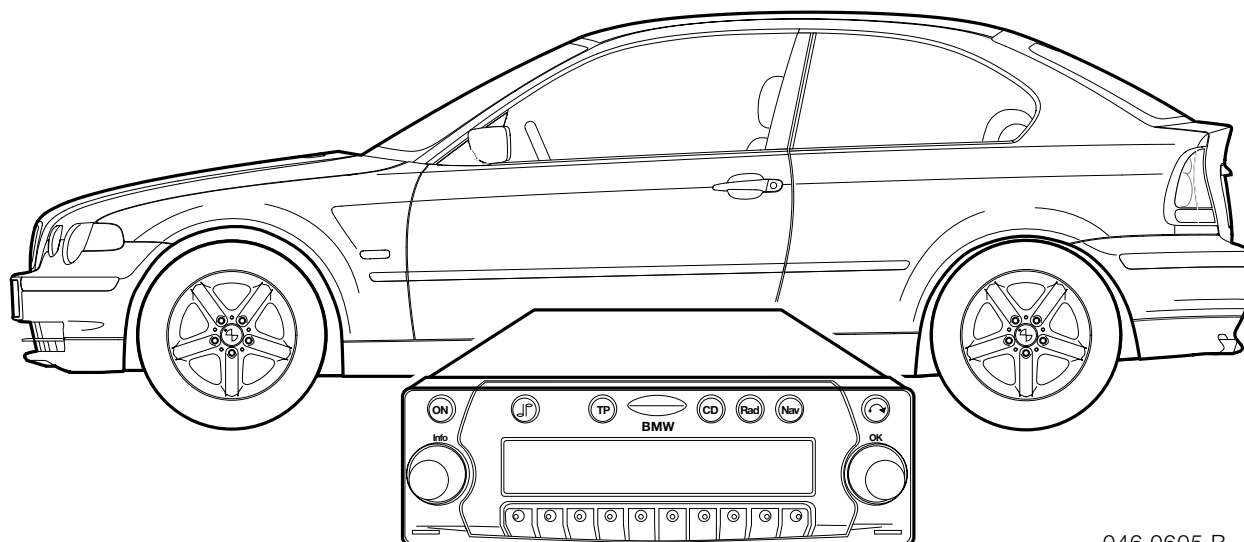




Parts and Accessories Installation Instructions



046 0605 B

BMW Traffic Pro installation kit

BMW 3 Series Coupé (E 46/2)

BMW 3 Series touring (E 46/3)

BMW 3 Series Saloon (E 46/4)

BMW 3 Series compact (E 46/5)

BMW 3 Series Convertible (E 46/C)

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

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

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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

Set of flat screwdrivers

Set of Philips screwdrivers

Combination pliers

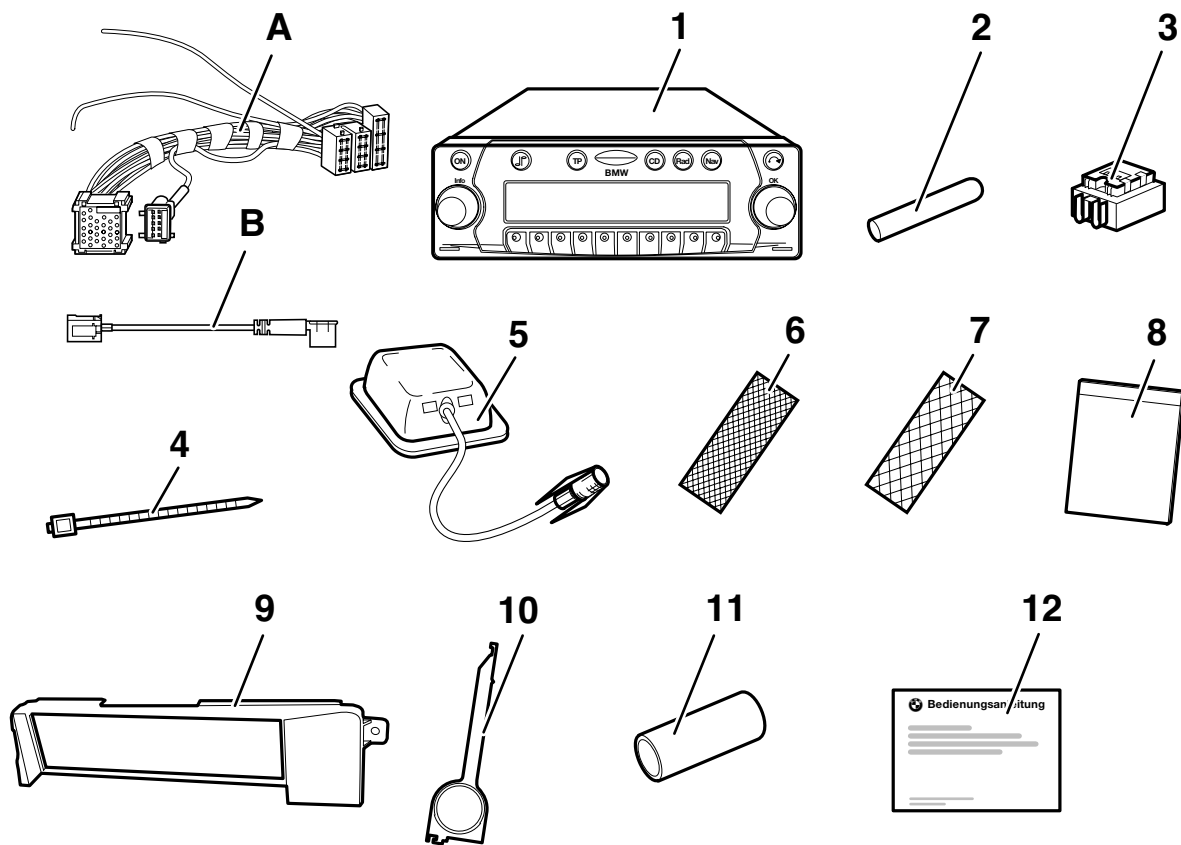
Angle cutter

Cable lamp

2. Preparations

	TIS instruction No.
Conduct a brief test	---
Disconnect the battery	12 00 ...
Remove the heating control	64 11 748
Remove the décor strip above the radio	51 16 221
Remove the radio	65 11 030
Remove the radio module holder from the instrument panel	---
Remove the glove compartment and bottom right instrument panel trim	51 16 360
Remove the front right door sill trims	51 47 000
Remove the side footwell trim on the front right A pillar	51 43 075
Pull up the carpet at the front right	---
Remove the instrument carrier	62 21 000

3. Parts list

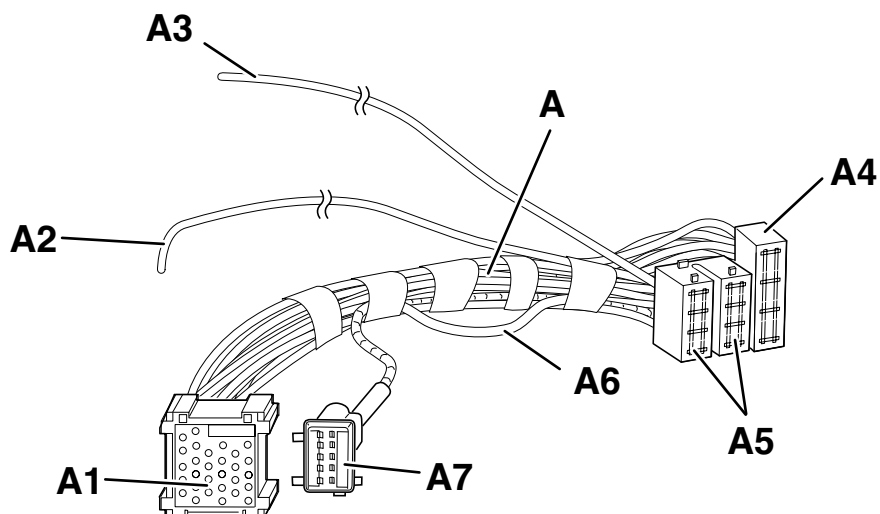


046 0606 B

Legend

- A Adapter cable
- B Aerial adapter (only required for cars with a Fakra aerial connector)
- 1 Navigation radio
- 2 Radio retaining pin
- 3 Double insulation-piercing connector (2x)
- 4 Cable tie (8x)
- 5 GPS aerial
- 6 Hook type Velcro strip*
- 7 Fleece type Velcro strip*
- 8 Rattle guard (2x)
- 9 Radio trim
- 10 Installation clip (2x)
- 11 Shrink hose
- 12 Owner's manual

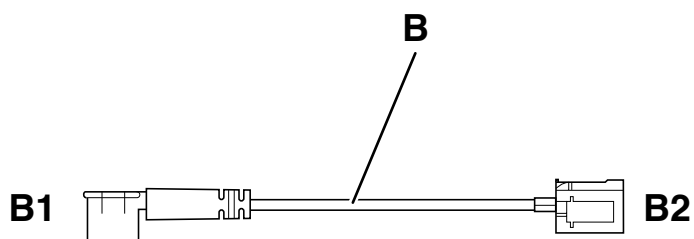
4. Aerial adapter connection diagram



046 0689 B

Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	Adapter cable	---	---	---	---
A1	Black 17-pin plug casing	---	---	To black 17-pin socket casing in the centre console	X18126
A2	Open cable end	Reversing light terminal	BL/GE	To the supply cable, near the front right door sill using an insulation-piercing connector (3) (check that the signal is present)	---
A3	Open cable end	Tacho A signal	SW/WS	To the standard wiring harness on the black 26-pin plug for the instrument cluster	X11175 PIN 8
A4	Red 20-pin socket casing	---	---	To the navigation radio in the centre console	---
A5	Black 16-pin socket casing	---	---	To the navigation radio in the centre console	---
A6	Coding loop	---	GE	---	---
A7	10-pin plug casing	---	---	To socket casing X13321 for the CD changer, insulate and tie back if the car has no CD changer	---

4. Aerial adapter connection diagram

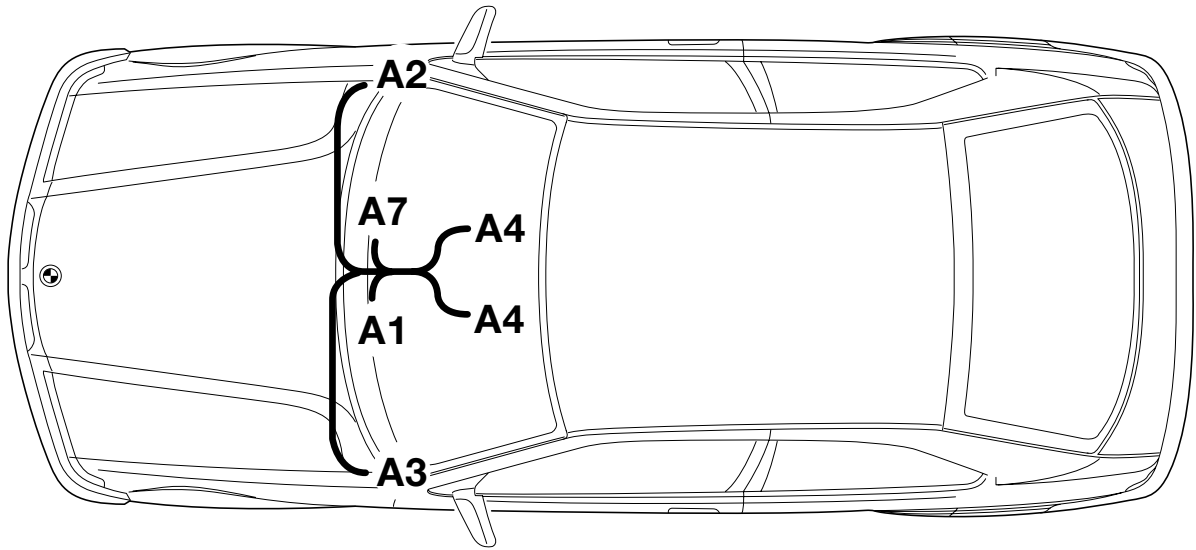


046 0671 B

Aerial adapter cable B is only required for cars with a Fakra aerial connector

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

5. Installation and cabling diagram (LHD cars)



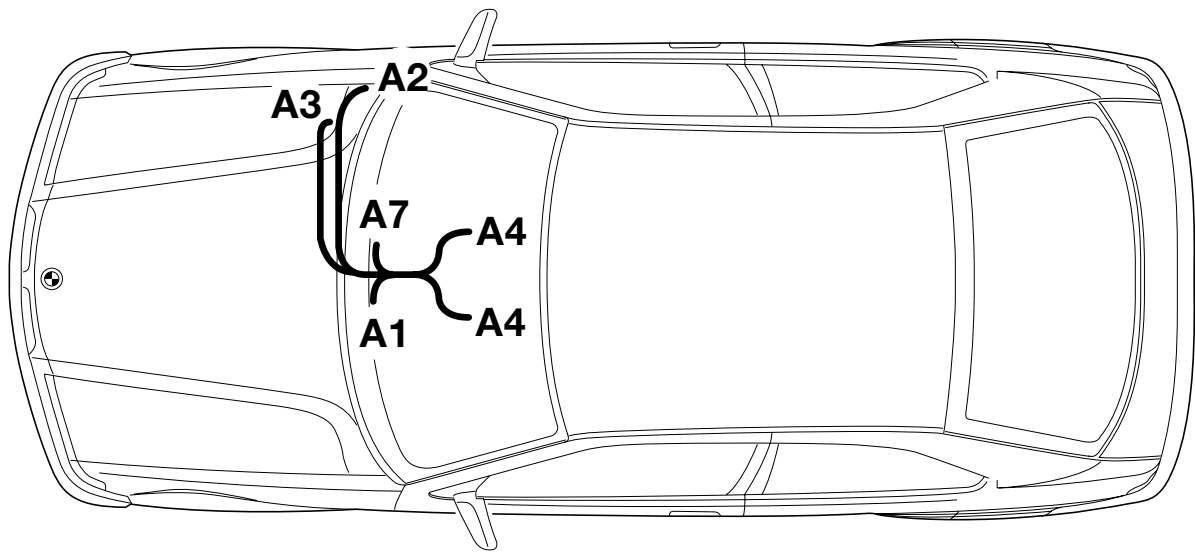
046 0690 B

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

- Branch **A1** to the black 17-pin socket casing in the centre console
- Branch **A2** to the standard wiring harness at the front right near the door sill using an insulation-piercing connector
- Branch **A3** to the black 26-pin plug **X11175 PIN 8** on the instrument cluster
- Branch **A4** to the navigation radio in the centre console
- Branch **A5** to the navigation radio in the centre console
- Branch **A7** to socket casing **X13321** (cars with a CD changer only)

Tie back any excess lengths.

6. Installation and cabling diagram (RHD cars)



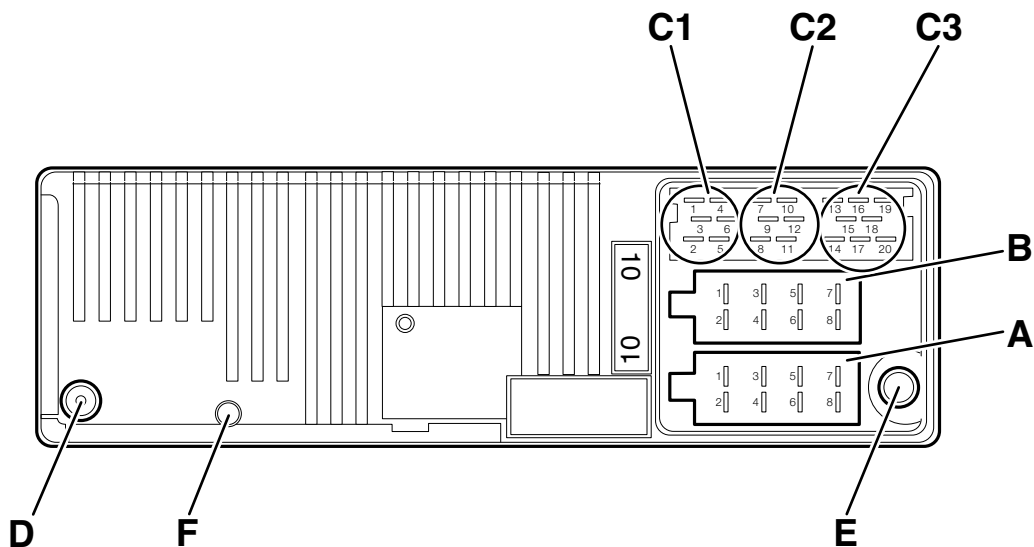
046 0755 B

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

- Branch **A1** to the black 17-pin socket casing in the centre console
- Branch **A2** to the standard wiring harness at the front right near the door sill using an insulation-piercing connector
- Branch **A3** to the black 26-pin plug **X11175 PIN 8** on the instrument cluster
- Branch **A4** to the navigation radio in the centre console
- Branch **A5** to the navigation radio in the centre console
- Branch **A7** to socket casing **X13321** (cars with a CD changer only)

Tie back any excess lengths.

7. Navigation radio connection diagram



046 0608 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

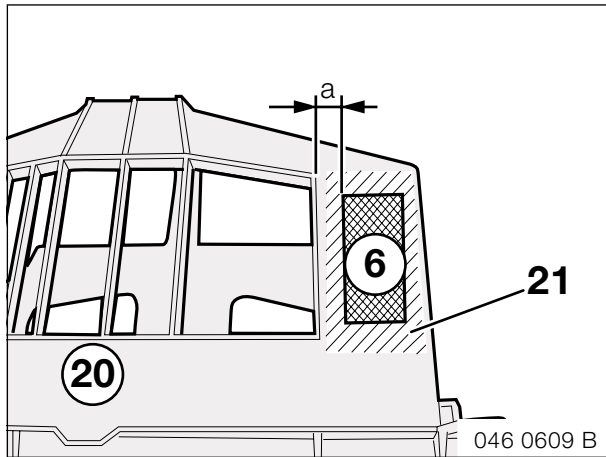
Jack E

GPS aerial jack

Jack F

Aerial diversity connection

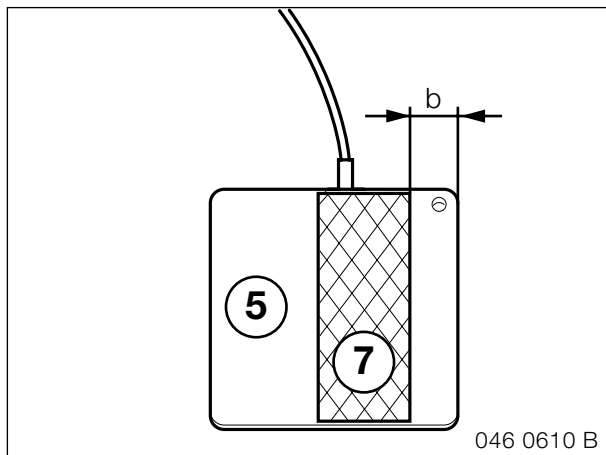
8. To install the GPS aerial



▶ The figure shows the removed radio module holder. ◀

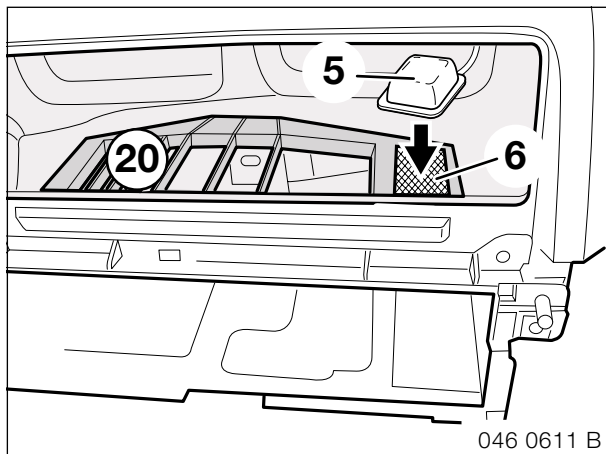
Clean the surface of the radio module holder (20) in the hatched area (21).
Affix the Velcro hook strip (6) as close as possible to the front of the radio module holder (20), as shown in the figure.

Dimension **a** = 10 mm



Affix the Velcro fleece strip (7) to the GPS aerial (5), as shown in the figure.

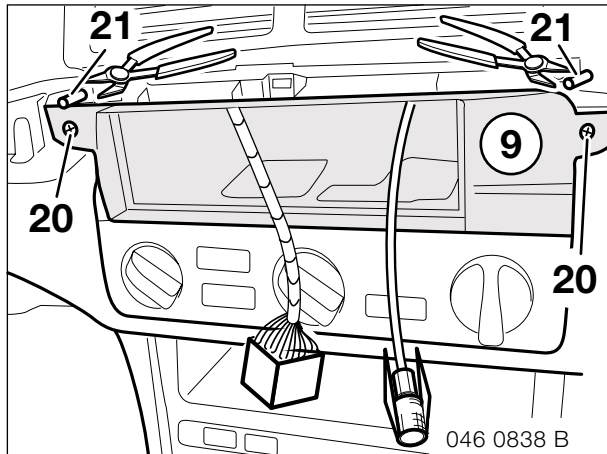
Dimension **b** = 10 mm



▶ The figure shows the installed radio module holder. ◀

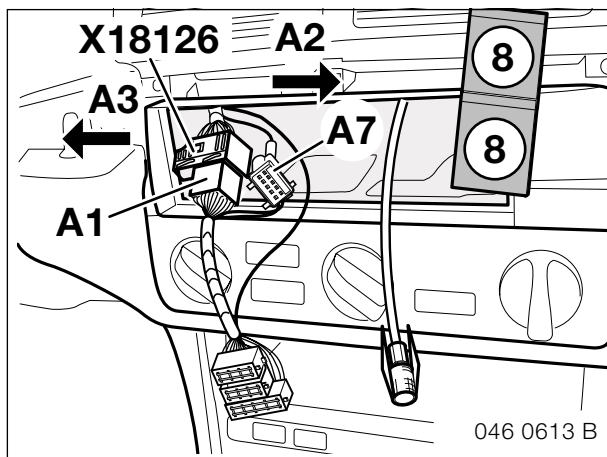
After installing the radio module holder (20), press the GPS aerial (5) with the affixed fleece Velcro strip to the hook Velcro strip (6) on the radio module holder (20) as shown in the figure.
Lay the GPS aerial cable to the installation site of the navigation radio and tie back the excess lengths.

9. To install the adapter cable (cars without a CD changer only)



▶ Before you install the radio trim cut off the guides (21). ◀

Insert the radio trim (9) and secure it with the existing Philips screws (20).



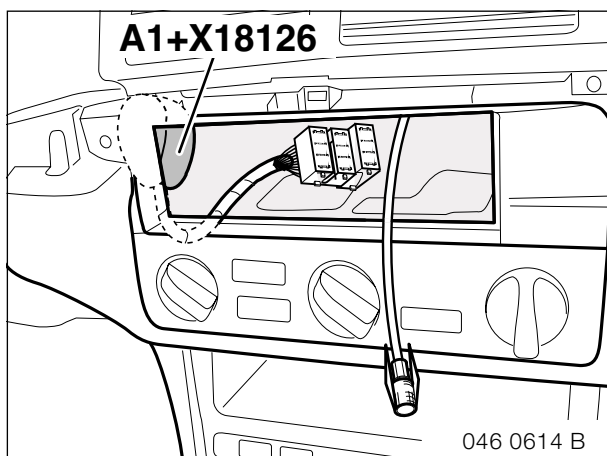
Connect branch **A1**, black 17-pin plug casing, to the 17-pin socket casing **X18126** on the audio wiring harness.

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** and **X18126** is wrapped in them.

Lay branch **A2**, open cable end, blue/yellow cable, along the standard wiring harness to the bottom right A pillar and secure it with cable ties.

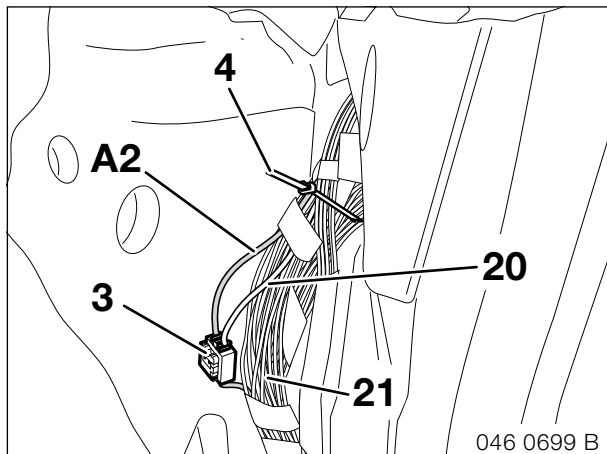
Lay branch **A3**, open cable end, black/white cable, along the standard wiring harness to the installation site of the instrument cluster and secure it with cable ties.

Branch **A7**, is not required, tie it back.



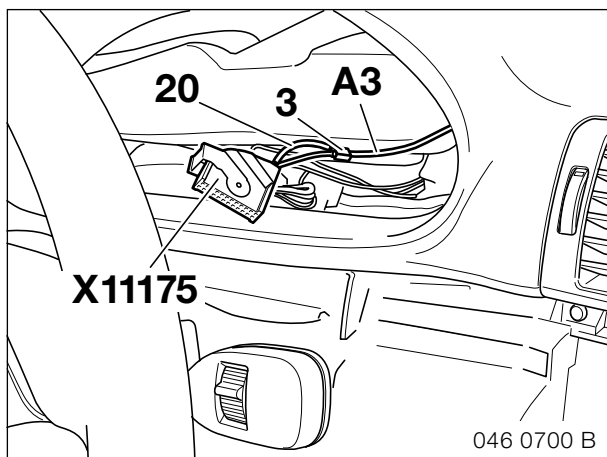
▶ Lay the wrapped plug connector **A1+X18126** on the left behind the instrument panel so as to enable you to install the navigation radio. ◀

9. To install the adapter cable (cars without a CD changer only)



▶ Figure A shows the bottom right A pillar. ◀

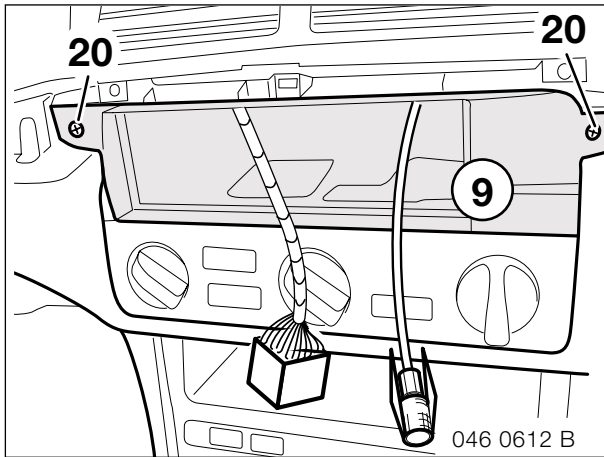
Connect branch **A2**, open cable end, blue/yellow cable, to the blue/yellow cable on the reversing light cable (20) on the main wiring harness (21) using an insulation-piercing connector (3) and secure it with cable ties (4). Since the lights wiring harness contains several blue/yellow cables, check whether the reversing light signal is present.



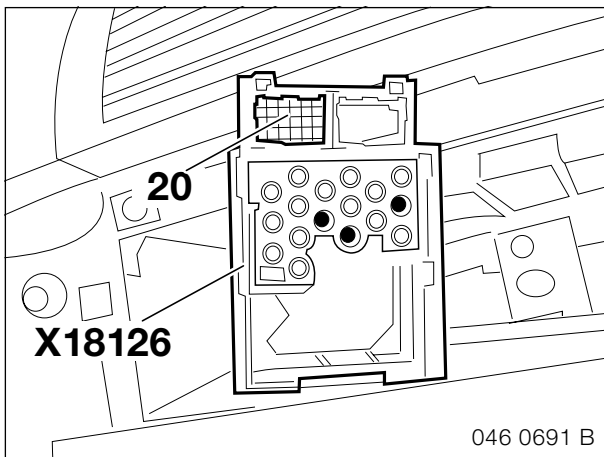
▶ The figure shows installation location of the instrument cluster. ◀

Connect branch **A3**, black/white cable, to the black/white cable (20) on the black 26-pin connection plug **X11175** PIN 8, at a suitable point using an insulation-piercing connector.

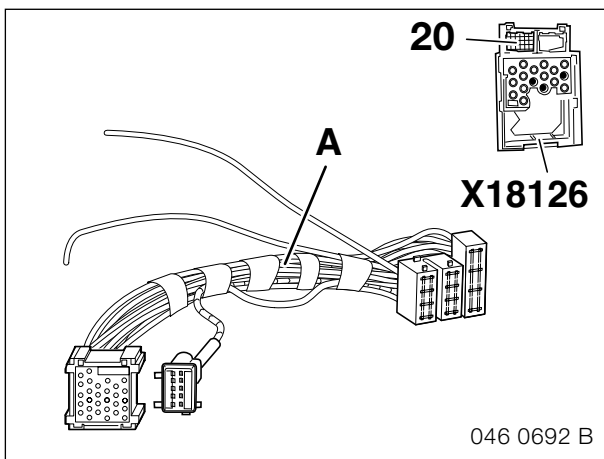
10. To install the adapter cable (cars with a CD changer only)



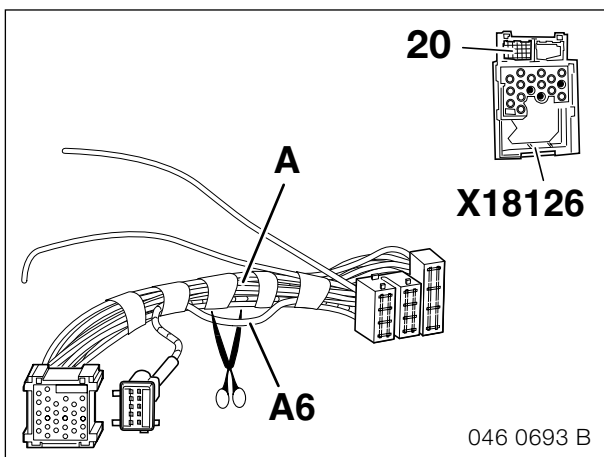
Insert the radio trim (9) and secure it with the existing Philips screws (20).



Disconnect the 10-pin socket casing (20) on the CD changer plug from the black 17-pin socket casing **X18126**. Before installing the adapter cable check whether the 10-pin socket casing (20) is made of black plastic or silver metal.

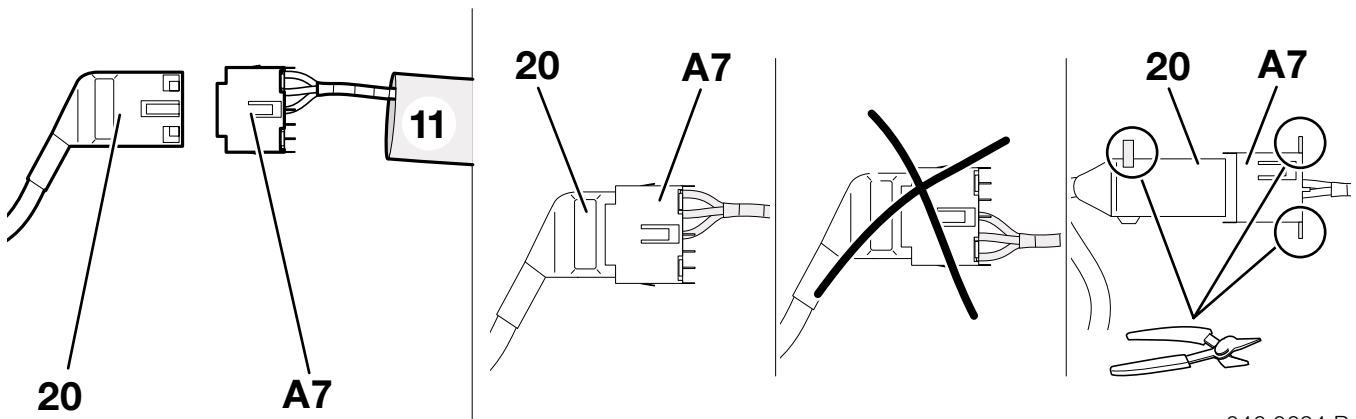


If the radio connection plug **X18126** has a silver 10-pin socket casing (20) fitted in it, the adapter cable may be installed without any modifications.



If the radio connection plug **X18126** has a black 10-pin plastic casing (20) fitted in it, the coding loop **A6** on the adapter cable **A** must be cut off and the open cable ends insulated.

10. To install the adapter cable (cars with a CD changer only)



046 0694 B

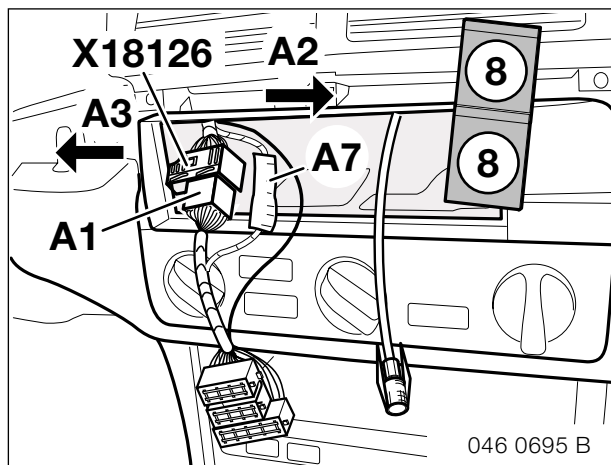
Push the shrink hose (11) over branch **A7**, silver 10-pin plug casing on adapter cable **A**, and connect the silver or black 10-pin socket casing (20) to the CD changer control cable.

▶ As you connect (20) to **A7** ensure that it is correctly positioned, see figure. ◀

All sharp metal and plastic detents are to be removed from plug connection (20) and **A7** using an angle cutter.

▶ There must be no sharp edges or corners on plug connection (20) and **A7**. ◀

Push the shrink hose (11) over the plug connection (20) and **A7** and shrink it using a hot air blower.



046 0695 B

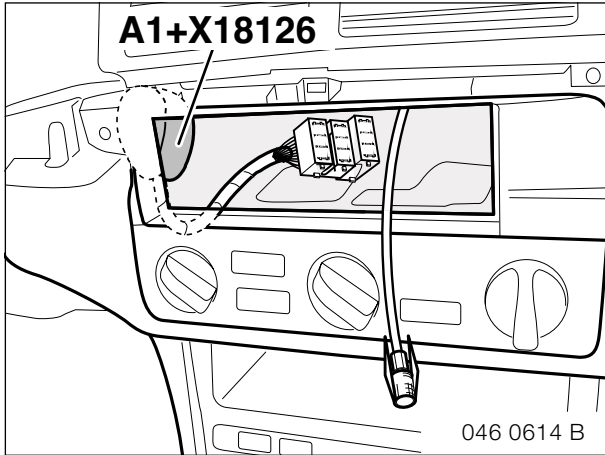
Connect branch **A1**, black 17-pin plug casing, to the 17-pin socket casing **X18126** on the audio wiring harness.

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** and **X18126** are wrapped in them.

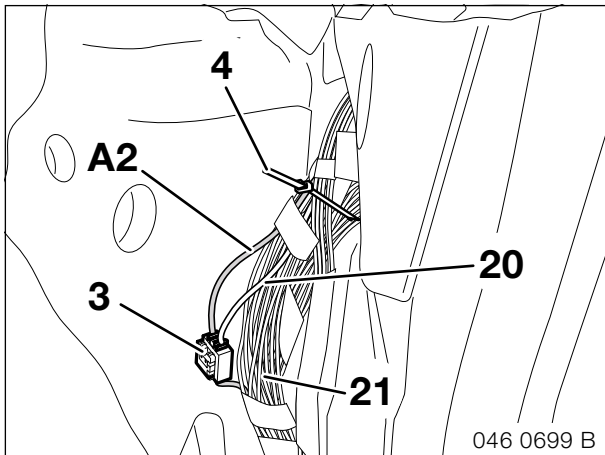
Lay branch **A2**, open cable end, blue/yellow cable, along the standard wiring harness to the bottom right A pillar and secure it with cable ties.

Lay branch **A3**, open cable end, black/white cable, along the standard wiring harness to the installation site of the instrument cluster and secure it with cable ties.

10. To install the adapter cable (cars with a CD changer only)



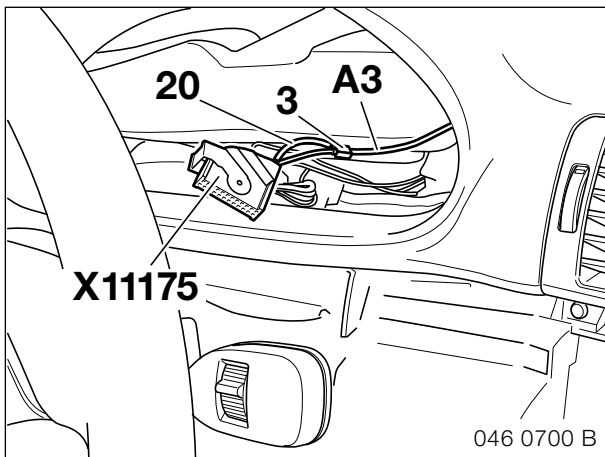
▶ Lay the wrapped plug connector **A1+X18126** on the left behind the instrument panel so as to enable you to install the navigation radio. ◀



▶ Figure A shows the bottom right A pillar. ◀

Connect branch **A2**, open cable end, blue/yellow cable, to the blue/yellow cable on the reversing light cable (20) on the main wiring harness (21) using an insulation-piercing connector (6) and secure it with cable ties (4).

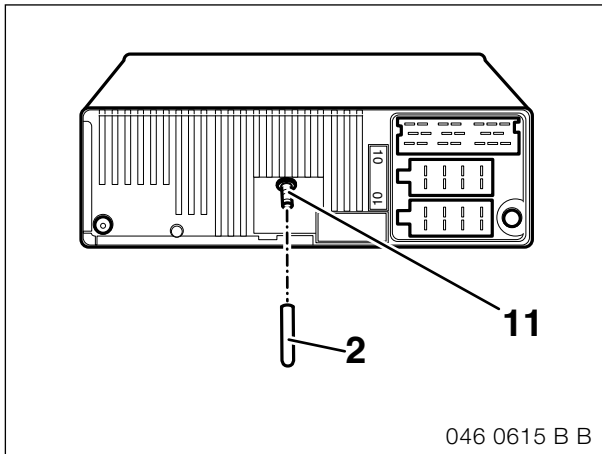
Since the lights wiring harness contains several blue/yellow cables, check whether the reversing light signal is present.



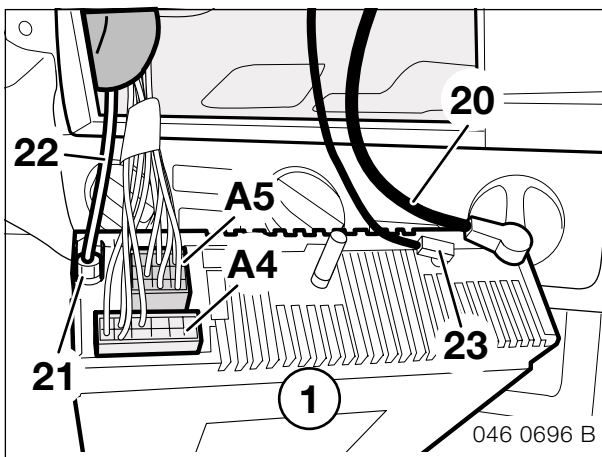
▶ The figure shows installation location of the instrument cluster. ◀

Connect branch **A3**, black/white cable, to the black/white cable (20) on the black 26-pin connection plug **X11175** PIN 8, at a suitable point using an insulation-piercing connector.

11. To connect the navigation radio



Screw the radio retaining pin (2) on to the stud bolt (11).

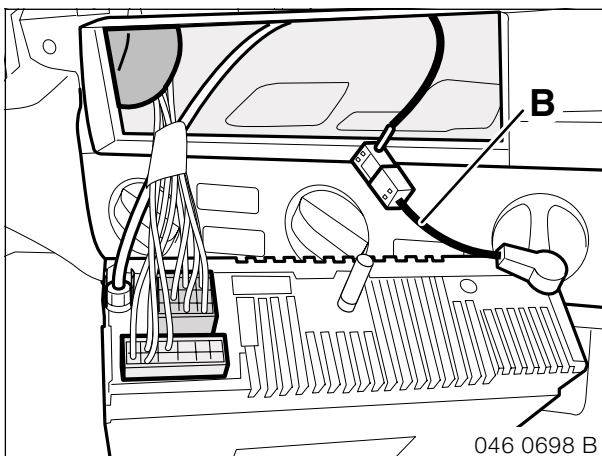


Connect branch **A4**, red 20-pin socket casing and branch **A5**, black 16-pin socket casing to the navigation radio (1).

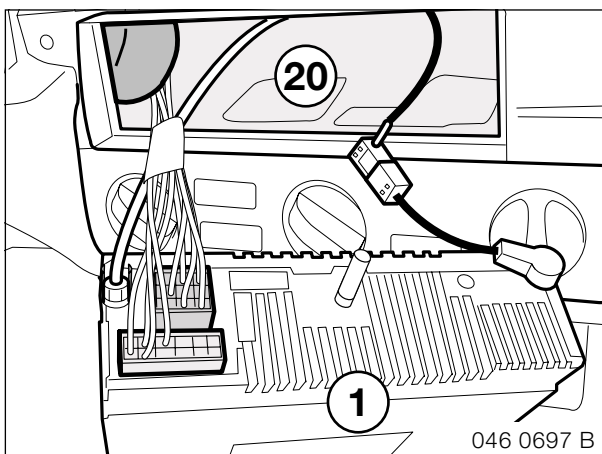
Connect the coaxial plug (20) on the GPS aerial cable (21) to the navigation radio (1).

Connect the aerial cable (20) to the radio.

▶ The coaxial aerial plug (23) must be connected on cars with aerial diversity. ◀



If there is a Fakra coaxial socket casing in the car's aerial connector, adapter cable **B** must be used.



Carefully slide the connected navigation radio (1) into the radio shaft (20) and secure it with the existing slides on the navigation radio (1).

▶ 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. ◀

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

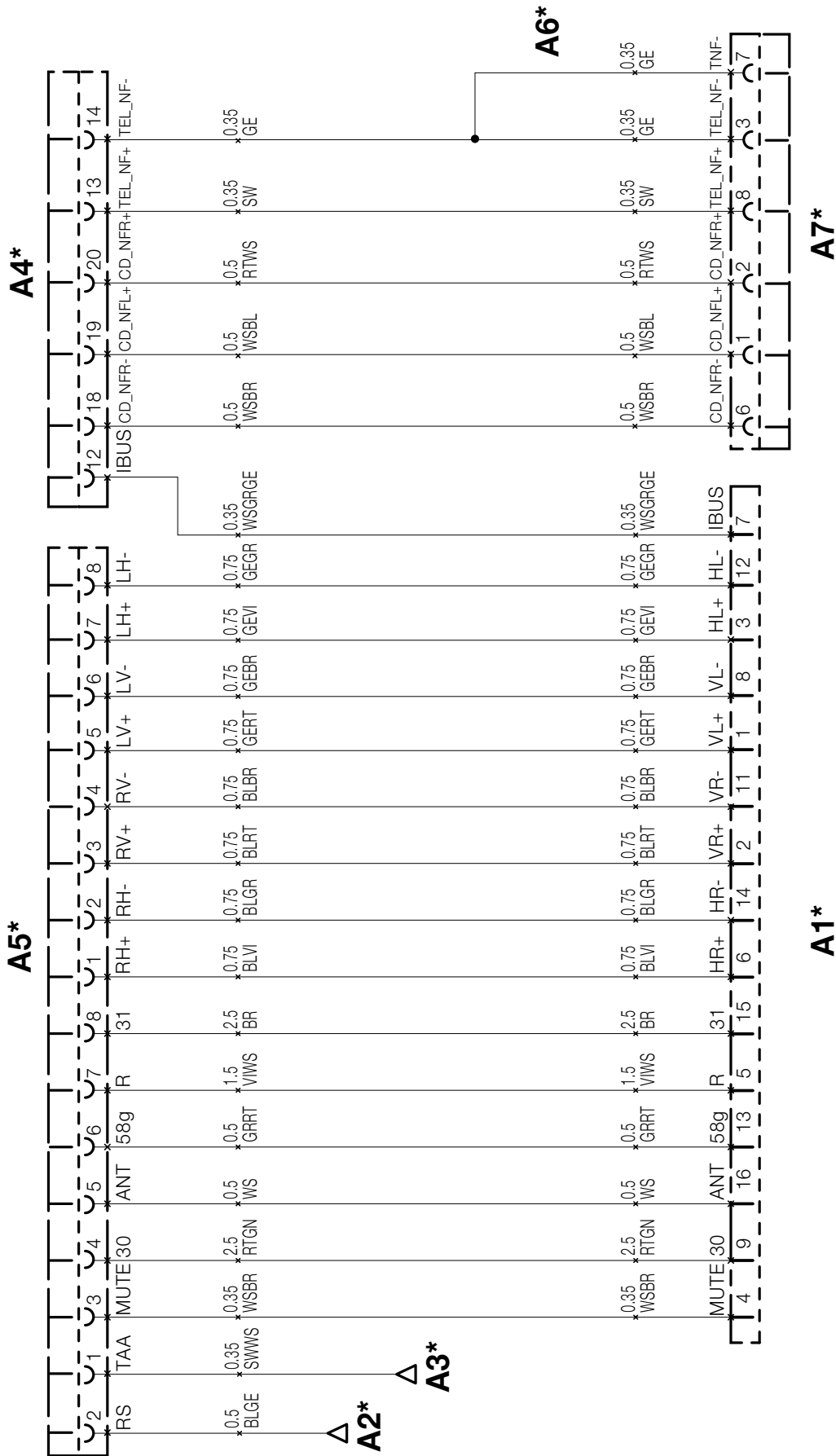
14. Language selection and commissioning

See enclosed **BMW Traffic Pro operating instructions**

15. Owner's manual

See enclosed **BMW Traffic Pro operating instructions**

16. Adapter wiring harness circuit diagram



046 0701 B

16. Adapter wiring harness circuit diagram

Legend

A1*	Black 17-pin plug casing
A5*	Black 16-pin socket casing (chamber A+B)
A2*	Open cable end (reversing light terminal)
A3*	Open cable end (tacho A signal)
A6*	Yellow coding loop (cars with a silver CD changer plug only)
A7*	10-pin plug casing
A4*	Red 20-pin socket casing

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