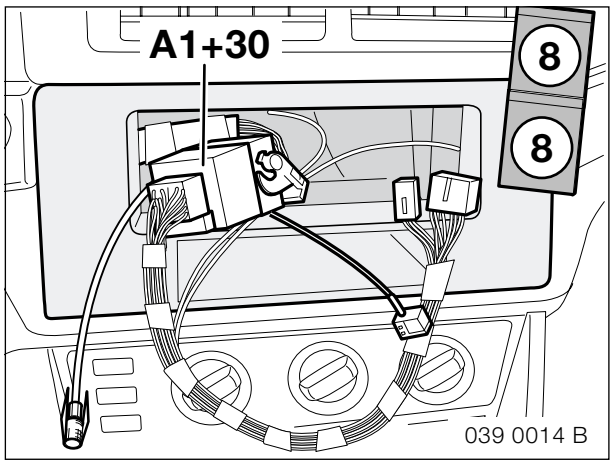
Connect branch **A1** to the new generation radio connection plug (40).
Lay branch **A4**, open cable end, blue/yellow cable, along the standard wiring harness to the bottom right A pillar and secure it with cable ties.
Lay branches **A5**+**A6** along the standard wiring harness to the installation site of the instrument cluster and secure them with cable ties.



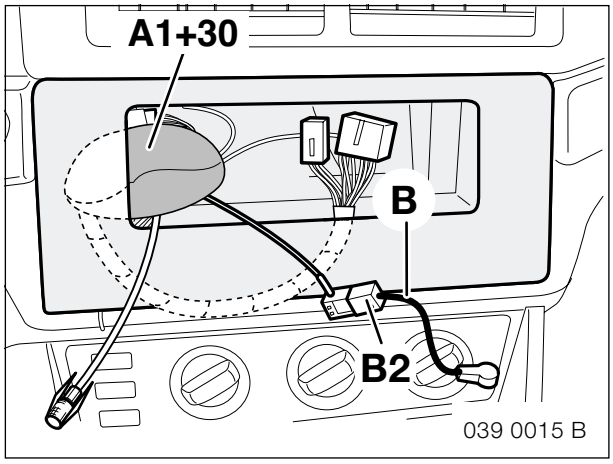
RHD cars only.

Connect branch **A1** to the new generation radio connection plug (40).
Lay branch **A4**, open cable end, blue/yellow cable, along the standard wiring harness to the bottom right A pillar and secure it with cable ties.
Lay branches **A5**+**A6** along the standard wiring harness to the installation site of the instrument cluster and secure them with cable ties.

10. To install the adapter cable and connect the navigation radio

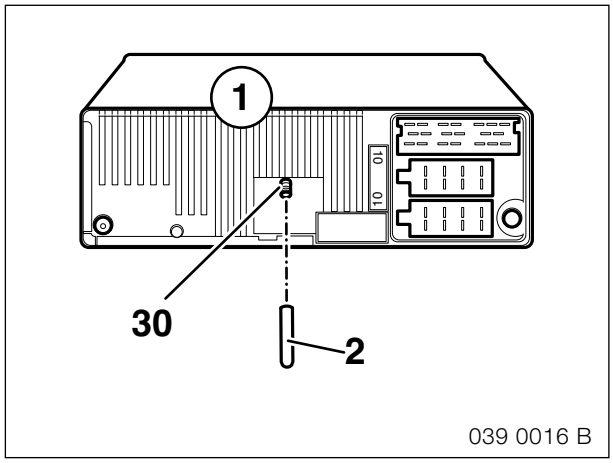


Affix a rattle guard (8) to the second rattle guard (8) and then affix them to the wiring harness so that the plug connector **A1** + **new generation** (30) is wrapped in them.

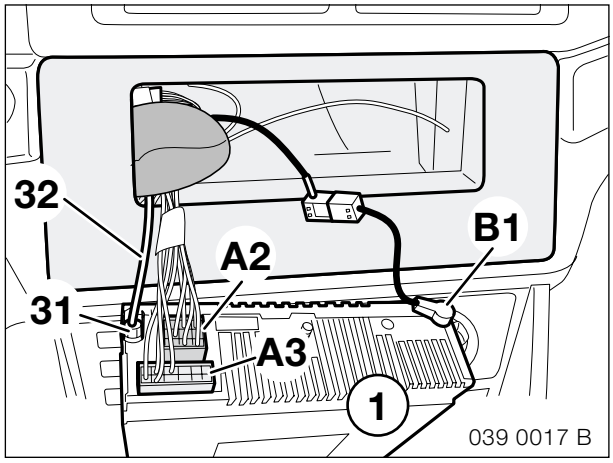


Lay the wrapped plug connector **A1** and **new generation** (30) on the left behind the instrument panel so as to enable you to install the navigation radio. ◂

Connect branch **B2**, coaxial Fakra plug casing on the adapter **B** to the existing aerial cable (30).

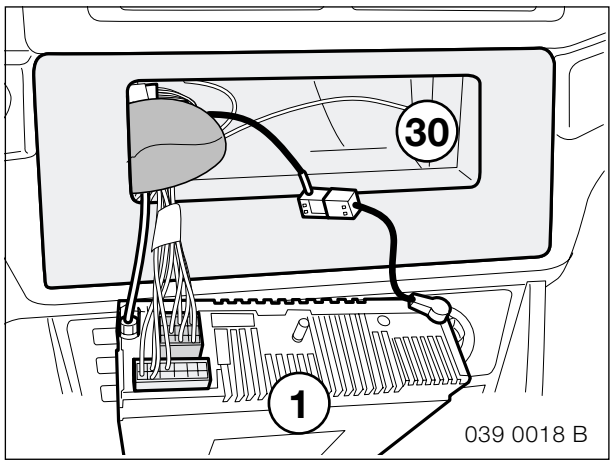


Screw the radio retaining pin (2) on to the stud bolt (30) on the navigation radio (1).



Connect branch **A2**, black 16-pin socket casing, to the navigation radio (1).
Connect branch **A3**, red 20-pin socket casing, to the navigation radio (1).
Connect branch **B1** to the radio aerial input.
Connect the coaxial plug (31) on the GPS aerial cable (32) to the navigation radio (1).

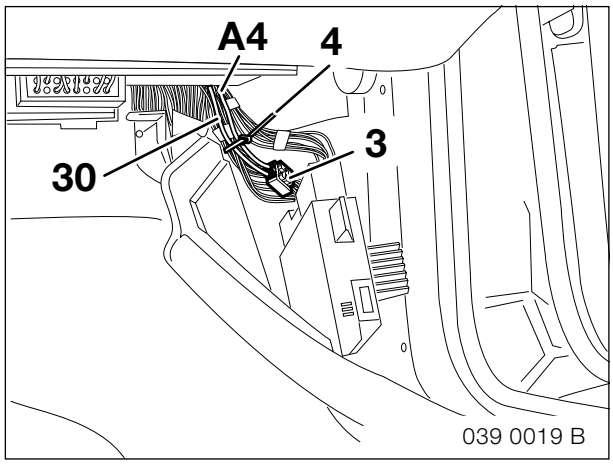
10. To install the adapter cable and connect the navigation radio



Carefully slide the connected navigation radio (1) into the radio shaft (30) and secure it with the existing slides.

Refer to the information for securing the navigation radio in the operating instructions in the section headed Installation/Removal instructions. ◂

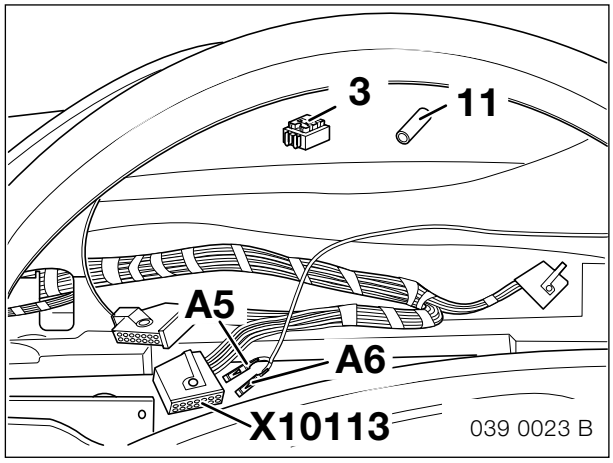
As you slide in the navigation radio, ensure that you do not jam or damage any of the cables. ◂



The figure shows the bottom right A pillar (the light module has been unscrewed). ◂

Connect branch **A4**, open cable end, blue/yellow cable, to the reversing light cable (30), white/yellow cable (PIN 10) using a double insulation-piercing connector and secure it with cable ties (4). Since there are several white/yellow cables, check the reversing light signal.

11. To connect the tacho A signal



Cars with high instrument cluster (SA 555) only

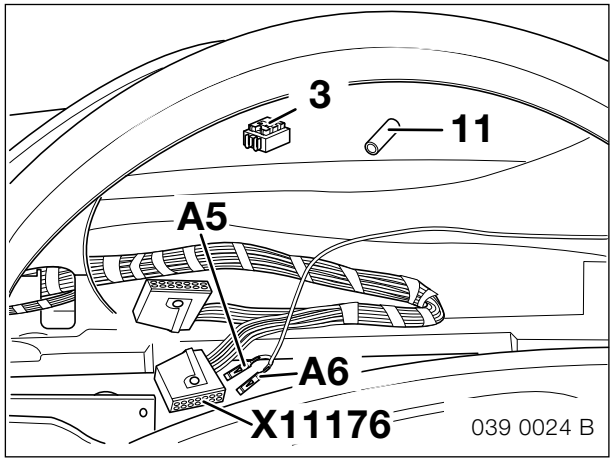
The figure shows installation location of the instrument cluster. ◂

Open and release the white 18-pin instrument cluster connection plug **X10113**.

Connect branch **A5**, 1-pin socket contact, black/white cable on the tacho A signal cable, to the free slot **PIN3** on the connection plug **X10113**.

Insulate and tie back branch **A6**, 1-pin socket contact, white cable, with a shrink hose (11).Then lock and close connection plug **X10113** again.

If **PIN3** is occupied, cut off branches **A5**+**A6** and connect the tacho A signal cable, black/white cable, to the black/white signal cable using a insulation-piercing connector (3). ◂



Cars with low instrument cluster only

The figure shows installation location of the instrument cluster. ◂

Open and release the white 26-pin instrument cluster connection plug **X11176**.

Connect branch **A6**, 1-pin socket contact, white cable on the tacho A signal cable, to the free slot **PIN14** on the connection plug **X11176**.

Insulate and tie back branch **A5**, 1-pin socket contact, black/white cable, with a shrink hose (11). Then lock and close connection plug **X11176** again.

If **PIN14** is occupied, cut off branches **A5**+**A6** and connect the tacho A signal cable, black/white cable, to the black/white signal cable using a insulation-piercing connector (3). ◂

12. Coding

This system is not diagnostics-capable and must not be coded.

13. Concluding work

Connect battery
Complete the commissioning process
Reassemble the car by following the instructions for its dismantling in reverse order
Print out error memory

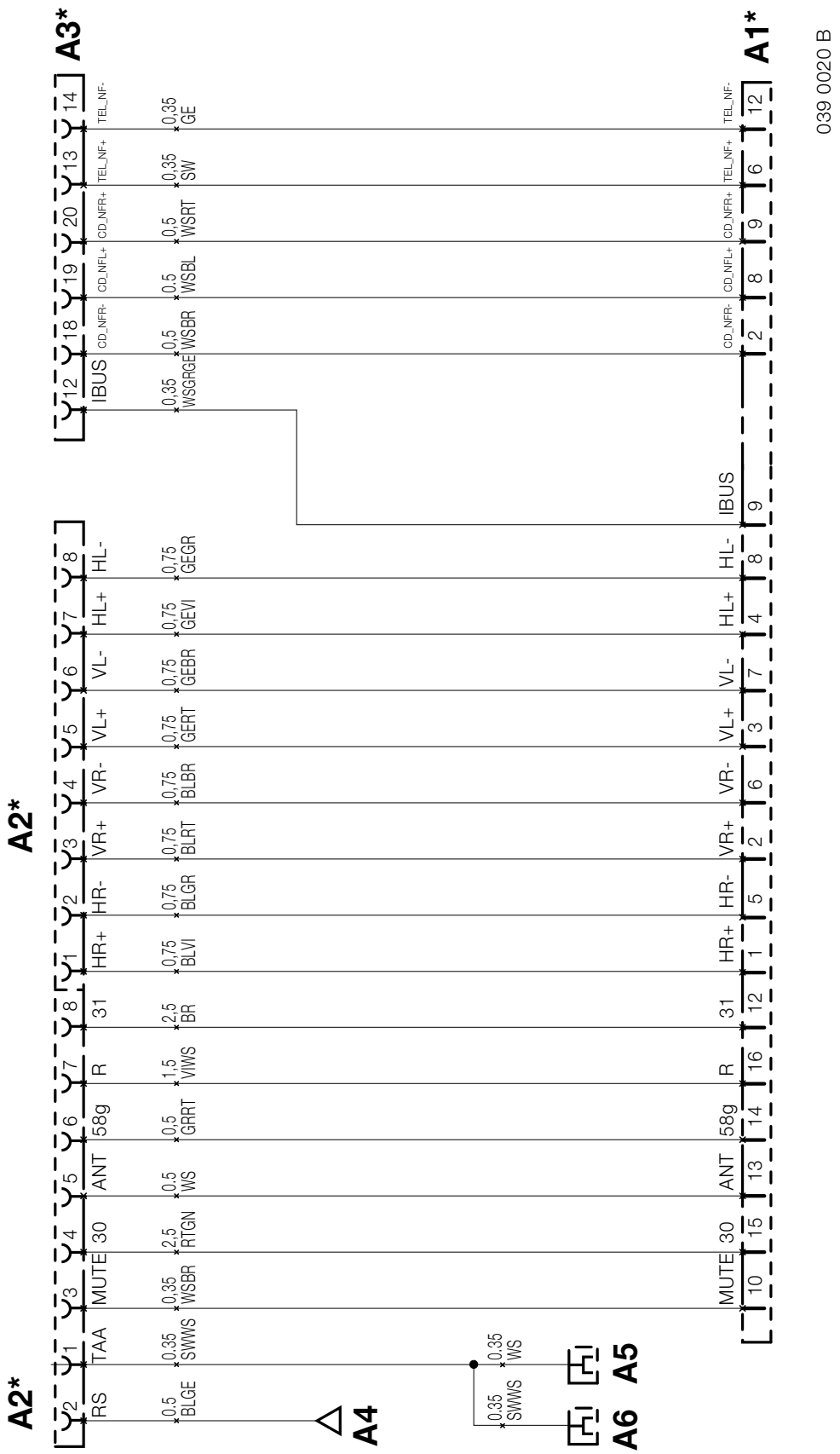
14. Language selection and commissioning

See enclosed **BMW Traffic Pro operating instructions**

15. Owner's manual

See enclosed **BMW Traffic Pro operating instructions**

16. Adapter wiring harness circuit diagram



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16. Adapter wiring harness circuit diagram

Legend

A1*	New generation adapter plug
A2*	Black 16-pin socket casing (chamber A+B)
A3*	Red 20-pin socket casing
A4*	Open cable end
A5*	Blade terminal contact (X10113 PIN 3)
A6*	Blade terminal contact (X11175 PIN 14)

The components marked with an asterisk (*) are only valid for this circuit diagram. All the other components and X designations correspond to BMW after-sales circuit diagrams

Cable colours

RT	= red
SW	= black
GN	= green
BR	= brown
GE	= yellow
WS	= white
VI	= violet
GR	= grey
BL	= blue